சர்தார் வல்லபாய் படேல் சர்வதேச ஜவுளி மற்றும் மேலாண்மை கல்லூரி
सरदार वल्लभभाई पटेल इंटरनेशनल स्कूल ऑफ टेक्सटाइल्स एंड मैनेजमेंट
SARDAR VALLABHBHAI PATEL
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BBA – Textile Business Analytics / Hons. /Hons. with Research

REGULATION, CURRICULUM AND SYLLABUS 2025

Three Years/Four Years

INDEX

ABOUT SVPISTM

SVPISTM is a one of its kind institute which is primarily devoted for Textile Management excellence. To cater to the needs of students' community it offers UG and PG programmes in Textiles and Management. With more than 15 years of heritage, SVPISTM has carved a niche in the field of Textile and Management education. Our methodology for producing industry ready candidates and entrepreneurs is based on experiential learning through practical workshops, real-time projects, working alongside with industry professionals as mentors.

This institute is an autonomous entity governed by the Ministry of Textiles, Government of India. All the academic progammes are offered in collaboration with the Central University of Tamil Nadu (CUTN). The core culture and philosophy of SVPISTM is to keep students at the forefront of modern textile and management practices through innovative pedagogy blending theoretical knowledge with practical application to succeed in the global business world.

In the rapidly changing economic and business landscape, need for managers with the global perspective and personal competencies to drive diverse teams has become even more important for organizations. We continually strive on best approach to empower the students to harness their potential strengths and to emerge as positive, well-informed, ethical and confident individuals.

Right from inception we have been training executives, preparing the participants for a world in constant evolution, a world that needs leaders capable of utilizing innovation to turn challenges into opportunities. At SVPISTM, innovation is the way of life.

VISION AND MISSION OF THE INSTITUTE

Vision

To emerge as an internationally renowned center of excellence in textile education, creating a strong cadre of professionals who will become inspiring performers and decision makers, capable of attaining high standards and competitive edge to bring the Indian textile industry to the forefront

Mission

Our Mission is to impart vibrant, comprehensive and innovative learning to our students enabling them to be managers, entrepreneurs, and leaders with strong cultural values and to provide an ambience to develop their skills to meet the challenges of the global business environment.

I. GOVERNANCE POLICIES

1. STUDENT BEHAVIOUR IN THE CAMPUS

a. Discipline includes the observance of good conduct and orderly behavior by the students of the Institute.
b. The following and such other rules as framed by the Institute from time to time shall be strictly observed by the students of the Institute.
   - ✓ Every student of the Institute shall maintain discipline and consider it his /her duty to behave decently at all places. Men student shall, in particular, show due courtesy and regard to women students.
   - ✓ No student shall visit places or areas declared by the Institute as "Out of Bounds" for the students.
   - ✓ Every student shall always carry on his / her personal Identity Card issued by the Institute.
   - ✓ Every student, who has been issued the Identity Card, shall have to produce or surrender the Identity Card, as and when required by the Institute Staff, Teaching and Library Staff and the Officials of the Institute.
   - ✓ Any Student found guilty of impersonation or of giving a false name shall be liable to meet disciplinary action.
   - ✓ The loss of the Identity Card, whenever it occurs, shall immediately be reported in writing to the class advisor.
   - ✓ If a student is found to be continuously absent from classes without information for a period of 15 days in one or more classes, his / her name shall be struck off the rolls. He/she may, however, be readmitted within the next fortnight on payment of the prescribed readmission fee etc. He / She will not be readmitted beyond the prescribed period.
c. Breach of discipline, interlaid, shall include:
   - ✓ Irregularity in attendance, persistent idleness or negligence or indifference towards the work assigned.
   - ✓ Causing disturbance to a Class or the Office or the Library, the auditorium and the play Ground etc.
   - ✓ Disobeying the instructions of teachers or the authorities;
   - ✓ Misconduct or misbehavior of any nature at the Examination Centre.
   - ✓ Misconduct or misbehavior of any nature towards a teacher or any employee of the Institute or any visitor to the Institute.
   - ✓ Causing damage, spoiling or disfiguring to the property/equipment of the Institute;
   - ✓ Inciting others to do any of the aforesaid acts;
   - ✓ Giving publicity to misleading accounts or rumor amongst the students;
   - ✓ Mischief, misbehavior and/or nuisance committed by the residents of the hostels;
   - ✓ Visiting places or areas declared by the Institute r as out of bounds for the students.
   - ✓ Not carrying the identity cards issued by the Institute;
   - ✓ Refusing to produce or surrender the Identity Card as and when required by Teaching and other Staff of the Institute;
   - ✓ Any act of ragging.

- ✓ Any other conduct anywhere which is considered to be unbecoming of a student.
- ✓ Possession and/or use of any prohibited items and substances like tobacco, alcohol, narcotics, etc., is banned inside the campus premises

d. Students found guilty of breach of discipline shall be liable to such punishment, as prescribed below:
   - ✓ Fine
   - ✓ Campus Ban
   - ✓ Expulsion
   - ✓ Rustication

e. No such punishment shall be imposed on an erring student unless he is given a fair chance to defend himself. This shall not preclude the Director from suspending an erring student during the pendency of disciplinary proceedings against him relating to discipline & disciplinary action in relation to the student shall vest in the Director. However the Director may delegate all or any of his / her powers as he deems proper to the program coordinator or to the disciplinary authority as the case may be any functionary of the Institute.

f. The said Committee, shall, make such Rules as it deems fit for the performance of its functions and these Rules and any other orders under them shall be binding on all the students of the Institute.

g. The decision of the Discipline Committee shall be final and binding. However, in exceptional circumstances the Discipline Committee is empowered to review its decisions.

2. DRESS CODE

Male students shall wear formal dress of pants and tucked-in shirts with shoes. The female students shall wear Salwar Kameez or any modest and professional attire. All students are expected to come in formal dress on important occasions. On any occasion students will not be allowed to attend the classes in T-shirts.

a. Formal Dress Code Policy – Wednesdays

To maintain a professional and disciplined learning environment, all students are required to adhere to a formal dress code every Wednesday. This initiative reinforces the importance of decorum, uniformity, and readiness for professional settings.

b. Dress Code Guidelines for Wednesdays:

Boys: Formal shirt (tucked in), formal trousers, belt, and shoes. Clean shave or well-groomed beard is expected.
Girls: Formal salwar kameez, or any modest and professional attire appropriate to the academic environment

3. LIBRARY

The library is stacked with latest books and reference materials. The library has been provided with the ERP Software having a multi-functional facility. The library holds over 8,000 volumes of books and rich collection of journals. In addition the library possesses audio- visual and multimedia documents. Apart from this, it also provides online sources and reprographic facilities. The library subscribes to online data bases to enhance the knowledge base of students. The time, rules and regulations of library are given below.

a. Library Timings

- ✓ Monday to Friday – 10.00 am to 5.30 pm
- ✓ Saturday (Excluding second & last Saturday of month) – 10.00 am to 4.30 pm

b. Rules and Regulations

- ✓ Students should register their entry and exit to access the Library.
- ✓ Books, bags, and other belongings are not allowed inside the Library.
- ✓ Students are allowed to take maximum of three books for a period of fourteen days. They may be allowed for further renewal if there is no demand for that particular book. If the books are not returned within the due date, Rupee one will be charged per day per book till the return of the books.
- ✓ Reservation facility is available on issued books.
- ✓ Books will be issued upto 5.30 pm on all the working days except Saturdays.
- ✓ ID card should be produced at the time of issuing books.
- ✓ Issue of books through the ID card of other students is strictly prohibited.
- ✓ Loss of book is to be replaced by the same copy or by double the cost of the book.
- ✓ Silence to be maintained inside the library. Group activity to be avoided inside library.
- ✓ Stealing, damaging the property of the library, misbehaviour with any-one in the library will be considered an act of indiscipline and misconduct. The student involved may be denied library membership and reported for further action on account of their misconduct.
- ✓ Any book issued must be shown for verification to the person on duty at the library gate.
- ✓ Marking, defacing or damaging any library property is a gross misconduct.

c. Lending Rules

- ✓ Reference book, journals or magazines, summer training reports or dissertation reports (including back issues) will not be issued to students. They are to be used only in the Library.
- ✓ The Librarian reserves the right to recall any book issued to the borrower even prior to the due

date of return, if necessary.

- ✓ Maximum of three books will be issued to the students for the period of fourteen days.
- ✓ Maximum of five books will be issued to the faculty members for the period of sixty days.
- ✓ If a student fails to return the book on due date or fails to get it re-issued on the due date, a fine of Rupee One per day per book will be charged for each book after the due date.

4. COMPUTER LAB

The institute campus is equipped with networked computers and other IT equipment. Internet browsing with broadband facility is available other than class hours during college working time. Facilities like printing & scanning are also extended to students.

a. I T Guidelines

i. The Institute and its IT resources

The Institute makes Information Technology services available to the students in varied forms:

- ✓ The Institute network comprises of secured network with the latest Hardware, Firewall & Antivirus software.
- ✓ The Institute network comprises DNS Server, ERP Server, and Online e-Learning software with the latest Processor with desktop computers setup.
- ✓ The Institute has centralized computing facility. Audio visual equipment is available in the classroom and in the seminar hall.
- ✓ Access to High-speed internet is available in all the computers except the computers in the class rooms. In addition to this National Knowledge Network Connectivity from BSNL is also available for students.
- ✓ Reprographic facility is made available inside the campus for the students as well as for the faculty members.
- ✓ Scanning facility is available in the Computer Laboratory, Library, Controller's office (Multi-function Device) and Academic section.
    - ✓ The computers assigned to the group / department may be utilized effectively by the group on time-share basis.
    - ✓ The Faculty, Staff and students are provided with individual user-IDs in the Institution domain server through which they can interact among themselves. Moreover, we have separate individual email-IDs to our faculty and staff for official purpose through the web mail.
    - ✓ The group or individual or department are being assigned with the computers or workstations, which means that the individual / department are responsible for the machine's safety. However the IT department may provide suggestions to keep it safe and in working condition.
    - ✓ In case of any requirement, the group / department should provide information about the usage of the computing equipment.

- ✓ The Institute owns Software licenses for various System Software as well as Application software.
- ✓ The Secured Wi-Fi Connectivity is available in the campus as well as in the hostels.

ii. DOs and DON'Ts for using the resources

- ✓ Students must wear a valid ID card before entering the Computer Lab
- ✓ While entering the computer laboratory, students must make an entry in the register book kept in the computer laboratory and also at the time of exit from the lab. Students are expected to maintain perfect silence and good discipline.
- ✓ Students are not allowed to bring in bags, pouches, food and beverages inside the Lab
- ✓ Mobile phone should be in switched off mode.
- ✓ Before leaving lab, students must shutdown the system, keep the place clean and rearrange the chairs in appropriate place.
- ✓ During the class hours students are not allowed to use the computer lab. If necessary, they can get permission from the concerned class faculty, Program coordinator and Lab in charge. They should submit the lab access form to the lab in charge, unless they will not be allowed to enter into the lab.
- ✓ You can back up your data regularly in the additional drives available in the local machine itself.
- ✓ Use of any media (CD / DVD / Pen Drive) or transfer of files from digital camera or any storage media to the network storage is subject to permission from the network administrator. Usage of pen drive is allowed only after scanning for virus.
- ✓ No user is allowed to login a computer as administrator. He / She is only an ordinary user with assigned individual / group user – id.
- ✓ Inform and seek permission from the IT department (recommended procedure) while transferring / shifting devices (such as desktop computers, laptops) from one place to other inside the campus for any task.
- ✓ In case of any requirement in taking laptops / projectors or any devices outside the campus, acquire a gate pass from the administrative office.
- ✓ Do not try getting data of others from the computer or the network.
- ✓ Taking a photograph using any media in the laboratory is prohibited.
- ✓ Do not login with the login-id of others or do not lend your login id and password to others. Any data loss thereby may not be retrieved.
- ✓ The students have to send a request to the library for any hard copy print by listing the file, location and page numbers of the content for print and collect only during the break hours. Users have to enter in the log book and collect the print out. This procedure applies to copying / writing data in CDs also.
- ✓ Students can use their personal computers in the campus. But they are not permitted to connect to the LAN. Use of software without license in the laptop and accessing the internet through institute network is strictly prohibited. Software piracy will not be entertained.
- ✓ Students are advised to maintain cleanliness inside the laboratory. Use of mobile phones,

hearing songs and eatables are not allowed inside the laboratory (to be strictly followed by all the students in the computer laboratory, failing which the services will be denied.)

iii. Storage, e-mail / Chat: Privacy, Responsibilities and Rules

- ✓ IT department has provided every user with a storage space in the network. As network share is available to students of that course, it is a common information sharing only and not to store individual / group's personalized data or irrelevant data like movies, songs etc.
- ✓ SVPISTM procedures allow IT system administrators to view and monitor any files, including e-mail messages, in the course of diagnosing or resolving system related problems and maintaining information integrity. System administrators, as part of the job, will treat any such information on the systems as confidential. However, if the administrator comes across information that indicates illegal activity / content stored in the storage area, the content will be deleted without any notice and the user's work area will be barred.
- ✓ SVPISTM's IT policy prohibits certain other kinds of usages. For example, using computers and the network used by individuals for commercial and individual purposes. Such cases if found will be brought to the attention of higher officials.
- ✓ Use of Messenger / Chat is prohibited inside the campus.
- ✓ Gaming is strictly prohibited. The web sites providing online gaming are not advised to be browsed. Any such activity if reported may block even the related beneficiary sites causing inconvenience to all other users in addition to denial of resources.

iv. Web Site Contents

- ✓ Individual users who are browsing will assume full responsibility for the content in Web pages, and they must abide by all applicable rules and policies of SVPISTM.
- ✓ Information about the institute is available in the institute's official website viz. www.SVPITM.ac.in and www.SVPISTM.ac.in
- ✓ Any information to be uploaded in the website may be provided to the IT department with the approval from the Director's office.

b. Abuse and Action for Abuse of Computing Privileges

i. ABUSE

i. Unauthorized use or misuse of IT department property or records includes
   a. Electronic data mishandling.
   b. Willfully or negligently damaging or defacing records in common share or storage areas of individual courses.
   c. Theft or unauthorized removal of records, property or other person's property.
   d. Use of unrecognized / unauthorized storage media.
   e. Any other abuse as found / amended from time to time.

ii. Unfortunately, computer abuse, malicious behaviour and unauthorized account access do happen. If they are found, it should be reported immediately.

ii. ACTION

- ✓ Denial of service of SVPISTM's computing and communications resources for violation of policy are set by the various disciplinary entities, then communicated to and carried out by IT. In instances of immediate threat to the computing and communication systems, IT takes direct and immediate action to safeguard the resources it is charged to protect.
- ✓ When IT department is notified that a user appears to be abusing computing resources, all of his or her computing privileges may be suspended immediately when such an action is warranted to protect the computing resources and to assure reliable service to the rest of the community.

5. HOSTEL REGULATIONS

a. Behaviour and Discipline

- ✓ A hostel campus should be a place where students can have the best possible conditions for studying and adequate rest. As such due consideration must be accorded to other residents. Noise level must be kept low to allow others the opportunity to study or sleep in comfort. Television, Radio etc. provided in the common room must be switched off after 10:00 pm. These rules are intended to ensure a conducive environment for all residents.
- ✓ Residents shall not create or permit their guests or visitors to create any disturbance or other nuisance in the hostel that will interfere with the well-being of others.
- ✓ Possession and/or use of any prohibited items and substances like tobacco, alcohol, narcotics, etc., is banned inside the campus premises
- ✓ Smoking, chewing and spitting of pan in the hostel premises is strictly prohibited.
- ✓ Ragging in any form is prohibited. Punishments for ragging ranges from expulsion from hostel, debarring from exams to cancellation of admission. Ragging shall be treated as a serious offence and shall be dealt with as per the UGC Regulations.
- ✓ Social gathering in the hostel complex are not permitted without the prior and written consent of the warden.
- ✓ Hostel residents are not allowed to entertain unauthorized person(s). Anyone found in violation to this will be fined and penalized according to Institute rule.
- ✓ Resident students found in act of violence or misconduct outside the hostel premises is not the liability of the Warden or Institute administration. In such cases the resident student is responsible for himself/herself.

b. Upkeep of the Hostel

- ✓ Residents are responsible for keeping the hostel premises clean. Residents are advised to keep their room, the mess hall, common room, visitor's room, stair case and toilets and bathrooms clean at all time.
- ✓ All water taps, fans and electrical appliances must be turned / switched off when not in use.
- ✓ Noise level must be kept low to allow others the opportunity to study or sleep in comfort.

Television, provided in the common room must be switched off or volume toned down after 10:00 pm. These rules are intended to ensure a conducive environment for all residents.

- ✓ The use of electrical appliances such as immersion heaters, electric stove/heater are forbidden in any of the room allotted for residence. Cooking, making tea etc is strictly prohibited in the room.
- ✓ Students shall conduct a room check to verify the inventory provided and endorse on the Check In/Check out Form. Any missing or damaged items must be reported to the hostel authority immediately. Otherwise, it will be assumed that all furnishings and fittings are in good order. The student will be responsible for any loss or damage thereafter.
- ✓ Resident(s) should not move any hostel property (table, chair, fan, cupboard, etc.) from one room to another. Any damage to hostel property must be reported immediately to the hostel authority/warden. Resident(s) will be charged for any damages except damages caused by normal wear and tear or faulty products/repairs.
- ✓ Residents will be personally responsible for the safety of their belongings. Residents are advised to keep their personal belongings and any other valuable items locked in their personal locker even when they are out for a short period. Any loss or theft of item(s) should be immediately reported to the hostel authority.
- ✓ Pasting of posters, writings, slogans and any kind of defacing the hostel in any form is not allowed.
- ✓ Electrician, contractors or any other service person may enter rooms as and when necessary in the course of their duty under the directive and permission from the warden only.
- ✓ The Hostel authority reserves the right to enter and inspect a hostel in the interests of health, safety and proper conduct of the students.
- ✓ Entry may also be made without prior notice, during normal hours, for the purpose of conducting non-emergency inspections. For repairs and maintenance purposes of showing the premises, students will be notified in advance by the hostel authority.

c. Entry and Timings

- ✓ It is required that residents of the hostel produce their Institute Identity card at the entrance of the hostel whenever he/she enters the hostel premises.
- ✓ Entry into the hostel is allowed till 7.00pm. Any late entries/night exits should be informed to the Warden in advance and permission to be obtained.
- ✓ Resident who wish to stay out of hostel should duly inform the authority about the same.
- ✓ If any student is absent/does not return to the hostel after 24 hours without any information of his/her whereabouts, roommate(s) or fellow residents should inform the hostel authority immediately.

d. Visitors and Guests

- ✓ All visitors to the hostel including the parents/guardian will have to make necessary entries in the visitor's book available at the hostel entrance.
- ✓ Visitors are restricted to the visitors lobby only.
- ✓ No visitors will be allowed inside the hostel premises after 7.00 pm.
- ✓ The visit of male guest(s) into female residence and vice versa is prohibited.

e. Allotment & Vacating of Hostel Accommodation

A limited hostel accommodation is available. It will be allotted on the basis of **"First come First Serve"** on full payment of one semester mess bill and hostel fees.

1. **The criteria for allotment of hostel accommodation by the Institute are as under*:***

i. **First Priority:** Students admitted to a full-time Programme of study and are from outside the state of Tamil Nadu.

ii. **Second Priority:** Students admitted to a full-time Programme of study and are from outside the Coimbatore district.

iii. **Third Priority**: Students from within the district of Coimbatore but living outside the Town agglomeration of Coimbatore.

iv. **Fourth Priority**: All others.

- ✓ Accommodation in the hostel is allowed initially for the current semester and is subsequently renewed subject to the continuing registration and fulfillment of academic requirements by the resident from time to time. All residents should subject themselves to the proof of registration and payment of all hostel dues of the previous semester to be eligible to continue as resident of the hostel.
- ✓ The Director may allot accommodation to students, in exceptional situations, on case to case basis.
- ✓ The maximum duration of stay in the hostel is the normal prescribed period of the programmes of studies. Once the resident completed his/her Programme of studies, he/she is no longer a resident and is required to vacate the hostel.
- ✓ Terminal student must surrender his/her rooms to the concerned warden latest by last day in the case of even semester and last day in the case of odd semester.
- ✓ Resident who discontinues his/her studies from the Institute in the middle of a semester should clear all his/her mess dues and submit an application for vacating the hostel to the Senior Warden. Resident must hand over to the caretaker the complete charge of his /her room with all furniture and fixtures in tact at the time of vacating the room.

f. Constitution of the Hostel Committee:

The Hostel Committee shall have the following members:

- ✓ Warden who shall be ex-officio convener
- ✓ A senior member nominated by the Warden in consultation with the Director
- ✓ Two members of institute

g. Roles and Responsibilities of the Hostel Committee:

In principle, the Hostel Committee shall discuss and make recommendations regarding:

- ✓ Allotment
- ✓ Discipline of resident students
- ✓ Maintenance and development of the Hostel
- ✓ Matters related to Mess
- ✓ Any other matter pertaining to the Hostel

Hostel facility is available only for girl students.

6. ATTENDANCE, DISCIPLINARY & GRIEVANCE COMMITTEE

a. This committee is constituted for the smooth functioning of the various activities of the Institute and it consists of the following members :

Head of the Department / Academic I/c. - Chairman of the Committee
Controller of Examinations - Convenor
Class Advisors - Members

b. The Committee will deliberate the following matters.
   i. The matters relating to condonation and attendance shortages of students.
   ii. All grievances and disciplinary problems of the students relating to malpractices in test, semester examinations, etc.

c. The meeting of the committee will be convened by the Controller of Examination. The Committee will send periodical report and the recommendations to the Director for consideration / ratification / approval.

7. MENTORSHIP

To help the students in planning their courses of study and for getting general inputs regarding either the academic programme or any other activity, counselling every student will be assigned to a faculty member who will be the mentor. Student would be allotted for each faculty mentors by the Head – Textiles / Management.

8. MALPRACTICE IN EXAMINATIONS

a. If a student is found copying in a test conducted for Continuous internal assessment, he / she will be given zero marks for that test and severely warned.

- ✓ If a student is found copying in the end semester examination he/she will be debarred from writing that particular paper in that semester. Based on the nature of malpractice, he/she may be debarred for two more attempts of writing that paper/all papers. The disciplinary committee will make recommendations for necessary disciplinary action.
- ✓ During the examinations the candidates shall be under the disciplinary control of the Chief Superintendent of the centre who shall issue the necessary instructions. If a candidate disobeys instructions or misbehaves with any member of the supervisory staff or with any of the invigilators at the Centre, he/she may be expelled from the examination hall for that session.
- ✓ The invigilator shall immediately report the facts of such a case with full details of evidence to the Controller of Examinations who will refer the matter to the Discipline Committee. The Committee will make recommendations for disciplinary action.

b. Every day, before the examination begins, the invigilators shall call upon all the candidates to search their personal things, tables, desks, etc., and ask them to hand over all papers, books, notes or other reference material which they are not allowed to have in their possession or accessible to them in the examination hall. When a late-comer is admitted this warning shall be

repeated to him at the time of entrance to the examination hall. They are also to ensure that each candidate has his/her identification card and hall ticket with him/her.

c. Use of Unfair means:

A candidate shall not use unfair means in connection with the examination. The following shall be deemed to be unfair means:

- ✓ Found in possession of incriminating material related/unrelated to the subject of the examination concerned.
- ✓ Found copying either from the possessed material or from a neighbor or from any devices.
- ✓ Inter-changing of answer scripts.
- ✓ Change of seat for copying.
- ✓ Trying to help other candidates.
- ✓ Found consulting neighbor.
- ✓ Exchange of answer sheets or relevant materials.
- ✓ Writing register number of some other candidate in the main answer paper.
- ✓ Insertion of pre-written answer sheets (Main sheets or Additional Sheets).
- ✓ Threatening the invigilator or insubordinate behavior as reported by the Chief Superintendent and/or Hall Superintendent.
- ✓ Consulting the invigilator for answering the questions in the examination.
- ✓ Cases of impersonation.
- ✓ Mass copying.

Note:

- ✓ The Director may declare any other act of omission or commission to be unfair means in respect of any or all the examination.
- ✓ Where the invigilator in charge is satisfied that one third (1/3) or more students were involved in using unfair-means or copying in a particular Examination Hall, it shall be deemed to be a case of mass copying.

d.

- ✓ The Hall Superintendent of the examination centre shall report to the Controller of Examinations, without delay and on the day of the occurrence if possible, each case where use of unfair means in the examination is suspected or discovered with full details of the evidence in support thereof and the statement of the candidate concerned, if any, on the forms supplied by the Controller of Examinations for the purpose.
- ✓ A candidate shall not be forced to give a statement by the invigilator. The act of his/her having refused to make a statement shall be recorded by the invigilator and shall be attested by two other members of the supervisory staff on duty at the time of occurrence of the incident.
- ✓ A candidate detected or suspected of using unfair means in the examination may be permitted to answer the question paper, but on separate answer-book. The answer-book in which the use of unfair means is suspected shall be seized by the invigilator, who shall send both the answer-books to the Controller of Examinations with his report. This will not affect the concerned candidate appearing in the rest of the examinations.

- ✓ All cases of use of unfair means shall be reported immediately to the Controller of Examinations by the examiner, paper-setter, evaluator, moderator, tabulator or the person connected with the semester examination as the case may be, with all relevant material.

9. INSTITUTE – INDUSTRY INTERACTION

SVPISTM provides practical industrial training. The students are taken to leading textile manufacturing units, textile research institutions, management institutes and export houses enabling them to get acquainted with the real time processes and the latest developments in the industry. Executives from Industry will deliver lectures and share their experiences on a regular basis with the students.

10. PLACEMENT ASSISTANCE CELL

A separate placement assistance cell is in place which is in constant touch with the leading textile manufacturing units, export units, overseas buying houses etc., and arrange campus recruitment. The placement cell at SVPISTM consists of a faculty coordinator and student coordinators from the programmes B.Sc., BBA and MBA. The placement cell will facilitate in creating opportunities and directions for the registered students towards placements.

a. Rules and Regulations of Placement Cell

1. All the final year students are required to read the placement rules and regulations, interested students should sign the registration form within two weeks from the commencement of classes for final year.
2. All the students are expected to know about various activities which would be planned from time to time depending on need from the student coordinators
3. Each student has to be a part of their respective mail groups through which they will be informed all details of the placement program.
4. The students will be duly informed through the student's coordinators and notice board about the companies interested in placing students and it is the responsibility of the students to get appraised of the happening of the placement cell.
5. Companies deemed to be fit for conducting campus interview in our institute will make their pre-placement presentation. Any clarification regarding the company may be done before the interview itself.
6. Students should make the decision of attending the interview based on the pre- placement presentations. Also they should come in full formal dress code to attend the same.
7. Till the official information about the selection of the candidates is received from the company, students are allowed to participate in other companies to a maximum of three chances.
8. Once the placement cell receives the official information about the selection, the selected student will not be allowed to attend any other company interview. This is to ensure the policy of "one man – one job" to all the students. However after all students are placed such students will be given option for their future appearance.
9. Following are considered as campus placement.

a. Student getting placement through campus placement interview coordinated by placement cell.
b. Student getting placed on the basis of their on-going final project in the respective company.
c. Any other assistance from the institute.

10. Registration of the student in placement cell is considered to be cancelled due to following reasons.
    a. Student not interested and not involved in the placement activities.
    b. Student who is continuously absent / not attending interviews.
    c. Student who is found by any means that they got the job personally and intentionally trying for better prospects through the institute.
    d. Any misconduct or indiscipline by students inside the campus.
11. The above mentioned rules are subject to change and it is within the discretion of the placement cell.
12. By registering with the placement cell does not mean it is a guarantee for job.

11. CLASS COMMITTEE

a. Each programme will have a Class Committee comprising the following members.
    i. Chairman: Head – Management / Textiles
    ii. All the faculty members handling courses for that class as members.
    iii. Two students' representatives with a minimum of 75% attendance during the semester shall be nominated by the class as members.
b. The functions of the Class Committee will be as follows :
c. The Class Committee shall meet post all CIA written tests.
d. The first meeting will be held within two weeks from the date of commencement of classes for the semester.
e. The class committee shall meaningfully interact and express opinions and suggestions to improve the effectiveness of teaching – learning process and analyse the performance of the students in the class test.
f. The Class Committee Minutes and the action taken report will be submitted to the Director.

12. TEMPORARY BREAK OF STUDY FROM THE PROGRAMME

A student may be permitted by the Director to withdraw from the programme for a maximum duration of one year, for reasons of medical grounds, physical fitness or other valid reasons subject to the recommendations of the class advisor in consent with the Head – Textiles / Management. In such cases, the student will have to fulfil all conditions to redo the programme.

WITHDRAWAL FROM EXAMINATION

a. A student may for valid reasons and on the recommendation of the class advisor in consent

with Head – Textiles / Management, be granted permission to withdraw from appearing for the entire Semester Examination as one unit.

b. Withdrawal application shall be valid, only if it is made 10 days before the commencement of the semester examination pertaining to the semester.
c. Such withdrawal shall be permitted only once during the entire programme and shall not be construed as an appearance for the eligibility of a student for the award of classification.
d. If a student falls sick in the due course of the Semester Examinations, he / she can withdraw from one or more courses.

13. PERFORMANCE ANALYSIS COMMITTEE

The Performance Analysis Committee will consist of Director as Chairman, Controller of Examinations as convenor and the members will be Head – Textiles / Management, all members of faculty and the class advisors. The meeting of the Performance Analysis Committee is to be held within four weeks from the last day of the semester examinations to analyse the performance of the students in all subjects of study (continuous and end semester).

14. RESULTS DECLARATION COMMIITEE

Results Declaration Committee will have Director as Chairman, Head – Textiles / Management and Controller of Examinations as members. After analysing the performance of the students in each course the committee is empowered to declare the results. If necessary, moderation of results will be done by this Committee. The findings and decisions of the performance analysis and results declaration committee is to be passed on to the Controller of Examinations immediately.

II. REGULATIONS

Definitions and Nomenclature

- Institute – Sardar Vallabhbhai Patel International School of Textiles and Management, Coimbatore.
- University / Collaborating University – Central University of Tamil Nadu, Thiruvarur.
- Programme –BBA (Bachelor of Business Administration) – Textile Business Analytics/ BBA – Textile Business Analytics (Hons. /Hons. with Research) Course - Every paper / subject of study offered under the programme.
- Curriculum - The various components / courses / labs in each programme that provides appropriate outcomes (knowledge, skills and attitude/behavior) towards the completion and objectives of the programme is called curriculum.
- Credits - Course work is measured in units called credit hours or credits.
- The number of lecture hours allocated for a course per week is the number of credits for that course. In case of practical and labs two hours will account for one credit.

1. QUALIFICATION FOR ADMISSION

a. Students for admission to the BBA Programme will be required to fulfil the minimum qualification as specified in the following table.

S.No.	Programme	Minimum Qualification
1.	BBA – Textile Business Analytics	A pass in the Plus two examination or equivalent of any recognized board in India (any stream) having 50% for General category, 45% marks for OBC-NCL/SC/ST/PWD candidates.

b. The Institute will prescribe from time to time other eligibility conditions for admission regarding the marks required to be secured by the student in the qualifying examination, minimum admissible percentage marks therein, permitted number of attempts for obtaining the qualifying examination, passing requirements in the respective entrance tests conducted by this institute for admissions, Common University Entrance Test (CUET) scores or other competitive entrance tests, physical fitness requirements, sponsorship etc.

2. DURATION OF THE PROGRAMME

a. The duration of the programmes are as follows:

Programme	Duration	
BBA Textile Business Analytics (Full-time)	6 Semesters	3 Years
BBA Textile Business Analytics Hons. (Full-time)	8 Semesters	4 Years
BBA Textile Business Analytics Hons. with Research (Full-time)	8 Semesters	4 Years

The programme is designed with reference to the New Education Policy of Governement of India.

b. 3-year UG Degree: Students who wish to undergo a 3-year UG programme will be awarded UG Degree in the Major discipline after successful completion of three years.

c. 4-year UG Degree (Honours): A four-year UG Honours degree in the major discipline will be awarded to those who complete a four-year degree programme.

d. 4-year UG Degree (Honours with Research): Students who secure 75% marks and above in the first six semesters and wish to undertake research at the undergraduate level can choose a research stream in the fourth year. They should do a research dissertation under the guidance of a faculty member of the College. The dissertation will be in the major discipline and will be awarded a UG Degree (Hons. with Research).

e. Exit options

   i. 6 semesters/3years – towards award of BBA – Textile Business Analytics

ii. 8 semesters/4 years-towards award of BBA – Textile Business Analytics(Hons./ Hons. with Research)

f. The duration of each semester will normally be 90 working days. The normal working days of 90 in each semester is exempted for semester VI/ VIII in which the students would spend time in industry/field for their project work.

g. A Student who is unable to complete the programme within the prescribed duration (6 semesters) may be allowed further to a maximum of 2 academic years after the completion of programme duration to complete the programme after which the marks obtained through Continual Internal Assessment (CIA) will be void.

3. STRUCTURE OF THE PROGRAMME

a. Student has an option of exiting after successful completion of three years with BBA Textile Business Analytics or opt for a four year programme with BBA Textile Business Analytics (Hons./ Hons. with Research).

b. This program comprises of 23 Major Core courses, 8 Minor stream courses, 5 Skill enhancement courses, 3 Multidisciplinary courses, 5 Ability Enhancement courses, 2 Elective courses, 3 Values added courses and 1 Self-interest courses comprising of 50 courses including internships and project work. The program will consist of total 152 credits up to 6th semester.

c. For students opting for 4 year programme, this program comprises of 28 Major Core courses, 12 Minor stream courses, 5 Skill enhancement courses, 3 Multidisciplinary courses, 5 Ability Enhancement courses, 3 Elective courses, 3 Values added courses and 1 Self-interest courses comprising of 60 courses including internships and project work. The program will consist of total 181 credits up to 8th semester.

d. The student can choose the elective courses from the list specified for concerned semester. Elective courses can be chosen by the student groups who would specialize in that elective unanimously. If the students opting for an elective are not in a position to have a consensus in selection of elective courses, rank order preference method would be adopted for finalizing the courses under electives.

e. For the project work at sixth semester / eighth semester, student will be permitted by the Programme Co-ordinator to work on an independent project under the supervision of a faculty member from the Institute (Internal Guide) and if required, be under a corporate guide assigned by the organization (External Guide).

f. The duration of the project will be three days per week during the sixth semester / eighth semester. At the end of the semester the student has to submit the project report.

g. The first 6 semesters are designed to incorporate core competencies in the stream Textile Business Analytics and can have an exit option after completion of 6 semesters, which will qualify for the award of degree of BBA Textile Business Analytics, subjected to fulfilling the minimum credit requirement for award of the degree. On completion of 8 semesters / 4 years, the student would be awarded BBA Textile Business Analytics (Hons. / Hons. with Research).

h. The Student has to inform the HoD at the start of the third year, if willing to proceed with

the fourth year.

4. TYPES OF COURSES

a) **Major Core Courses:** Major discipline is the discipline or subject of main focus and the degree will be awarded in that discipline. For students enrolled in Textile Business Analytics, courses related to Textile studies, Management and Business Analytics are marked as 'Major core Course'.

b) **Minor Stream Courses:** These courses help a student to gain a broader understanding beyond the major discipline. The student can choose the elective courses from the list specified for concerned semester. Elective courses can be chosen by the student groups who would specialize in that elective unanimously. If the students opting for an elective are not in a position to have a consensus in selection of elective courses, rank order preference method would be adopted for finalizing the courses under electives.

c) **Other courses:**

a) **Skill enhancing Laboratories courses**: All UG students are required to undergo skill enhancing practical courses to develop their skillset through hands on practical laboratory classes.

b) **Multidisciplinary Courses:** All UG students are required to undergo 3 introductory-level courses relating to any of the broad disciplines relating to Natural and Physical Sciences / Mathematics, Statistics. These courses are intended to broaden the intellectual experience and form part of liberal arts and science education.

c) **Ability Enhancement Courses (Language):** Students are required to achieve competency in a Modern Indian Language (MIL) and in the English language with special emphasis on language and communication skills.

d) **Value-Added Courses:**

i. As an initiative towards developing students as industry ready professionals and competent entrepreneurs, value added courses are introduced in final semester.

ii. The courses are prescribed during the sixth semester based on the inputs from the students, industry experts, and feedback from the employers, industry readiness requirements, contemporary practices and trending topics at the time when the course is to be offered.

iii. The courses will be delivered by industry experts / external agencies / practitioners/academic experts in the respective discipline in which the course is designed. They bring the knowhow contemporary industry practices to the college doorstep.

iv. Multiple value-added courses would be designed based on the said parameters and would be presented to the students for their choice of selecting two courses. A particular course would be delivered only if 40% of the batch strength opts fo r that course.

v. Students shall choose minimum of two courses or more based on their interests and account the credit points.

vi. These valueadded courses are voluntary basis and credits obtained will be added to the course credit as mentioned under 3b/3c.

vii. These credits cannot be compensated to the course credit that is mentioned under 3b/3c.

e) Self-interest courses:

i. Our predominant focus today is to curate the wealth of information that is freely available on the web into high quality learning-outcome to one's interest, learning style and pace of learning.
ii. Self-learning courses based on the students' unique interests through open source learning is introduced among the students to make them gain a competitive advantage in the market.
iii. This flexible learning provides the students a broad spectrum of study.
iv. Each student can undergo one open-source course through MOOC, SWAYAM, NPTEL etc., in sixth semester based on their interest which is related to the programme of study.
v. These courses shall account to one credit on successful completion of the course as prescribed by the organizer. The credits such obtained will be added to the course credit as mentioned under 3b/3c.
vi. These credits cannot be compensated to the course credit that is mentioned under 3b/3c.

d. **Internship:**

With the consultation of a faculty guide and coordinator, every student shall undertake a suitable internship at an industry for a period of three weeks during the summer vacation. Report of the Summer Internship is to be submitted by the students within 15 days from the commencement of **the third and fifth Semester** respectively as per the format given in the guidelines for report preparation. The first internship should preferably be undertaken in the Textile industry to help students understand the fundamental concepts such as fiber types, yarn manufacturing, fabric production, dyeing, printing, and finishing processes. The second internship should preferably be in the Data Analytics industry to help students understand the importance and application of Data analytics in real-world scenarios.

e. Project:

Every student shall undertake a project work in the sixth semester in consultation with the faculty guide and the project coordinator. The project work shall be carried out in institution / industry / research organization. This project is to be carried out for duration of 12 weeks.

f. Mini Project:

Students pursuing **BBA (Hons.)** shall undertake a **Mini Project** during the **eighth semester** under the guidance of an allotted faculty member. The project work shall be carried out in institution / industry / research organization. This mini project is to be carried out for duration of 8 weeks.

g. **Dissertation:**

Students choosing a 4-Year Bachelor's degree (Hons. with Research) are required to take up Dissertation under the guidance of a faculty member. The students are expected to complete the Dissertation in the eighth semester. The research outcomes of their project work may be published in peer-reviewed journals or may be presented in conferences /seminars.

5. ASSESSMENT OF THEORY COURSES

ASSESSMENT	MARKS
Continuous Internal Assessment	40
End Semester Examinations	60

Continuous Internal Assessment - Allotted marks are 40 for each theory course and the marks are inclusive of a written test and an assignment. The assignment can be in the form of article, seminar, presentation and etc. The choice of assignment is left with the faculty concerned.

- Two written exams (Continuous Internal Assessment Test I & II) with 90 minutes duration for 50 marks may be conducted and this will be converted to 20 marks for each course/subject.
- Students may be asked to submit at least two assignments in each course during each semester.
- Student should also present papers and participate in seminars conducted for each subject.
- Students may be asked pursue on and submit appropriate documents to one or more of the assessment methods.
- The presentations by students would be assessed based on RUBRICS.

  - CRITERIONS:
    - Contributions
    - Attitude
    - Preparedness & Focus
    - Quality of Work
    - Timely completion

POINTS	AWARD OF MARKS
≥ 90	10 Marks
≥ 80 but < 90	8 Marks
≥ 60 but < 80	6 Marks
≥ 40 but < 60	4Marks
= 40	2 Marks

- Controller of Examinations will issue the schedule and conduct the written test. Award of internal marks by assessment through various methods specified is the responsibility of the faculty handling the particular course.
- The internal marks obtained by the students will be duly informed before the semester examinations.

The marks may be allocated as follows:

Written tests (Each test carries 10 marks)	20 Marks
Assignments / Seminars / Case studies / Article review / Paper presentation / Publications / Field study / Concept viva / Test based on MCQs / Quizzes etc.	10 Marks

Students' Presentation/mini project/any activity as decided by the respective subject faculty	10 Marks
Total	**40 Marks**

Question Paper Pattern (CIA)

Total Marks: 50 Duration: 90 Minutes

PART A Answer Any Five (5x3=15 Marks)

1.
2.
3.
…..
7.

(Remember & Understand)

PART B Answer Any Two (2x10=20 Marks)

8.
9.
10.

(Apply, Analyze & Evaluate)

PART C Compulsory Question (Case study) (1x15=15Marks)

11.

(Evaluate & Create)

6. ASSESSMENT OF PRACTICAL COURSES

a. List of exercise for the subjects that contain practical shall be designed by the faculty member who handles the subject for the semester and executed under his/her supervision. Record shall be maintained by the individual student for the exercises carried out.

b. Maximum Marks for practical is 100 which consist of :

Continuous Internal Assessment (Internal Marks)	**End Semester** (External Marks)
60	40

c. End semester exam for practical subjects which has credit, shall be conducted by the internal faculty member in the presence of an External Examiner. The Question paper shall be set by Internal Examiner in consultation with External Examiners and exercises are conducted for the duration designed by them. The assessment is carried out subsequently along with a viva-voce and the results for the same are forwarded to COE.

d. Criteria for evaluation of experiment may be framed by the course faculty based on the laboratory course.

7. EVALUATION OF INTERNSHIP, PROJECT WORK AND DISSERTATION:

a. INTERNSHIP

a. For evaluation of internship, the student will make a presentation of the report on a date to be announced by the Controller of Examinations. The Presentation and Viva-voce will be evaluated by a team consisting of the faculty guide, the Internal Examiner and another faculty member nominated as the External Examiner.

b. During the internship period students will make presentation once in a week to the concerned faculty guide, and the final presentation-cum-viva voce examination marks shall be allotted as follows :

Type of assessment	Continuous Internal Assessment (Internal)	End Semester
Weekly Review (3)	**45**	**-**
Observation	**15**	**-**
Report	**-**	**30**
Presentation & viva voce	**-**	**10**
Total (100)	**60**	**40**

The internship report of the students shall be evaluated for a maximum of 100 marks of which 60 marks would be allotted for internal assessment and 40 marks would be allotted for external examination. A minimum of 20 marks should be obtained in external examination and in total 50 marks (Internal + External) should be obtained to pass.

b. PROJECT WORK:

a. During the project period students will make presentations to the faculty guide / faculty co-ordinator. The final presentation-cum-viva voce examination marks shall be allotted as follows:

Type of assessment	Continuous Internal Assessment (Internal)	End Semester
Project Reviews (3)	**60**	**-**
Report	**-**	**80**
Presentation & viva voce	**20**	**40**
Total (200)	**80**	**120**

The project work of the students shall be evaluated for a maximum of 200 marks of which 80 marks would be allotted for internal assessment and 120 marks would be allotted for external examination. A minimum of 60 marks should be obtained in external examination and in total 100 marks (Internal + External) should be obtained to get pass.

b. For evaluation of the project, the student will make a presentation of the Project work on a date to be announced by the Controller of Examinations. The Presentation and Viva-voce will be evaluated by a team consisting of an Internal Examiner and an External Examiner assigned by the Controller of Examination.

MINI PROJECT

a. During the mini project period students will make presentation once in a week to the concerned faculty guide, and the final presentation-cum-viva voce examination marks shall be allotted as follows :

Type of assessment	Continuous Internal Assessment (Internal)	End Semester
Weekly Review (3)	**45**	**-**
Observation	**15**	**-**
Report	**-**	**30**
Presentation & viva voce	**-**	**10**
Total (100)	**60**	**40**

The mini project report of the students shall be evaluated for a maximum of 100 marks of which 60 marks would be allotted for internal assessment and 40 marks would be allotted for external examination. A minimum of 20 marks should be obtained in external examination and in total 50 marks (Internal + External) should be obtained to pass.

c. DISSERTATION:

a. Students pursuing BBA (Hons. with Research) in Textile Business Analytics are required to undertake a Dissertation Project during Semester VIII. It involves problem Identification, Literature Review, Feasibility Study, Requirements Gathering through data collection, Work Plan Development including timelines and milestones followed by detailed design and implementation using appropriate Analytics Tools (e.g., Excel, R, Python, Power BI, Tableau, etc.), Data Analysis, Findings, and Interpretation aligned with the problem statement, Comprehensive Documentation of the entire research process and finally demonstration of outcomes.

b. During the dissertation students will make presentations to the faculty guide / faculty co-ordinator. The final presentation-cum-viva voce examination marks shall be allotted as follows:

Type of assessment	Continuous Internal Assessment (Internal)	End Semester
Project Reviews (3)	**60**	**-**
Report	**-**	**80**
Presentation & viva voce	**20**	**40**
Total (100)	**80**	**120**

c. The dissertation work of the students shall be evaluated for a maximum of 200 marks of which 80 marks would be allotted for internal assessment and 120 marks would be allotted for external examination. A minimum of 60 marks should be obtained in external examination and in total 100 marks (Internal + External) should be obtained to get pass.

d. For evaluation of the dissertation, the student will make a presentation of the dissertation work on a date to be announced by the Controller of Examinations. The Presentation and Viva-voce will be evaluated by a team consisting of an Internal Examiner and an External Examiner assigned by the Controller of Examination.

8. ELIGIBILITY CRITERIA FOR APPEARING IN EXAMINATIONS AND ATTENDANCE REQUIREMENT

a. Students fulfilling the following criteria will be allowed to appear in the examinations:
    a. Paid all the fees and dues to the Institute
    b. He/She has minimum prescribed attendance in a semester in all courses.

b. The minimum required attendance is 75% of the hours conducted for the roll out of each individual course (inclusive of lecture hours, tutorial hours and practical lab hours) and other prescribed learning activities in each course.

c. The institute may for valid and convincing reasons condone the shortage in attendance not exceeding to 5%, provided that Head - Management makes a recommendation to this effect after consulting the Director of the institute. The institute will condone this 5% shortage in minimum requirement of attendance only on payment of condonation fee of Rupees 500 by the students.

d. The students deputed by the Institute to take part in the extra and co-curricular events shall be given a concession of up to 5% attendance, if necessary, in addition to the relaxations in the attendance requirement as provided above. Such concession would be available for the days of actual participation in the event, including journey time with the prior approval of the Director of the Institute. Such concession of up to 5 % in addition to the relaxation of attendance specified in "item c" may also be permitted for valid medical and physical illness.

e. The above said relaxations stated in item d will be considered for students whose academic progress and conduct is observed satisfactory.

f. The students who could not manage 75% attendance for two consecutive semesters have to repeat the semesters in the subsequent academic year. In such cases, the student will have to fulfil all the conditions to redo the programme.

9. END SEMESTER EXAMINATIONS

a. End semester examinations will be scheduled by the COE / Director for all Practical and Theory courses. The filled in Application forms with the payment of Examination fee for the students is Rs. 300/- per course (including Practical) to be submitted to the COE section within the stipulated time. The question paper will be set by an external examiner.

b. The End Semester Examination will be conducted for 100 Marks with a duration of 3 hours. A student should secure a minimum of 50 marks in the examination to get a pass in each course. Marks obtained by the students in the examination will be converted to 60%.

c. A minimum of 50% (End Semester and Continuous Assessment) in each course is required for obtaining a pass and the grades.

d. Question Paper Pattern (ESE)

Total Marks: 100 **Duration: 180 Minutes**

PART A Answer all questions **(10x3= 30 Marks)**

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

(Remember & Understand)

PART B Answer all questions **(5x10=50 Marks)**

1. A or
   B
2. A or
   B
3. A or
   B
4. A or
   B
5. A or
   B

(Apply, Analyze & Evaluate)

PART C Case analysis **(1x20=20 Marks)**

1.

(Evaluate & Create)

10. MOVEMENT TO HIGHER SEMESTER

a. Every student should register for the next semester along with the statement of results of the previous semester, proof of payment of tuition fees and mess fees (if applicable).

b. The following students would not be allowed to proceed to the next semester and would have to complete the semester which they had not completed only at the next available opportunity.
   i. Students who had failed to gain the minimum attendance in one or more courses conducted in the preceding semester
   ii. Students who had not completed the academic requirements for the course(s) in the preceding semester
   iii. Students who had been barred from taking the continuous internal assessment and or end semester examination for a course(s) other than valid reasons or medical grounds as approved by Director of the institute
   iv. Students who have got pending payments due to the institute
   v. Students who are barred in the preceding semester on grounds and practices of indiscipline

c. A student who is permitted to discontinue may re-join the programme at the appropriate semester only along with the students enrolled at the time of regular commencement of that semester as per the academic schedule of the institute.

d. A student who discontinues and re-joins shall be governed by the rules, regulations, courses of study and syllabus followed, at the time of his / her re-joining the programme.
e. Any student appearing for supplementary examinations in any subject, two years after the first registration for that subject, will be governed by the regulations and syllabus followed at the time when the supplementary examination is taken.

11. PERFORMANCE ANALYSIS SYSTEM

a. **Assessment of a subject** will be done on mark basis. The Performance Analysis Committee shall meet within three weeks after the completion of all examinations to analyse the performance of students in all assessments (continuous and end semester) for each course.
b. **The letter grades and the corresponding grade points** are as follows: Grading system for the programme is as follow:

Marks Range	Corresponding Grade	Grade Point
Below 50	**RA (Re- Appearance)**	**N.A**
50 and above but below 60	B (Above Average)	6
60 and above but below 70	B+ (Good)	7
70 and above but below 80	A (Very Good)	8
80 and above but below 90	A+ (Excellent)	9
90 and above 100	O (Outstanding)	10

c. **Classification**

A student in order to be eligible for the award of the Degree must obtain a minimum of "B" grade in each course. The results of successful candidates will be classified as indicated below on the basis of the Cumulative Grade Point Average (CGPA):

S. No.	Range of CGPA	Classification (provided the student pass all courses in the first attempt)
1	CGPA of 8.0 and above and up to 10.0	First Class with Distinction
2	CGPA of 6.5and above and up to 7.9	First Class
3	CGPA of 5.5and above and up to 6.4	Second Class

12. GRADE SHEET

1. After the results are declared, Grade Sheets will be issued to each student which will contain the list of subjects for that semester and the grades obtained by the student.
2. Grade Point Average (GPA) for each semester will be calculated only for those students who have passed all the subjects of that semester. Similarly, Cumulative Grade Point Average (CGPA) up to any semester will be calculated only for those students who have passed all the subjects up to that semester. GPA is calculated as follows:

$$GPA = \frac{\Sigma(C_i * GP_i)}{\Sigma (C_i)}$$

Where C_i - is the credit assigned to the course
GP_i - is the grade point obtained by the student

3. On successful completion of the programme, the CGPA is calculated as follows:

		$GPA = \frac{\Sigma(C_i * GP_i)}{\Sigma (C_i)}$
Where	Ci	-is the credit assigned to the course
	GPi	- is the grade point obtained by the student
	N	- is the total number of credits for the entire programme

13. ELIGIBILITY TO AWARD BBA Textile Business Analytics/ BBA Textile Business Analytics (Hons./Hons. with Research)

A student shall be eligible for the award of BBA – Textile Business Analytics/ BBA - Textile Business Analytics (Hons. /Hons. with Research), if the student has,

a. Undergone the prescribed programme of study and has passed in all the courses specified for the programme.
b. No dues to the Institute, Library, Hostel etc.,
c. No disciplinary action pending against him / her.

14. CONSOLIDATED STATEMENT OF GRADES

a. At the end of the programme, all successful students will be furnished with a consolidated statement of grades which will contain the following particulars :
   i. Grades in the courses of the semesters
   ii. CGPA
   iii. Classification (First class with Distinction / First class / Second class.
b. A student who has completed the minimum period and has undergone all the courses specified in a programme may be given a course completion certificate.
c. At the end of the programme all successful students can apply for the provisional certificate on payment of prescribed fees of Rs.500/- through proper application to the CoE.

15. REVALUATION OF ANSWER SCRIPTS

Within one week from the announcement of examination result, a student may ask for photocopies of his / her semester / supplementary examination answer paper in any subject on payment of Rs. 400/- per course through proper application to the Controller of Examinations. Subsequently, within a week's time he / she can opt for revaluation if he / she so desires, on payment of Rs. 500/- per course through proper application to the Controller of Examinations.

16. SUPPLEMENTARY EXAMINATIONS

Supplementary examination for failed students will be scheduled along with the semester examinations. Students registering for supplementary examinations at the end of any semester should register for the courses he / she intends to appear by submitting application in the prescribed form with the prescribed fee of Rs.300/- per subject for B.B.A. Programme to the Controller of Examinations. The candidates can appear for the supplementary examinations for the maximum period of 2 years from their period of study.

17. WITHDRAWAL FROM EXAMINATION

A student may for valid reasons and on the recommendation of the Programme Co-ordinator, be granted permission to withdraw from appearing for the entire Semester Examination as one unit. Withdrawal application shall be valid, only if it is made 10 days before the commencement of the semester examination pertaining to the semester. Such withdrawal shall be permitted only once during the entire programme and shall not be construed as an appearance for the eligibility of a student for the award of classification specified. If a student falls sick in the middle of the Semester Examinations, he / she can withdraw from one or more courses.

BACHELOR OF BUSINESS ADMINISTRATION – TEXTILE BUSINESS ANALYTICS

III. CURRICULUM & SYLLABUS

1. MISSION OBJECTIVES (MOs):

M1	To develop competent professionals with analytical, managerial, and entrepreneurial skills tailored for the textile industry.
M2	To build a strong foundation in business analytics, data-driven decision-making, and digital tools relevant to textile and apparel management.
M3	To provide industry-oriented knowledge of textile manufacturing, supply chain, marketing, and international trade through experiential and multidisciplinary learning.
M4	To inculcate ethical leadership, lifelong learning, and a commitment to sustainability, innovation, and continuous professional development in a global business environment.

2. PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- On successful completion of the program, the student will be able to:

PEO1	To be able to demonstrate managerial and leadership skills in dynamic business environment
PEO2	To focus on overall development of students with conceptual clarity, analytical and logical thinking
PEO3	To be able to face emerging business challenges with positive attitude
PEO4	To prepare the students to take up entrepreneurial ventures by providing suitable ecosystem.
PEO5	To develop proficiency in analytical tools and data interpretation techniques, enabling students to derive actionable insights and support strategic business decisions in a data-driven environment.

3. Programme Outcomes (PO)

On the successful completion of the program, the student will be able to:

PO1	Enable all participants to recognize, understand and apply the language, theory andmodels of the field of business analytics in Textile industry
PO2	Foster an ability to critically analyze, synthesize and solve complex unstructuredbusiness problems
PO3	Encourage an attitude for business improvement, innovation and entrepreneurial action
PO4	Encourage the sharing of experiences to enhance the benefits of collaborative learning
PO5	Instill a sense of ethical decision-making and a commitment to the long-run welfare of both organizations and the communities they serve

4. Mapping of MOs and PEOs

S- Strong, M - Medium

Mission Statements (M)	PEO1	PEO2	PEO3	PEO4	PEO5
M1	**S**	**S**	**S**	**M**	**S**
M2	**S**	**M**	**S**	**S**	**M**
M3	**S**	**S**	**M**	**S**	**M**
M4	**M**	**M**	**M**	**S**	**S**

5. Mapping of PEOs and POs

S- Strong, M - Medium

	PO1	PO2	PO3	PO4	PO5
PEO1	S	S	S	M	M
PEO2	S	S	M	S	M
PEO3	M	S	M	S	S
PEO4	M	S	S	M	M
PEO5	M	M	M	S	S

6. GRADUATE ATTRIBUTES OF BBA TEXTILE BUSINESS ANALYTICS PROGRAMME

1. **Technical skills:** Understanding textiles, garment construction, relevant technologies and business analytics Tools & Technologies.
2. **Creative skills:** Ability to design, illustrate, and innovate.
3. **Critical thinking:** Problem-solving and trend analysis.
4. **Communication skills:** Effective presentation and collaboration.
5. **Business knowledge:** Understanding the fashion industry and entrepreneurship.
6. **Ethical awareness:** Commitment to sustainability and ethical practices.
7. **Adaptability:** Lifelong learning and ability to adjust to industry changes.

List of abbreviations

- L – Lecture Hours / Contact Sessions
- T – Tutorial Hours
- P – Practical Hours
- C-Credit
- CT – Course Type
- AM – Assessment Methodology
- CIA – Continuous Internal Assessment
- ESE – End Semester Examination
- MC – Major Core
- MS – Minor stream
- MD – Multi Disciplinary
- AEC – Ability Enhancement Course
- SEC – Skill Enhancement Course
- VAC – Value Added Course
- SI – Summer Internship
- PW – Project work

7. SUBJECT CURRICULUM

SEMESTER I – Foundation to Business Administration								
COURSE CODE	**COURSE NAME**	**L**	**T**	**P**	**C**	**CT**	**AM**	
							CIA	**ESE**
25BBA11T/25BBA11H	Language Tamil I / Hindi I	3	0	0	3	AEC	40	60
25BBA12	Communicative English	3	0	0	3	AEC	40	60
25BBA13	Management Principles and Organizational Behavior	3	0	0	3	MC	40	60
25BBA14	Financial Accounting	4	0	0	4	MS	40	60
25BBA15	Business Statistics - I	3	0	0	3	MS	40	60
25BBA16	Introduction to Business Analytics	3	0	0	3	MC	40	60
25BBA17L	Statistical Applications Laboratory (Analysis with Excel)	0	0	4	2	SEC	60	40
25BBA18V	Yoga for Human Excellence#	2	0	0	2	VAC	100	
Total lecture/tutorial/practical hours		**21**	**0**	**4**				
Total credits		**23**						
SEMESTER II - Foundation to Business Administration								
COURSE CODE	**COURSE NAME**	**L**	**T**	**P**	**C**	**CT**	**AM**	
							CIA	**ESE**
25BBA21T/25BBA21H	Language Tamil II / Hindi II	3	0	0	3	AEC	40	60
25BBA22	Technical English	3	0	0	3	AEC	40	60
25BBA23	Business Statistics -II	3	0	0	3	MS	40	60
25BBA24	Mathematics for Data Science	3	0	0	3	MC	40	60
25BBA25	Managerial Economics	4	0	0	4	MS	40	60
25BBA26	Basics of Textile Manufacturing	3	0	0	3	MC	60	40
25BBA27L	Textile Science Lab	0	0	4	2	SEC	60	40
25BBA28L	Statistical Applications Laboratory II(Analysis with SPSS)	0	0	4	2	SEC	60	40
25BBA29V	Environmental Science	2	0	0	2	VAC	**40**	**60**
Total lecture/tutorial/practical hours		**21**	**0**	**10**				
Total credits		**25**						

SEMESTER III – Managerial Functions								
COURSE CODE	**COURSE NAME**	**L**	**T**	**P**	**C**	**CT**	**AM**	
							CIA	**ESE**
25BBA31	Human Resources Management	4	0	0	4	MC	40	60
25BBA32	Production and Operations Management	3	0	0	3	MC	40	60
25BBA33	Financial Management	4	0	0	4	MC	40	60
25BBA34	Apparel Manufacturing	3	0	0	3	MC	40	60
25BBA35	Textile Business Intelligence	3	0	0	3	MC	40	60
25BBA36	Research Methods	3	0	0	3	MS	40	60
25BBA37L	Basic Apparel Construction lab	0	0	4	2	SEC	60	40
25BBA38L	Textile Business Intelligence Laboratory – Tableau & Power BI	0	0	4	2	MC	60	40
25BBA39I	Internship – I	0	0	8	3	SI	60	40
Total lecture/tutorial/practical hours		**20**	**0**	**16**				
Total credits		**27**						
SEMESTER IV – Managerial Functions								
COURSE CODE	**COURSE NAME**	**L**	**T**	**P**	**C**	**CT**	**AM**	
							CIA	**ESE**
25BBA41	Marketing Management	4	0	0	4	MC	40	60
25BBA42	Business Law	3	0	0	3	MC	40	60
25BBA43	Textile chemical processing and finishing	3	0	0	3	MD	40	60
25BBA44	Textile Costing and Export Documentation	3	0	0	3	MS	40	60
25BBA45	Textile Business Analytics with R Programming	3	0	0	3	MC	40	60
25BBA46	Textile Database Management with SQL Programming	3	0	0	3	MC	40	60
25BBA47L	Textile Business Analytics with R Programming Laboratory	0	0	4	2	MC	60	40
25BBA48L	Textile Database Management Programming Laboratory	0	0	4	2	MC	60	40
Total lecture/tutorial/practical hours		**19**	**0**	**8**				
Total credits		**23**						

SEMESTER V – Domain Exposure								
COURSE CODE	**COURSE NAME**	**L**	**T**	**P**	**C**	**CT**	**AM**	
							CIA	**ESE**
25BBA51	Supply Chain Management	3	0	0	3	MC	40	60
25BBA52	Project Planning and Management	3	0	0	3	MC	40	60
25BBA53	Environment Compliance and Management	3	0	0	3	MD	40	60
25BBA54	Textile Data Science Using Python	3	0	0	3	MC	40	60
25BBA55	Advance Textile Business Analytics	3	0	0	3	MC	40	60
25BBA56L	Textile Data Science Using Python – Laboratory	0	0	4	2	MC	60	40
25BBA57	Elective - I	4	0	0	4	MS	40	60
25BBA58I	Internship-II	0	0	8	3	SI	60	40
Total lecture/tutorial/practical hours		**19**	**0**	**12**				
Total credits		**24**						
SEMESTER VI – Tools and Experiential Learning								
COURSE CODE	**COURSE NAME**	**L**	**T**	**P**	**C**	**CT**	**AM**	
							CIA	**ESE**
25BBA61	Strategic management and Corporate Governance	3	0	0	3	MC	40	60
25BBA62	Application of Cloud Computing in Textile Industry	3	0	0	3	MC	40	60
25BBA63	Entrepreneurship Development	3	0	0	3	MD	40	60
25BBA64	Elective - II	4	0	0	4	MS	40	60
25BBA65L	Cloud Computing Laboratory – AWS – For Textile Industry	0	0	4	2	SEC	60	40
25BBA66V	Value Added Course-I #	2	0	0	2	VAC	100	-
25BBA67S	Self-interest Course-I#	0	0	0	1	AEC	100	-
25BBA68P	Project Work	0	0	24	12	PW	60	40
Total lecture/tutorial/practical hours		**15**	**0**	**28**				
Total credits		**30**						
		Total Credits=152						

SEMESTER VII								
COURSE CODE	**COURSE NAME**	**L**	**T**	**P**	**C**	**CT**	**AM**	
							CIA	**ESE**
25BBA71	Big Data Analytics	4	0	0	4	MC	40	60
25BBA72	Industrial Management	4	0	0	4	MC	40	60
25BBA73	Product and Brand Management	3	0	0	3	MS	40	60
25BBA74	Data Mining and Warehousing	3	0	0	3	MC	40	60
25BBA75	Elective: III	4	0	0	4	MS	40	60
Total lecture/tutorial/practical hours		**18**	**0**	**4**				
Total credits		**18**						

SEMESTER VIII (for students pursuing BBA (Hons.)								
COURSE CODE	**COURSE NAME**	**L**	**T**	**P**	**C**	**CT**	**AM**	
							CIA	**ESE**
25BBA81	Total Quality Management for Textile & Apparel Industry	3	0	0	3	MS	40	60
25BBA82	Natural Language Processing and Text Analytics	3	0	0	3	MC	40	60
25BBA83L	Creativity and innovation lab	0	0	4	2	MC	40	60
25BBA84M	Mini Project	0	0	8	4	MC	60	40
Total		**6**	**0**	**12**	**12**			
Total Cumulative credits including value added and self-interest courses		182 Credits						
SEMESTER VIII (for students pursuing BBA (Hons. with Research)								
COURSE CODE	**COURSE NAME**	**L**	**T**	**P**	**C**	**CT**	**AM**	
							CIA	**ESE**
25BBA81D	Dissertation	0	0	24	**12**	MC	80	120
Total		**0**	**0**	**12**	**12**			
Total Cumulative credits including value added and self-interest courses		**194**						

- Those students opting for BBA (Hons. with Research) can pursue full time project with 12 credits

8. LIST OF ELECTIVES :

LIST OF ELECTIVES (SEMESTER VI)
ELECTIVE - I
25BBA507(A) – TECHNICAL TEXTILES 25BBA507(B) - FASHION BRAND MANAGEMENT 25BBA507(C) – APPAREL MERCHANDISING AND MARKETING 25BBA507(D) – TEXTILE COSTING 25BBA507(E) – RETAIL MANAGEMENT
ELECTIVE – II
25BBA604(A) - CONSUMER BEHAVIOUR 25BBA604(B) – FINANCE ANALYTICS 25BBA604(C) - MARKETING ANALYTICS 25MBA604(D) - HR ANALYTICS 25BBA604(E) - OPERATION AND SUPPLY CHAIN ANALYTICS

LIST OF ELECTIVES (SEMESTER VII)
ELECTIVE - III
25BBA705(A) - RETAIL ANALYTICS 25BBA705(B) - MULTIVARIATE ANALYSIS 25BBA705(C)- DIGITAL MARKETING 25BBA705(D)-INTEGRATED MARKETING COMMUNICATION

*** Value added courses and Self Interest courses to be completed within the sixth semester**

 # Mandatory for the award of degree

9. LIST OF VALUE ADDED COURSES:

- Intellectual Property Rights
- Event Management
- Critical Issues in Fashion Research
- Sustainable Energy
- Artificial Intelligence (AI)
- Industry 4.0

- Internet of Things (IoT)
- Big Data
- Cloud Computing

The courses may be offered as per the requirement of the industry and choice of the students. The list may be updated as per the recent trends.

SELF-INTEREST COURSES (MOOC, SWAYAM, NPTEL courses)

Each student can undergo one open source course through MOOC, SWAYAM, NPTEL etc., based on their interest which is related to the programme of study.

- Business Analytics for Management Decision
- Data Analytics with Python
- Business Analytics & Text Mining
- Supply Chain Analytics
- Business Intelligence & Analytics
- Machine Learning
- Artificial Intelligence: Knowledge Representation and Reasoning
- Cloud Computing & Big Data
- Cloud Computing and Distributed Systems
- Business Analytics & Data Mining
- Essentials of Data Science with R
- Statistical Analysis using SPSS
- Data Visualization (incl. Power BI & Tableau)
- Data to Dashboard: Mastering Visual Storytelling with Tableau
- Advanced Excel with Data Visualization

The list may be updated as per the recent trends.

10. CREDIT FRAMEWORK

S.No.	Course particulars	Semester wise credit split									Total	Contribution in (%)
		1	2	3	4	5	6	7	8	8*		
1	Major core	6	6	19	17	14	6	11	7	12	79/83	45
2	Minor stream	7	7	3	3	4	4	7	5		35/45	21
3	Multi Disciplinary				3	3	3				9	5
4	Ability Enhancement course	6	6				1				13	8
5	Skill Enhancement course	2	4	2			2				10	6
6	Value Added Course	2	2				2				6	4
7	Internship			3		3					6	4
8	Project work						12				24	7
	Total	23	25	27	23	24	30	18	12	12	**182/194**	**100**

*- for BBA(Hons. with research)

11. **SYLLABUS:**

SEMESTER – I

25BBA11T– TAMIL – I

3 0 0 3

குறிக்கோள்கள்:

- **பாரத நாட்டின் பெருமை, தற்போதைய சமூக நிகழ்வுகளையும் மனித உணர்வுகளையும் புது கவிஞர்கள் வாயிலாக மாணவர்களுக்கு உணர்த்துதல்**
- **வாழ்வில் பின்பற்றவேண்டிய தனி மனித சமூக ஒழுக்கங்களை சிறுகதை மற்றும் உரைநடை வாயிலாக மாணவர்களுக்கு உணர்த்துதல்**

On the successful completion of the program, the student will be able to:

	Course Outcome	Level
CO 1	Appreciate the pride of the Indian nation through various revered poets	Understand
CO 2	Understand the duties of an individual	Understand
CO 3	Discuss the importance of freedom	Understand
CO 4	Identify the virtues of the Tamil language	Understand
CO 5	Improve listening comprehension and oral communication skills	Skill

Mapping of Program Outcomes with Course Outcomes

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1		M			
2					S
3			M		
4				M	
5	M				

அலகு - 1 (செய்யுள்)

1.பாரதியார் – பாரத நாடு

2.பாரதிதாசன் - உலகம் உன்னுடையது

3.நாமக்கல் கவிஞர் இராமலிங்கம் பிள்ளை- சூரியன் வருவது யாராலே

4.அழ.வள்ளியப்பா - ஒரு வரம் கண்ணாடி

5.கண்ணதாசன் – யாத்திரை

அலகு - 2 (செய்யுள்)

1. மு. மேத்தா - மரங்கள்

2. வைரமுத்து - சுதந்திரம்

3. ஈரோடு தமிழன்பன்- அகல் விளக்காக இரு

4. அப்துல் ரகுமான்- கண்ணீரின் ரகசியம்....

5. மாலதி மைத்ரி- குருவி

6. வத்ஸலா - நான் ஆலமரம்

அலகு - 3 (இலக்கணம்)

1.வல்லெழுத்து மிகும் இடங்கள்

2.வல்லெழுத்து மிகா இடங்கள்

அலகு-4 (இலக்கிய வரலாறு)

1.மரபுக்கவிதையின் சிறப்பு இயல்புகள்

2.புதுக்கவிதையின் சிறப்பு இயல்புகள்

3.சிறுகதையின் தோற்றமும் வளர்ச்சியும்

4.உரைநடையின் தோற்றமும் வளர்ச்சியும்

அலகு-5

1. அறம் எனப்படுவது - முனைவர். அமுதன்

2. அழகோ அழகு - வெ. இறையன்பு

பாட புத்தகம்:

1. அறம் எனப்படுவது (முனைவர். அமுதன்) – நியூ செஞ்சுரி புக் ஹவுஸ் பி லிட், 41பி, சிட்கோ இண்டஸ்டிரியல் எஸ்டேட், அம்பத்தூர், சென்னை-600098

2. அழகோ அழகு - வெ. இறையன்பு - நியூ செஞ்சுரி புக் ஹவுஸ் பி லிட், 41பி, சிட்கோ இண்டஸ்டிரியல் எஸ்டேட், அம்பத்தூர், சென்னை-600098

குறிப்பு புத்தகம்:

1. தீந்தமிழ் இலக்கணம் (க. வெள்ளிமலை எம்.ஏ.) – ஐவரி அச்சகம், சென்னை – 600005

2. இலக்கணம் இலக்கிய வரலாறு மொழித்திறன் பேராசிரியர்.முனைவர். பாக்யமேரி) – பூவேந்தன் பதிப்பகம், மயிலாப்பூர், சென்னை

25BBA11H - HINDI – I

3 0 0 3

Course Objectives

- To enable the learners to know about the modern trends in Literature
- To imbibe values, social, moral through prose and short stories.
- To introduce the concept of Translation.
- To create an opportunity for the students to learn functional aspects of the language.

Course Outcomes (CO)

On the successful completion of the program, the student will be able to:

	Course Outcome	Level
CO 1	Identify the importance a prose	Understand
CO 2	Know about Hindi writers and get moral values from different stories.	Understand
CO 3	Translate Hindi to English	Apply
CO 4	Comprehension will help the students for competitive exams.	Skill
CO 5	Improve listening comprehension and oral communication skills	Skill

Mapping of Program Outcomes with Course Outcomes

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1		M			
2					S
3			S		
4				S	
5	M				

UNIT I

Prose: 1. Meri vasiyath, 2. Kadhamba ke phool, 3. bathcheeth mem shistachar

UNIT II

Non-Detailed: 1. Pareeksha, 2. Takur ka kuwa, 3. Trishanku bechara

UNIT III

Bahuyuktha hindi padnam

UNIT IV

Translation: Hindi to English only (1 – 10 Lessons only).

UNIT V

Comprehension: 15 - 30 Lessons only.

TEXT BOOKS:

1. Gadhya Manjusha-editor, Govind. M. A., Amar Prakashan, Mathura, (U.P).

2. Hindi Gadhya Prabhakar, **Editor:** Dr. Hiranmaya, Publisher: Siksha Bharathy, Kashmiri Gate, New Delhi – 110006.

3. Madhyamic Gadhya sankalan – Editor: Shrimathi Kamala Shankar, Publisher: Lokbharathi Prakashan, 15-A, Mahathma Gandhi Marg, Allahabad – 1.

4. Kahani Kunj, **Editor:** Dr. V. P. Amithab, Publisher: Govind Prakashan, Sadar Bazaar, Mathura, U. P. – 281 001.

5. Premchand ki shreshtha Kahaniyan by Kumar Krishnan, Publisher: Vani Prakashan, 21-A, Dariya ganj, New Delhi – 110002.

6. Gadhya Prasang by Dr. Sathya Prakash, Publisher: Sumithra Prakashan, 16/4, Hastings Road, Allahabad - 1

7. Vyavaharic Hindi by Sayed Rahamadulla (Page: 90-91).

8. Anuvad Abhyas – Part III by D.B.H.P. Sabha, Chennai - 17

25BBA12 - COMMUNICATIVE ENGLISH

3 0 0 3

Course Objectives

- To convey message to others clearly
- To develop communication skills
- To enhance students' communicative competence and performance
- To instill language skills

Course Outcomes (CO)

On the successful completion of the program, the student will be able to:

	Course Outcome	Level
CO 1	Expand the learner's use of maximum functions of English	Understand
CO 2	Acquire effective communications both oral and written	Understand
CO 3	Apply language functions in real situations.	Apply
CO 4	Enhance students" communicative competence and performance	Skill
CO 5	Analyze literary texts and identifying key themes, styles, and cultural contexts.	Analyze

Mapping of Program Outcomes with Course Outcomes

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1		S			
2					S
3			S		
4				M	
5	M				

UNIT I: **Functions of English**

Use of English in media, business and technology – Social functions: Conversational English Greeting, introducing, requesting, inviting, congratulating, thanking, apologizing, advice, suggestions, opinions, permission, sympathy, asking to repeat, complaining, understanding and being understood, agreement, preference, asking for information, changing the topic.

UNIT II*: Oral Communication*

Face to face communication – Telephonic conversation: Skills and etiquette – Interview skills – Instruction – Dictation.

UNIT III*: Remedial Grammar*

Subject verb agreement – Tenses – Transformation of sentence – Auxiliary verbs – Linkers.

UNIT IV*: Listening and Reading*

Academic listening; Listening to talks and descriptions; Listening to Announcements; Listening to Media news; Listening to casual conversations – Intensive reading, extensive reading, skimming, scanning, literary reading, non-literary reading

UNIT V: *Written Communication*

Email – letter writing - report writing – note taking – sentence construction (patterns)

TEXT BOOKS:

1. Syamala V. Effective English Communication for you, Emerald Publishers, Chennai, 2005. ISBN: 81-7966-002-8.
2. Mr. Mohan, Mr. Krishna and Ms. Meera Banerji, Developing Communication Skills, Macmillan, New Delhi, 2007. ISBN: 978-0333-92919-3.
3. Mr. Dutt, Mr. P. Kiranmai, Ms. Geetha Rajeevan and Mr. C.L.N. Prakash, A Course in Communication Skills, Cambridge University Press, New Delhi, 2007. ISBN: 978-81-7596-5362

25BBA13 - MANAGEMENT PRINCIPLES AND ORGANIZATIONAL BEHAVIOR

3 0 0 3

Course Objectives

- To familiarize students with principles of management and contemporary organizational behavior theories.
- To familiarize the students with organizational culture and help them to manage change.

Course Outcomes

Upon successful completion of this course the student would be able to,

	Course Outcome	Level
CO 1	Understand the core principles of management such as planning, organizing, leading, and controlling, and how they are applied in organizational settings.	Understand
CO 2	Evaluate how individual, group, and organizational factors influence behavior, productivity, and performance in the workplace.	Evaluate
CO 3	Use key motivational theories to address organizational challenges and improve decision-making processes.	Apply
CO 4	Enhance leadership abilities and communication skills, with an emphasis on effective team management, conflict resolution, and motivating employees.	Skill
CO 5	Gain insight into the processes of organizational change, develop strategies to manage change, and foster a positive organizational culture.	Understand

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	S				
2		S			
3		M	S		
4		M	M	S	
5	M	M			S

UNIT 1

Management Theories - Management Functions and their significance – Evolution of Management – Span of control – Departmentalization – Line /Staff Authority and decentralization- Managerial and organizational decision making – MBO - Roles, responsibilities and skills of managers.

UNIT II

Nature, scope, contributing disciplines to OB, challenges and opportunities, Organization Structure – Types and its application in textile industry - Emotional intelligence.

UNIT III

Personality - Determinants, Traits - Learning – Definition – Theories - Perception – Meaning, Importance, Process - Values – Importance, Sources, Types - Attitude – Motivation – Theories, Applications

UNIT IV

Nature of groups – Defining and classifying groups – Structure, process – Group decision Making – Team management skills – Communication – Functions, Barriers – Leadership – Concepts, Theories, styles, Conflict – Nature and types – Negotiation.

UNIT V

Dynamics, role and types of culture -– Organizational change - Concepts, resistance to change - Organizational development –Process – Values and interventions–Business Ethics.

REFERENCES

1. Laurie, J. Mullins. (2013). *Management and Organisational Behaviour* (10th ed,). USA: Pearson Higher Education.
2. Stephen P, Robbins. (2013). *Organizational Behaviour*, (15th ed,). New Jersey, NJ: Pearson Education.
3. Harold Koontz., & Heins Weihrich. (2009). *Essentials of Management* (8th ed,). New Delhi, ND: Tata McGraw-Hill Publishing Company.
4. Stephen, P.Robbins & David, A. Decenzo. (2008). *Fundamentals of Management,* (6th ed,). Unites States, US: Pearson Education.
5. James, A. F Stoner. Edward, R. Freeman. & Daniel, R. Gilbert. (2018). *Management,* (6th ed,). New Jersey, NJ: Pearson Edition.

25BBA14 - FINANCIAL ACCOUNTING

4 0 0 4

OBJECTIVES:

- To understand the basic principles of financial accounting and get acquainted with financial management process and functions.
- To enable the students to analyze and interpret Financial Statements

COURSE OUTCOMES

Upon successful completion of this course the student would be able to,

	Course Outcome	Level
CO 1	Apply appropriate financial analysis tool to make effective financial decisions	Understand
CO 2	Develop the ability to analyze balance sheets and profit & loss accounts to assess the financial health and performance of a business.	Analyze
CO 3	Comprehend the accounting treatment for corporate actions like bonus issues, buybacks, redemption of preference shares and debentures, and the valuation of goodwill and shares.	Understand
CO 4	Record accounting entries and prepare annual financial statements for sole proprietorship businesses, adhering to the prescribed legal formats and applicable Notes to Accounts.	Apply
CO 5	Account for special transactions such as capital reduction, internal reconstruction, and business combinations, including the preparation of reconstructed balance sheets and consolidated financial statements.	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	S	S			
2	S				
3	S		S		
4	M	S			M
5	S	S		M	

UNIT I

Introduction: Financial Accounting-definition and Scope, objectives of Financial Accounting, Accounting v/s Book, Keeping Terms used in accounting, users of accounting information and limitations of Financial Accounting.

UNIT II

Conceptual Frame work: Accounting Concepts, Principles and Conventions, Accounting Standards-concept, objectives, benefits, Accounting Policies, Accounting as a measurementdiscipline, valuation Principles, accounting
estimates.

UNIT III

Recording of transactions: Voucher system; Accounting Process, Journals, Subsidiary Books, Ledger, Cash Book, Trial Balance. Depreciation: Meaning, need & importance of depreciation, methods of charging depreciation (WDV & SLM).

UNIT IV

Preparation of final accounts: Preparation of Trading and Profit & Loss Account and BalanceSheet, Introduction to Computerized Accounting.

UNIT V

Introduction to Company Final Accounts: Preparation of Final Accounts, Understanding of final accounts of a Company.

Reference

1. Anil Chowdhry. (2007). Fundamentals of Accounting and Financial Analysis (1st ed.). Pearson Education
2. Jane L. Reimers. (2005). Financial accounting (1st ed.)PearsonEducation
3. Agarwal R. & Srinivasan R. (2010). Accounting Made Easy (2nd ed.). McGraw Hill Education.
4. Gupta A. (2018). Financial Accounting for Management: An Analytical Perspective (6th ed.).). PearsonEducation.
5. Maheshwari S. N. & Suneel K. M. & Sharad K. M. (2012). A Textbook of Accounting for Management (3rd ed.). Vikas Publishing House.

25BBA15 - BUSINESS STATISTICS I

3 0 0 3

Course Objectives

- To enable the students to acquire knowledge in the area of statistics and their applications in business decision making.
- To familiarize the student with functions of several variables.

Course Outcomes

Upon successful completion of this course the student would be able to,

	Course Outcome	Level
CO1	Understand basic statistical concepts, terminology, and types of data used in business decision-making.	Understand
CO2	Organize, summarize, and present data using appropriate graphical and tabular methods.	Apply
CO3	Compute and interpret measures of central tendency, dispersion, and position to describe data characteristics.	Analyze
CO4	Apply concepts of probability and probability distributions to solve simple business-related problems.	Apply
CO5	Use correlation and regression analysis to explore and quantify relationships between business variables.	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	1	2	3	4	5
1	M	S			
2	S	M			
3	S	S		M	
4	S	S			
5	S	S	M		S

UNIT I

Presentation of data by diagrammatic and graphical method - Formation of frequency distribution. Probability – Concept, Bayes‟ theorem. Probability distributions - Binomial, Poisson and normal

UNIT II

Measures of central tendency - Arithmetic mean, median, mode, geometric and harmonic mean, measures of variation and standard mean and quartile deviations - Skewness and Kurtoses

UNIT III

Simple correlation - Scatter diagram - Karl Pearson‟s Co-efficient of correlation – Rank correlation – Regression – Simple and multiple regression analysis - Regression lines

UNIT IV

Sample design – Sampling theory and test of significance – Quality tools – DOE, ANOVA and Chi square test .

UNIT V

Analysis of Time Series: Methods of measuring - Trend and seasonal variations – Index number – Unweighted indices - Consumers price and cost of living indices.

Note: Theory and problem shall be distributed at 20% and 80% respectively.

TEXT BOOKS:

1. Das N G. (2008). *Statistical Methods* (1st ed.). McGraw Hill Education.

2. Goon, A. M., Gupta, M. K., & Das Gupta, B. (1968). *Fundamentals of statistics*, I and II. World Press P Ltd.

3. Miller, & Freuntz. (2010). *Probability & Statistics for Engineers* (8th ed). Prentice Hall of India.

REFERENCES:

1. Gupta, S. P. (2014). *Statistical methods* (44th ed). S Chand & Sons.

2. Pillai, R. S. N., & Mrs. Bagavathi. (1984). *Statistics – Theory and practice* (7th ed). S Chand & Sons.

3. Leaf, G. A. V. (2009). *Practical statistics for the textile industry*. Cornell University Part I and II.

25BBA16 - INTRODUCTION TO BUSINESS ANALYTICS

3 0 0 3

Course Objectives

1. Understanding the Role of Business Analyst and Data Science in business.
2. Understanding the basic concept of data management and data mining techniques
3. To understand the basic concept of machine learning
4. To understand the application of business analysis.
5. Understanding the basic concept of Data Science Project Life Cycle.

Course Outcomes

On the successful completion of the course, student will be able to:

	Course Outcome	**Level**
CO1	Understand basic statistical concepts, terminology, and types of data used in business decision-making.	Understand
CO2	Organize, summarize, and present data using appropriate graphical and tabular methods.	Apply
CO3	Understand data management (Interpret and visualize data using basic dashboards, charts, and business intelligence tools) and handling and Data Science Project Life Cycle	Analyze
CO4	Apply concepts of probability and probability distributions to solve simple business-related problems.	Apply
CO5	Evaluate the role of data-driven decision-making in improving business processes and strategic planning.	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	M				
2	S				M
3	S				
4		S		M	
5		S	S		

Unit I

Introduction: What is business analytics? Historical Overview of data analysis, Data Scientist vs.Data Engineer vs. Business Analyst, Career in Business Analytics, What is data science, Why Data Science, Applications for data science, Data Scientists Roles and Responsibility

Unit II

Data: Data Collection, Data Management, Big Data Management, Organization/sources of data, Importance of data quality, Dealing with missing or incomplete data, Data Visualization, Data Classification Data Science Project Life Cycle: Business Requirement, Data Acquisition, Data Preparation, Hypothesis and Modeling, Evaluation and Interpretation, Deployment, Operations, Optimization.

Unit III

Introduction to Data Mining, The origins of Data Mining, Data Mining Tasks, OLAP and Multidimensional data analysis, Basic concept of Association Analysis and Cluster Analysis. Unsupervised and Supervised methods.

Unit IV

Introduction to Machine Learning: History and Evolution, AI Evolution, Statistics Vs Data Mining Vs, Data Analytics Vs, Data Science, Supervised Learning, Unsupervised Learning, Reinforcement Learning, Frameworks for building Machine Learning Systems.

Unit V

Application of Business Analysis: Retail Analytics, Marketing Analytics, Financial Analytics, Healthcare Analytics, Supply Chain Analytics.

Text Books:

1. Pochiraju, B., & Seshadri, S. (2019). *Essentials of business analytics: An introduction to the methodology and its applications* (1st ed). Springer.
2. Muller, A. (2016). *Introduction to Machine Learning with Python a Guide for Data Scientists* (1st ed). Shroff/ O'Reilly.
3. Igual, L., & Seguí, S. (2017). *Introduction to data science: a python approach to concepts, techniques and applications* (1st ed). Springer.

Reference Book:

1. Tan, P.-N. (2016). *Introduction to data mining* (1st ed). Pearson education

2. Koole, G. (2019). *An introduction to business analytics*. MG books.

25BBA17L - STATISTICAL APPLICATIONS LABORATORY I (ANALYSIS WITH EXCEL)

0 0 4 2

Course Objectives

- To inculcate the knowledge of MS Excel
- To understand the basic statistics tools & methods

Course Outcomes

On the successful completion of the course, students will be able

	Course Outcome	Level
CO1	Understand the interface, features, and basic functionalities of Excel for statistical data analysis.	Understand
CO2	Enter, manage, and clean raw business data using Excel tools.	Apply
CO3	Perform descriptive statistical analysis (mean, median, mode, standard deviation) using Excel functions.	Apply
CO4	Create and interpret data visualizations (charts, graphs, pivot tables) for business insights.	Analyze
CO5	Apply Excel tools to solve basic probability problems, perform correlation and regression analysis.	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	1	2	3	4	5
1	S				
2	S	M			
3	S				
4	S	S			S
5	S	S	M		

LIST OF EXPERIMENTS

1. Introduction to Excel
    a. Overview of the Excel interface
    b. Basic data entry and formatting
    c. Cell referencing (relative, absolute, mixed)

2. Basic Formulas and Functions
    a. Basic formulas (SUM, AVERAGE, COUNT, etc.)
    b. IF statements and logical functions
3. Intermediate Excel Functions
    a. VLOOKUP and HLOOKUP functions
    b. INDEX and MATCH functions
    c. Text functions (LEFT, RIGHT, MID, CONCATENATE, etc)
    d. Date and time functions
4. Data Management and Analysis
    a. Sorting and filtering data
    b. Data validation and drop-down lists
    c. Subtotal and outlining data
    d. Pivot Tables and Pivot Charts
5. Advanced Data Analysis
    a. What-If Analysis using Scenario Manager
    b. Goal Seek and Solver for optimization problems
    c. Data tables for sensitivity analysis
    d. Power Query for data transformation
6. Data Visualization with Charts
    a. Creating various types of charts (bar, line, pie, etc.)
    b. Customizing charts and adding data labels
    c. Introduction to Sparklines
7. Statistical Analysis with Excel
    a. Descriptive statistics (mean, median, mode, etc.)
    b. Correlation and regression analysis
8. Business Analytics Applications
    a. Time series analysis with Excel
    b. Forecasting techniques
    c. Data modeling with Excel (basic predictive analytics)
9. Building Dashboards
    a. Building a basic dashboard with charts
    b. Dashboard interactivity and user-friendly design
10. Mini Project - Use necessary tools to analyze textile business data.

REFERENCE:

1. Fairhurst, D. S. (2019). *Using excel for business and financial modelling* (3rd ed).Wiley.

25BBA18V- YOGA FOR HUMAN EXCELLENCE

2 0 0 2

Course Objectives

- To know about the importance of Physical Exercises, yogasana and meditation
- To empower the students with knowledge about the mind and its functions

Course outcomes

Upon successful completion of this subject, the students should be able to:

	Course Outcome	**Level**
CO1	Practice basic yogic techniques including asanas, pranayama, and meditation for physical and mental well-being.	Apply
CO2	Analyze the impact of yoga on stress management, emotional balance, and concentration.	Analyze
CO3	Develop positive attitudes, values, and a disciplined lifestyle through yogic practices.	Apply
CO4	Evaluate the role of yoga in achieving holistic growth, ethical leadership, and social responsibility.	Evaluate
CO5	Practice basic yogic techniques including asanas, pranayama, and meditation for physical and mental well-being.	Apply

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1				**S**	
2	M				**S**
3			**S**		
4		M			**S**
5				**S**	

UNIT I: Yoga Types

Types of yoga – karma yoga – bhakthi yoga – raja yoga – gnana yoga – hata yoga. agna- santhi – clearence – thuriya – thuriyatheetham.

UNIT II: Yogasana, Varma Art and Naturopathy

Padmasana, halasana, vajrasana, sukasana, chakrasana (side posture), viruchasana, bhujangasana, yoga mudra, ustrasana, maha mudra, vakkarasana. art of varma – philosophy of varma – practices – benefits – methods of naturopathy.

UNIT III: Simplified Physical Exercises

Physical exercises – hand exercises – leg exercises – breathing exercises – eye exercises –kapalabathi – makarasana – body massage – acupressure – relaxation science and total consciousness – integrated approach.

UNIT IV: Personality Development

Introspection – analysis of thoughts – moralization of desire – neutralization of anger –eradication of worries – benefits of blessing.

UNIT V: Life lessons

Divine thoughts of Bharathiar – Concepts of Ramalinga Vallalar Vethathirian principles –Practical solutions of Vethathirian philosophy.

TEXT BOOK:

1. "Simplified Physical Exercises", by Vedhathiri Maharishi Pathipagam, 180, GadhijiRoad, Erode – 638001.

REFERENCES:

1. "Yoga its Basis and Applications" – H.R Nagendra, S-VYASSA publications.
2. "New perspective in stress Management (SMET)", S-VYASSA publications.
3. "My Life History", Thathuvagnani Vethathiri Maharishi, 180, Gadhiji Road, Erode
4. "Patanjali's Yoga Sutras", S-VYASSA publications.
5. "Yoga – Breathing Practices", S-VYASSA publications.

SEMESTER II

25BBA21T - TAMIL - II

3 0 0 3

குறிக்கோள்கள்:

- மாணவர்களின் மனநலத்துக்கும் வருங்கால வாழ்வுக்கும் உதவும் வகையில் இலக்கியப் பயிற்சி அளித்தல்

- அறம் சார்ந்த வாழ்வியல் விழுமியங்களைக் கற்பித்தல்

- சமயங்களை பற்றி மாணவர்களுக்கு உணர்த்துதல்

- வாழ்வில் கடை பிடிக்க வேண்டிய ஒழுங்குமுறைகளை இலக்கியங்கள் மூலம் கற்றல்

- தமிழர் வீர விளையாட்டுகளை குறுநாவல் வழி கற்றல்

Course Outcomes (CO)

On the successful completion of the program, the student will be able to:

	Course Outcome	Level
CO 1	Provide literary training to aid students' mental well-being and future life.	Understand
CO 2	Explain ethical life values.	Understand
CO 3	Understand about religions.	Understand
CO 4	Analyse life's disciplines through literature.	Apply
CO 5	Understand Tamil martial sports through short stories.	Understand

Mapping of Program Outcomes with Course Outcomes

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1	S				
2			M		
3				S	
4					M
5		S			

அலகு - 1

திருக்குறள் - 1. ஊக்கமுடைமை 2.செய்நன்றியறிதல்

நாலடியார் - 1. பொறையுடைமை (5 பாடல்கள்) 2. பெரியாரைப்பிழையாமை (5 பாடல்கள்)

அலகு - 2

திருஞானசம்பந்தர் தேவாரம் – கோளறுதிருப்பதிகம் (10 பாடல்கள்) பெருமாள் திருமொழி - 11 பாடல்கள் . இயேசுகாவியம் – பாரச்சிலுவை (8 பாடல்கள்) சீறாப்புராணம் - கடவுள் வாழ்த்து (5 பாடல்கள்)

அலகு – 3 - இலக்கணம்

பவணந்தி முனிவர் - நன்னூல் - எழுத்து - மாணாக்கனது வரலாறு பாடங் கேட்டலின் வரலாறு

அலகு – 4 – உரைநடைப் பகுதி

1. நல்லதை நோக்கி நடப்போம் - சுகி சிவம்
2. கல்வியும் கடவுட் தன்மையும் - வெ. இறையன்பு
3. அக்னிச் சிறகுகள் (அத்தியாயம் 1) முனைவர். எ பி ஜே அப்துல் கலாம்
4. அன்பிற் சிறந்த தவமில்லை - தமிழருவி மணியன்
5. சாதனை படைக்கும் சிந்தனைகள் - உயர்வளிக்கும் எண்ணங்கள் – டாக்டர். சிவசூரியன்

அலகு – 5

வாடி வாசல் (நாவல்) – சி.சு.செல்லப்பா – காலச்சுவடு பதிப்பகம்

குறிப்பு புத்தகம்:

1. நல்லதை நோக்கி நடப்போம் - சுகி சிவம்
2. கல்வியும் கடவுட் தன்மையும் - வெ. இறையன்பு
3. அக்னிச் சிறகுகள் (அத்தியாயம் 1) முனைவர். எ பி ஜே அப்துல் கலாம்
4. தமிழருவி மணியன் - அன்பிற் சிறந்த தவமில்லை
5. டாக்டர். சிவசூரியன் - சாதனை படைக்கும் சிந்தனைகள் - உயர்வளிக்கும் எண்ணங்கள்
6. பவணந்தி முனிவர் – நன்னூல்
7. சி.சு.செல்லப்பா – காலச்சுவடு பதிப்பகம்

25BBA21H - HINDI – II

3 0 0 3

Course Objectives

- To enable the students to know about the Modern Trends in Literature as the contemporary literature deals with the changing trends in the socio-economic cultural revolution taking place in the social system.
- To introduce the importance of letter writing, dialogue writing and applied grammar in Hindi literature.

Course Outcomes (CO)

On the successful completion of the program, the student will be able to:

	Course Outcome	Level
CO 1	Understand the importance of letter writing, dialogue writing and applied grammar in Hindi literature.	Understand
CO 2	Illustrate the Modern Trends in Literature	Understand
CO 3	Identify errors in writing and reading of hindi	Identify
CO 4	Appreciate the hindi literature	Apply
CO 5	Frame sentences and write formal communication letters	Apply

Mapping of Program Outcomes with Course Outcomes

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1	S				
2			M		
3				S	
4					M
5		S			

UNIT I

1. Sawal, 2. Jeevan ki theen pradhan bathem, 3. Do Chere.

UNIT II

Lagu Kathayem: 1. Fees, 2. Risthe, 3. Kelne ke din, 4. Kamra

UNIT III

Applied Grammar: 1. Line Badaliye, 2. Vachan Badaliye, 3. Vachya Badaliye, 4. Ulte arthavale shabda likiye, 5. Karak cinhom se bariye, 6. Vakyom mem prayog kijiye, 7. Kaal Badaliye, 8.Shuddakijiye.

UNIT IV

Vakya ke liye ek Shabda (one word for one sentence).

UNIT V

Letter Writing: 1. Leave letter, 2. About a tour from the college, 3. About a function celebrated in thecollege, 4. Applying for the job, 5. Ordering for the books.

TEXT BOOKS:

1. Hindi Gadhya Prabakar, Editor: Dr. Hiranmay, Publisher: Shiksha Bharathy, Kashmiri Gate, NewDelhi - 6
2. Bharathi Gadhya Sangrah by Vani Prakashan, New Delhi.
3. From Laghu Katha.com.
4. Sugam Hindi Vyakaran, Siksha Bharathi Madarsa Road, Kashmiri Gate, New Delhi.
5. Abhinav Pathra Lekhan by D.B.H. Prachar Sabha, Chennai – 17.

25BBA22– TECHNICAL ENGLISH

3 0 0 3

Course Objectives

- To enhance ability and skills of the students to comprehend technical texts
- To develop their speaking skills in paper presentation, discussions etc.
- To acquire proper writing skill for reports, and official communications
- To facilitate them to acquire proper pronunciation skills.

Course outcomes

On the successful completion of the course, student will be able to:

	Course Outcome	Level
CO 1	Enhance ability and skills of the students to comprehend technical texts	Understand
CO 2	Develop their speaking skills in paper presentation, discussions etc.	Understand
CO 3	Acquire proper writing skill for reports, and official communications	Understand
CO 4	Speak in formal and informal situation	Apply
CO 5	Acquire phonetic skills	Understand

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1				S	
2			S		
3	S				
4					S
5		S			

UNIT I: Applied Phonetics

The phonological system in English – speech sounds – stress, rhythm – strong and weak forms – pitch and intonation

UNIT II: Technical Proposals

Definition and key factors – types – contents – format – evaluation

UNIT III: Formal reports

Definition – preparatory steps – types – structure – textile vocabulary

UNIT IV: English for specific purpose

Business communication – competitive examinations (TOEFL etc.) – paper presentations – description and demonstration, advertisement – notices, agenda and minutes

UNIT V: Career skills

Curriculum vitAEC and cover letters – soft skills – mock interviews – group discussion – personality traits

TEXT BOOKS:

1. Raman, Meenakshi and Sharma, Sangeetha .(2014). *Technical Communication Principles andPractice*, Oxford Univeristy Press: New Delhi,
2. Means, L Thomas and Elaine Langlois,(2007).*English & Communication for Colleges, CengageLearning, USA*

25BBA23 -BUSINESS STATISTICS – II

3 0 0 3

Course Objective

- To enhance analytical thinking through Permutations, Combinations, and the Binomial Theorem.
- To familiarize students with commercial arithmetic concepts
- To provide the foundation in financial mathematics, financial planning and investment analysis.

Course Outcomes

On the successful completion of the course, student will be able to:

	Course Outcome	**Level**
CO1	Apply arithmetic, geometric, and harmonic progressions along with permutation, combination, and binomial theorem to solve business-related problems	Understand
CO2	Solve practical business problems involving profit and loss, discount, commission, brokerage, and bills of exchange	Analyze
CO3	Apply the concept of set theory in logical and business decision-making.	Apply
CO4	Evaluate financial problems using concepts of simple and compound interest, stocks, shares, annuities, amortization, and sinking fund.	Evaluate
CO5	Formulate and interpret linear programming problems for business decision-making using mathematical models	Apply

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	M	S			
2		S			
3	M	S			M
4	S	S	M		
5	M	M		S	

Unit I

Series – Arithmetic Progression – Geometric Progression – Harmonic progression, Permutation and Combination – Binomial theorem.

Unit II

Set Theory – Definition of set, types of Sets, Venn Diagram and Application of set. Vectors and Matrices – types of Matrices, Matrix Multiplication and system of linear Equations – Application of Matrices in Solving problems relating to business.

Unit III

Commercial Arithmetic – Profit and Loss, Discount, Commission, Brokerage, Insurance, Rates and Taxes, Partnership goodwill money Bills of Exchange – Banker's Discount, Banker's Gain, Present value of the Bill of Exchange.

Unit IV

Mathematics of Finance – Simple interest and Compound interest – Stocks and Shares, Debenture, Important Terms, Calculation of Dividend, Market Value, yield interest – Annuity – Introduction amount and Present Value of Immediate or ordinary Annuity, Amortization, Sinking fund.

Unit V

Linear Programming - Introduction, Meaning, Requirements for a Linear Programming Problem, Assumption, Linear functions and Linear Equation and Mathematical formulation of LPP.

Text Books

1. Padmalochan Hazarika ,Business Mathematics ,S.Chand and Co
2. Martin Anthony & Norman Biggs ,Mathematics for Economics and Finance, Cambridge University Press, India
3. Gupta, S.P. &.Gupta P.K, Business Statistics and Business Mathematics , Sultan Chand & Sons.

REFERENCES

1. Gupta, S.P. & Gupta M.P.(2014). *Business Statistics(18th Ed),Sultan Chand & Sons Educational Publishers – New Delhi.,*
2. Sharma J.K.(2007). *Business Statistics*, Pearson Education India.
3. Sharma KVK, *Statistics Made Simple: Do it Yourself on PC*, PHI Publication
4. Gupta, S.C., & Kapoor V.K, *Fundamentals of Mathematical Statistics(2001).*- Sultan Chand & Sons, New Delhi.

25BBA24 - MATHEMATICS FOR DATA SCIENCE

3 0 0 3

Course Objective

- To provide suitable and effective methods called Numerical Methods, for obtaining approximate representative numerical results of the problems.
- To provide students with the foundations of essential linear algebra methods and Numerical methods to mostly use in varied applications in Business, Science etc.

Course Outcomes

On the successful completion of the course, students will be able to

	Course Outcome	Level
CO1	Understand and apply vector operations, systems of linear equations, and matrix operations in data science contexts.	Understand
CO2	Analyze and evaluate linear dependence and independence, subspaces, and orthogonal projections in the context of linear models and least-squares problems.	Analyze
CO3	Apply determinants, matrix inversion, Cramer's rule, and basic concepts of calculus for optimization and solving real-world data problems.	Apply
CO4	Apply numerical methods to solve complex data analysis problems.	Apply
CO5	Evaluate and optimize mathematical models used in data science	Apply

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	1	2	3	4	5
1	S				
2		S			
3				S	
4	M	S			M
5	M			S	

Unit I

Vectors & functions Systems of linear equations, Row reduction and echelon forms, Matrix operations

Unit II

Linear dependence and independence, Subspaces and bases and dimensions, Orthogonal bases and orthogonal projections, Linear models and least-squares problems

Unit III
Determinants and their properties, Inverse of a matrix, Cramer's Rule, Calculus, Optimization.

Unit IV
Eigenvalues and eigenvectors, Positive definite matrices, Linear transformations, Singular Value Decomposition, Hessian matrix

Unit V
Numerical Analysis: Iterative method, Taylor Series, Cauchy method, Newton Raphson Method.

Textbook
1. Strang, Gilbert, et al. Introduction to linear algebra. Vol. 3. Wellesley, MA: Wellesley-Cambridge Press, Fifth Edition, 2016.
2. John B. Fraleigh, Raymond A. Beauregard, Victor J. Katz,Linear algebra,3rd Edition,1995.

Reference Books:
1. Hoffmankunze,(2009).*Introduction linear algebra.*(2nd ed). Prentice-Hall, Inc. Englewood Cliffs, New Jersey,
2. David C. Lay, Steven R. Lay, Judi J. McDonald,(2018) Linear Algebra and Its Applications,(5th ed).Pearson publication.

25BBA25 - MANAGERIAL ECONOMICS

4 0 0 4

Course Objectives

- To give an insight on demand and supply analysis, forecasting and decision making, to provide students with a basic understanding of various market structures
- To provide students with a basic understanding of the macro-economic concepts and Indian Government's stabilization policies.

Course Outcomes

	Course Outcome	**Level**
CO1	Apply the concepts of managerial economics in day to day running of business.	Apply
CO2	Workout and develop business strategies according to the principles and law of demand, supply and market structures	Analyze.
CO3	Understand the fundamental concepts of demand, supply, and elasticity to aid managerial decision-making.	Understand
CO4	Analyze various market structures and their impact on pricing and output decisions.	Analyze.
CO5	Evaluate production and cost functions to determine efficient allocation of resources.	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	**S**	**M**			**M**
2		**S**	**M**	**M**	
3	**S**				
4	**S**	**M**			
5		**S**	**M**		

UNIT 1

Managerial economics - Scope –Importance in business decision making - Role of Managerial Economist - Fundamental concepts - Demand analysis: Meaning, determinants and types, Elasticity of demand.

UNIT 2

Supply - Meaning and determinants, production decisions, production functions - Isoquants, Expansion path – Cost concepts, cost - output relationship - Economies and diseconomies ofscale - Cost functions.

UNIT 3

Market structure - Characteristics - Pricing and output decisions different market structures - Methods of pricing - Differential pricing

UNIT 4

Profit - Meaning and nature - Profit policies - Profit planning and forecasting – Break Even Analysis

UNIT 5

National income - Business cycle - Inflation and deflation - Balance of payments - Monetary and fiscal policies – Ease of doing business.

REFERENCES

1. Varshney, R. L &Maheshwari K. L., (2014),*Managerial Economics*,(22nd Revised ed) .S Chand & Sons, New Delhi,
2. Yogesh Maheshwari,(2012), *Managerial Economics*,(*3rd ed*) PHI Learning Private Limited, New Delhi.
3. Mithani, D.M,(2009), *Managerial Economics Theory and applications(*8th ed*)*, Himalaya Publishing HousePrivate Limited, Mumbai.
4. World Bank Group,(2014),*Doing Business 2015*,*(12th ed).*Washington,
5. Geetika, Piyali Ghosh& Purba Roy Choudhury,(2013),*Managerial Economics*(*2nd ed),*Tata McGraw HillPublishing Co., Ltd., Noida,

25BBA26 - BASICS OF TEXTILE MANUFACTURING

3 0 0 3

Course Objectives

- To provide students about the knowledge of textile fibres and yarn manufacturingprocess.
- To learn about the fabric manufacturing process through weaving.
- To learn about the nonwoven fabrics.

Course Outcomes

On the successful completion of the course, student will be able to:

	Course Outcome	**Level**
CO1	Understand the classification and properties of natural fibres	Understand
CO2	Insights about the yarn manufacturing process	Analyze.
CO3	Understanding about the weaving preparatory process	Understand
CO4	Know about types of looms	Analyze.
CO5	Understanding about the concepts of Nonwovens.	Understand

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1		**S**	**S**	**S**	
2		**S**	**S**	**S**	
3		**S**	**S**	**S**	
4		**S**	**S**	**S**	
5					S

UNIT I

Textile Fibres: Introduction – Classification: Natural, regenerated and synthetic – Physical and Chemical properties – Applications*.

UNIT II

Yarn Manufacturing: Introduction - Principles of Ginning, Blow room, carding, draw frame, combing, simplex and ring spinning - Study of yarn twist and its importance – Types of yarn twist – Various yarn and package defects - blending and its types.

UNIT III

Weaving preparatory: Introduction – Object of winding – High speed winding machine – Weft winding – Warping machine – Sectional warping machine – Sizing – Sizing ingredients – Sizing machine – Drawing in – Denting.

UNIT IV

Loom: Introduction - Passage of yarn through loom: primary, secondary and auxiliary motion – Principles and types of looms: hand loom*, power loom and shuttle less looms.

UNIT V

Nonwovens: Introduction – Fibres used – classification of nonwovens – web formation: Dry laid, wet laid, polymer laid – Web bonding: Mechanical, chemical and thermal bonding.

REFERENCES

1. Mishra, S. P. (2005). *A Text Book of Fiber Science and Technology. Reprint.* New Delhi: New Age International Pvt. Ltd.
2. Corbman, Bernard, P. (2000). *Textiles: Fiber to Fabric, 6th edition*. Singapore: McGraw Hill.
3. Klein, W. (2014). *The Rieter Manual of spinning. Vol 1 – 7.* Winterthur: Rieter Machine Works Ltd.
4. Adanur, S. (2001). *Handbook of Weaving*, (*1st ed*.) New York: CRC Press.
5. Karthik, T., Prabha Karan, C. and Rathinamoorthy, R. (2016*). Nonwovens: Process, Structure, Properties & Applications, 1st Edition*. India: Woodhead Publishing.

25BBA27L - TEXTILE SCIENCE LAB

0 0 4 2

Course objectives:

- To study properties and applications of textile fibers
- To enable the students to learn essential properties of yarn
- To study the operating mechanism of the weaving and knitting machine

Course outcomes:

Upon completion of this course, the student shall be able to

	Course Outcome	**Level**
CO1	Understand the yarn passage in weaving and knitting machine	Understand
CO2	Examine the suitability of any fiber for textile applications	Evaluate
CO3	Determine the yarn count and strength	Understand
CO4	Know about types of looms	Analyze
CO5	Understanding about the concepts of Nonwovens.	Understand

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1			**S**		**M**
2				**S**	
3			**M**		**S**
4	S				
5				M	

LIST OF EXPERIMENTS

1. Identification of fibres by chemical method, burning and microscopic method.
2. Determination of moisture content and regain of fibre.
3. Determination of fibre fineness
4. Determination of fibre length
5. Determination yarn count
6. Determination of lea strength

7. Study of material passage in loom
8. Analysis of woven fabric design – Plain and Twill
9. Study of material passage through single jersey knitting machine
10. Collection of different type of fabrics produced from different kind of fibres

REFERENCES:

1. Mishra, S. P. (2000). *A Text Book of Fibre Science and Technology*. New Delhi: New Age International Pvt. Ltd.
2. Corbman, B. P. (2000). *Textiles: Fibre to Fabric*. Singapore: International students Edition McGraw Hill Book Company.
3. Anbumani, N,(2007) *Knitting-Fundamentals, Machines, Structures and d evelopments*, NewAge International (P) Ltd., New Delhi,.

25BBA28L - STATISTICS APPLICATIONS LABORATORY II (ANALYSIS WITH SPSS)

0 0 4 2

COURSE OBJECTIVES

- To explore and acquire skills in SPSS

COURSE OBJECTIVES

On the successful completion of the course, student will be able to:

	Course Outcome	Level
CO1	Understand the fundamental programming concepts of SPSS	Understand
CO2	Design and customize data visualizations and apply advanced statistical methods such as factor analysis, cluster analysis, and MANOVA in SPSS.	Analyze
CO3	Apply descriptive statistical techniques using SPSS to summarize, organize, and interpret data effectively.	Apply
CO4	Relate analysis techniques to data sets	Apply
CO5	Application of SPSS and R Statistical tools to problems	Apply

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	1	2	3	4	5
1	S				M
2		S			
3	S	S			
4	M	S		M	
5	S	M	M		

LIST OF EXPERIMENTS

1. Introduction to IBM SPSS
    a. Overview of IBM SPSS software
    b. Understanding the SPSS interface
    c. Importing and exporting data
2. Managing datasets in SPSS
    a. Data setup
    b. Reverse coding

    c. Selecting cases
    d. Splitting files
    e. Weighting cases
    f. Calculating scores
3. Descriptive Statistics in SPSS
    a. Frequency distributions
    b. Measures of central tendency (mean, median, mode)
    c. Measures of dispersion (range, variance, standard deviation)
4. Inferential Statistics - Part 1
    a. Calculating Probabilities
    b. Hypothesis testing (chi-square test)
    c. t -test (One-sample, Independent-sample, Paired sample)
5. Inferential Statistics - Part 2
    a. Analysis of Variance (ANOVA)
    b. Correlation analysis
    c. Regression analysis
6. Data visualization in SPSS
    a. Creating charts and graphs in SPSS
    b. Customizing visualizations
    c. Exporting visualizations for reports
7. Advanced SPSS Functions – Part 1
    a. Factor analysis
    b. Cluster analysis
8. Advanced SPSS Functions – Part 2
    a. Discriminant analysis
    b. MANOVA (Multivariate Analysis of Variance)
9. SPSS for Predictive Analytics
    a. Decision trees in SPSS
    b. Logistic regression in SPSS
10. Mini project – Use necessary tools to analyze textile business data.

25BBA29V- ENVIRONMENTAL SCIENCE

2 0 2 2

Course Outcomes (CO)

On the successful completion of the program, the student will be able to:

	Course Outcome	Level
CO 1	Understand the different types of pollution and its impact on environment	Understand
CO 2	Create awareness about eco-systems, social issues and environmental pollution control legislations	Understand
CO 3	Elaborate on the various natural resources	Understand
CO 4	Identify the various forms of pollution	Understand
CO 5	Know various social issues related to environment	Understand

Mapping of Program Outcomes with Course Outcomes

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1					S
2				M	
3		S			
4	S				
5			S		

UNIT I

Natural Resources: Renewable and non-renewable resources - natural resources and associated problems - forest resources - water resources - mineral resources - food resources - energy resources - land resources - role of an individual in conservation of natural resources - equitable use of resources for sustainable lifestyles.

UNIT II

Ecosystems: Concept of ecosystem - structure and function of an ecosystem – producers, consumers and decomposers - energy flow in the ecosystem - ecological succession - food chains, food webs and ecological pyramids.

UNIT III

Environmental Pollution: Meaning and factors, types of environment pollution: air pollution, water

pollution, noise pollution, industrial pollution - soil pollution - marine pollution - thermal pollution nuclear hazards - role of an individual in prevention of pollution.

UNIT IV

Social issues: from unsustainable to sustainable development - urban problems related to energy water conservation, rain water harvesting, watershed management - resettlement and rehabilitation of people; its problems and concerns - environmental ethics : issues and possible solutions - climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust.

UNIT V

Environment Protection act: Environment protection act - air (prevention and control of pollution) act - water (prevention and control of pollution) act - wildlife protection act - forest conservation act - issues involved in enforcement of environmental legislation - public awareness.

TEXTBOOKS:

Benny Joseph, „Environmental Science and Engineering", Tata McGraw-Hill, New Delhi, 2006.
Gilbert M.Masters, „Introduction to Environmental Engineering and Science", 2nd edition, Pearson Education, 2004.

REFERENCES:

1. Dharmendra S. Sengar, „Environmental law", Prentice hall of India Pvt Ltd, New Delhi, 2007.
2. Erach Bharucha, "Textbook of Environmental Studies", Universities Press(I) Pvt, Ltd, Hydrabad, 2015.
3. G. Tyler Miller and Scott E. Spoolman, "Environmental Science", Cengage Learning India PVT, LTD, Delhi, 2014.
4. Rajagopalan, R, „Environmental Studies-From Crisis to Cure", Oxford University Press, 2005.

SEMESTER – III

25BBA31 - HUMAN RESOURCES MANAGEMENT

4 0 0 4

Course Objectives

- To understand the best ways in which Human Resources are managed in textile industry
- To provide the knowledge on effective HR policies to acquire, develop and retain the Human Resources in organizations.

Course Outcomes

On the successful completion of the course, student will be able to:

	Course Outcome	Level
CO1	Demonstrate understanding of fundamental HRM concepts, principles, and practices.	Understand
CO2	Analyze the impact of HR strategies on organizational effectiveness and culture.	Analyze
CO3	Demonstrate effective communication and teamwork skills in human resource contexts.	Apply
CO4	Develop strategic HRM plans aligned with business goals.	create
CO5	Evaluate employee performance, compensation, and retention strategies critically.	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1	M				
2		S	M		
3	S			M	
4		S	S		M
5		S			S

UNIT I

Introduction - HRM policies and roles - The importance of the human factor – HRM and its interaction with other functional areas - Evolution of human resource management – StrategicHR management

– Line and staff functions - Role of HR manager– Establishing a HRMdepartment, HR Policies, Functions, Roles and HR practices in Indian textile industry.

UNIT II

Human resource planning and forecasting - Organisational structure, employment system and classification of employees in textile industry – Job analysis - Job description, Job specification, Job evaluation and types of jobs in textile industry – Job design -Application of KPA, KRA and competency mapping in textile industry- Cultural issues and challenges – Migration trends - Absenteeism and labour turnover in textile industry.

UNIT III

Recruitment - Policy, procedure process and methods in textile units – Internal, external alternative sources of recruitment –E-recruitment - Employment forecasting and building employee commitment – Selection - Policy, process and methods -Psychological and computerised testing – Interviewing, methods of interviewing - Placement – Talent management

– Talent engagement activities.

UNIT IV

Training and Development - Orienting the employees, training needs, training objectives, the process, types and training at various levels of employees in Textiles sector – Skill initiatives of Govt. of India, Sectoral skill council – Textile sector skill council - Performance evaluation - Plan, techniques and feedback –Performance management – Performance planning and monetary

– Performance assessment and review – Performance feedback and counselling – Managing team performance and Employee career planning and development initiatives.

UNIT V

Compensation – Financial / Non-financial incentives and variable pay for performance - Executive and non-executive plans- Benefits and services - Statutory and non-statutory benefits – Salary administration – Principles, techniques and components of salary fixation.

REFERENCES

1. Gary Dessler,(2012).*Human Resource Management(13th ed)*, Prentice Hall of India Pvt Ltd., New Delhi.
2. Robert L Mathis, John H Jackson, Sean R Valentine, & Patricia A Meglich,*Human ResourceManagement*,(15th Edition) .Cengage Learning, USA..
3. John. Ivancevich,(2012).*Human Resource Management*,(12th ed). Tata McGraw Hill Pub. Co. Ltd.,Noida.
4. Micheal Armstrong,(2007).*Human Resource Management Practice,(11th ed)*. Kogan Page Ltd., USA.
5. Rao, T. V., (2 0 1 2) . *Performance Management and Appraisal Systems – HR Tools for Globalcompetitiveness*, Response books, New Delhi,

25BBA32 - PRODUCTION AND OPERATIONS MANAGEMENT

3 0 0 3

Course Objectives

To make the students understand the concepts of production and operations management.

Course Outcomes

On the successful completion of the course, student will be able to:

	Course Outcome	Level
CO1	Understand the basic concepts, functions, and scope of production and operations management.	Understand
CO2	Analyze the process of product design, facility layout, and location planning.	Analyze
CO3	Apply forecasting techniques, production planning, and inventory management methods in business operations.	Apply
CO4	Evaluate quality control tools and techniques to ensure operational excellence.	Evaluate
CO5	Develop strategies for efficient supply chain management and lean operations.	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1	S				
2		S		M	
3	M	S			
4		S			M
5		M	S		S

Unit I

INTRODUCTION TO PRODUCTION AND OPERATIONS MANAGEMENT

Introduction - Meaning and Definition; Classification - Objectives and Scope of Production and Operation Management; Automation: Introduction, Meaning and Definition, Needs, Types, Advantages and Disadvantages.

Unit II

PLANT LOCATION AND LAYOUT

Introduction – Meaning and Definition, Factors affecting location, theory and practices, cost factor in location- Plant layout principles, space requirement, Different types of facilities; Organization of physical facilities – building, sanitation, lighting, air conditioning and safety.

Unit III

MATERIALS MANAGEMENT

Introduction – Meaning and Definition - Purchasing, Selection of Suppliers, Inventory Management, Material Handling Principles and Practices, Economic Consideration, Criteria for Selection of Materials Handling Equipment, Standardization, Codification, Simplification, Inventory Control, Techniques of inventory Control (Concept only).

Unit IV

PRODUCTION PLANNING AND QUALITY CONTROL

Objectives and Concepts, capacity planning, corresponding production planning, controlling, scheduling routing – Quality Control Production Planning/operations planning and control-roleof production planning and control in operation management-scope of production planning and control-main functions of PPC- Level of Production Planning-Production planning functions- production control functions benefits of production planning and control-productions planning and control in different productions and system. Meaning of ISO and TQM.

Unit V

MAINTENANCE AND WASTE MANAGEMENT

Introduction – Meaning – Objectives - Types of maintenance, Break down, spares planning and control, preventive routine, relative advantages, maintenance scheduling, equipment reliability and modern scientific maintenance methods - Waste Management - Scrap and surplus disposal, salvage and recovery.

REFERENCES

1. Chary, S. N, *Production and Operations Management*, McGrawHill.
2. Kachru, U, *Production and Operations Management*, ExcelBooks.
3. Everett E Adam Jr., & Ronald J Ebert, *Production and Operations Management*, Sage Publishers.
4. Agarwal, L. N. &Jain, K.C. *Production Management*
5. Thomas E. Morton, *Production Operations Management*, South Western College.

25BBA33 - FINANCIAL MANAGEMENT

4 0 0 4

Course Objectives

- To enable the students to understand the basic concepts of Financial Management.
- To enable students to understand various sources of finance available to a firm, to knowhow to manage a firm's working capital efficiently
- To demonstrate proficiency in valuation techniques, both DCF (discounted cash flow)and non-DCF
- To understand the concepts and techniques of Capital Budgeting, Working Capital Management and Dividends.
- To throw light on the significance of Cost of Capital for deciding the Capital Structure.

Course Outcomes

On the successful completion of the course, student will be able to:

i. Capable of applying appropriate Capital Budgeting Techniques.
ii. Able to apply appropriate Capital Structure and Dividend Policy for optimal risk return trade-off.
iii. Capable of applying different Working Capital policies to improve liquidity.
iv. Apply the outcome of capital budgeting for managerial decision making under capital rationing.
v. Apply operating and financial leverages to strike a fine balance between shareholders'and lenders' interests.
vi. Scientifically estimate the weighted average cost of capital for maximizing the firm's profits.
vii. Estimate and decide the various sources of working capital.

[redacted]	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES				
	(S – Strong, M-Medium)				
	PO				
CO	[redacted]				
	1	2	3	4	5
i.	S	S	M		
ii.	S	S	S		M
iii.	S	S	M		
iv.	S	S	M	M	
v.	S	S			S
vi.	S	S	M		
vii.	S	M	M		

UNIT I

Financial management – Definition and Scope of Financial management - Finance Functions - Objectives of Financial Management - Profit Maximization and Wealth Maximization. Sources of Finance (Traditional and Modern) - Short-term Bank sources – Long-term-Shares – Debentures - Preferred Stock – Debt – Angel Investor, Crowd Funding & Venture Captial

UNIT II

Capital budgeting: Meaning, objectives &techniques–Payback -ARR –NPV– IRR–Profitability Index (SIMPLE PROBLEM ONLY).Financing Decisions: Cost of Capital-Cost of Specific Sources of Capital-Equity-Preferred Stock Debt-Reserves –Weighted Average Cost of Capital.(SIMPLE PROBLEM ONLY) (Concepts and applications for Textile Units).

UNIT III

Capital Structure: Meaning, objectives and Importance –Optimal Capital Structure-Theory of Capital structure- Operating Leverage and Financial Leverage.

UNIT IV

Dividend and Dividend policy: Meaning-Sources available for Dividends-Dividend Policy - Determinants of Dividend Policy– Models: Gordon &Walter's Model.

UNIT V

Working Capital Management: Working Capital Management- concepts – importance - Determinants of Working capital. Cash Management: Motives for holding cash – Objectives and Strategies of Cash Management. Receivables Management: Objectives-Credit policies. (With reference to Textile Industry).

REFERENCES

1. Pandey, I. M,(2015).*Financial Management, Vikas Publishing House Pvt. Ltd*.,(11thEd) Noida.
2. Khan, M. Y.& Jain, P.K,(2011). *Financial management, Text Problems and cases* (6th ed) *Tata McGraw HillPub Co., Ltd.,*
3. Prasanna Chandra,(2015).*Financial Management(7thed)*, Tata McGraw Hill Publishing Co Ltd., New Delhi.
4. Sudarsana Reddy, G. (2010). *Financial Management Principles & Practices(2nd ed),* Himalaya PublishingHouse Private Limited, Mumbai.
5. James, C Vanhorne, (2012).*Fundamentals of Financial Management*(11thed). PHI Learning, New Delhi.

25BBA34 - APPAREL MANUFACTURING

3 0 0 3

Course Objective

- To make students gain knowledge on various techniques involved in different stages of manufacturing apparels**.**

Course Outcomes (CO)

On the successful completion of the program, the student will be able to:

	Course Outcome	Level
CO 1	Understand the types of seams and stitches, sewing threads & their quality	Understand
CO 2	Get to know the use of accessories for garments	Understand
CO 3	Understand the various problems & remedies during garment manufacturing	Apply
CO 4	Understand the fundamental aspects of production of garment and various processes involved	Understand
CO 5	Explain the types of seams and stitches, sewing threads & their quality	Understand

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1	M				
2			M		
3		S			
4					S
5				S	

UNIT I

Introduction to Indian apparel industry; Anthropometry- definition and tools, Specification sheet, technical pack; Structure of an apparel industry-work flow, Pre production planning; types of samples and sample approval;

UNIT II

Basics of fabric spreading, modes of spreading, different fabric packages, spreading tension, uniformity and alignment, woven fabric lay, knitted fabric lay, types of fabric lay, Lay planning principles. Marker making, principles of marker making, types of markers, marker planning and marker efficiency, and fabric design parameters on markers, matching and grain line. Fabric cutting methods, latest fabric cutting equipments, and record keeping in cutting room, advancements in cutting room technology

UNIT III

Seams: Definition, Types of seams, seam quality, seam performance, factors to be considered in the selection of seam, seam finishes, seam defects. Stitches: Definition, stitch classes, stitch parameters, factors to be considered in the selection of stitches. Stitching defects. Sewing Thread: Types, construction, sewing thread quality, selection of sewing thread.

UNIT IV

Single needle lock stitch machine – over lock – flat lock machine - mechanism and accessories; needle – functions, special needles, needle size, numbering, needlepoint.

UNIT V

Garment accessories, trims and components; fusing requirements and process; Objectives of pressing and packing- Suitable solutions for Sustainable Apparel production

REFERENCES

1. Winifred Aldrich., "Metric Pattern Cutting", Blackwell Science Ltd., Oxford, 1994
2. Peggal H., "The Complete Dress Maker", Marshall Caverdish, London, 1985
3. Jai Prakash and Gaur R.K., "Sewing Thread", NITRA, 1994
4. Ruth Glock, Grace I. Kunz, "Apparel Manufacturing", Dorling Kindersley Publishing Inc., New Jersey, 1995.
5. Pradip V.Mehta, "An Introduction to Quality Control for the Apparel Industry", J.S.N. Internationals, 1992.

TEXT BOOKS:

1. Carr H., and Latham B., "The Technology of Clothing Manufacture", Blackwell Science Ltd., Oxford, 1994.
2. Gerry Cooklin, "Introduction to Clothing Manufacture" Blackwell Science Ltd., 1995.
3. Harrison.P.W Garment Dyeing, The Textile Institute Publication, Textile Progress, Vol .19 No.2,1988

25BBA35 - TEXTILE BUSINESS INTELLIGENCE

3 0 0 3

Course Objectives :

The student should be made to:

- Be exposed with the basic rudiments of business intelligence system
- Understand the modeling aspects behind Business Intelligence for textile sector
- Understand textile business intelligence life cycle and the techniques used in it
- Be exposed with different data analysis tools and techniques used for textile sector

Course Outcomes:

At the end of the course the students will be able to

	Course Outcome	**Level**
CO1	Explain the fundamentals of business intelligence.	Apply
CO2	Link data mining with business intelligence.	Analyze
CO3	Apply various modeling techniques for textile business analysis.	Apply
CO4	Explain the data analysis and knowledge delivery stages.	Apply
CO5	Apply business intelligence methods to various situations in textile sector.	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	M				
2	M				
3		S			
4			M	S	
5			M		S

UNIT I BUSINESS INTELLIGENCE

Effective and timely decisions – Data, information and knowledge – Role of mathematical models – Business intelligence architectures: Cycle of a business intelligence analysis – Enabling factors in business intelligence projects – Development of a business intelligence system – Ethics and business intelligence.

UNIT II KNOWLEDGE DELIVERY

The business intelligence user types, Standard reports, Interactive Analysis and Ad Hoc Querying, Parameterized Reports and Self-Service Reporting, dimensional analysis, Alerts/Notifications, Visualization: Charts, Graphs, Widgets, Scorecards and Dashboards, Geographic Visualization, Integrated Analytics, Considerations: Optimizing the Presentation for the Right Message.

UNIT III EFFICIENCY

Efficiency measures – The CCR model: Definition of target objectives- Peer groups – Identification of good operating practices; cross efficiency analysis – virtual inputs and outputs – Other models. Pattern matching – cluster analysis, outlier analysis

UNIT IV BUSINESS INTELLIGENCE APPLICATIONS IN TEXTILES

Marketing models for Textiles – Logistic and Production models for Textiles – Case studies in Textiles Sectors

UNIT V FUTURE OF BUSINESS INTELLIGENCE FOR TEXTILES

Future of business intelligence for Textiles – Emerging Technologies, Machine Learning, Predicting the Future, BI Search & Text Analytics– Advanced Visualization– Rich Report, Future beyond Technology

TEXT BOOK:

1. Efraim Turban, Ramesh Sharda, Dursun Delen, "Decision Support and Business Intelligence Systems", 9 th Edition, Pearson 2013.

REFERENCES:

1. Larissa T. Moss, S. Atre (2003).*Business Intelligence Roadmap: The Complete Project Lifecycle of Decision Making,* Addison Wesley.

2. Carlo Vercellis,(2009).*Business Intelligence: Data Mining and Optimization for Decision Making*, Wiley Publications.

3. David Loshin Morgan, Kaufman,(2012).*Business Intelligence: The Savvy Managers Guide,* Second Edition, 2012.

4. Ralph Kimball , Margy Ross Warren Thornthwaite, Joy Mundy, Bob Becker,2007).*The Data Warehouse Lifecycle Toolkit*, Wiley Publication Inc.

25BBA36 – RESEARCH METHODS

3 0 0 3

Course Objectives:

- To introduce the concept of scientific research and the methods of conducting scientific enquiry.
- To enable the student to conduct surveys and inquiry by applying appropriate research techniques.

Course Outcomes

Upon successful completion of this course the student would be able to,

	Course Outcome	**Level**
CO1	Able to pursue research on a scientific basis and select appropriate research design.	Apply
CO2	Analyze and interpret data using statistical techniques	Analyze
CO3	Able to analyze the collected data using appropriate statistical tools for interpretation of the data.	Analyze
CO4	Able to present the research report adopting the right tools for enhancing the quality of presentation	Apply
CO5	Prepare structured research reports and communicate research findings effectively..	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	**S**	**M**			
2		**S**			M
3.		**S**			M
4	M			**S**	
5		M			**S**

UNIT I

Research Methodology

An Introduction, Meaning of Research, Objectives and Purpose of research, Meaning of Business Research, Nature and Scope of Business research. Types of Business Research, Significance, Characteristics & Criteria of a good research.

UNIT II

Research Process

Steps Research Problem – Meaning-Statement of Research Problem.

UNIT III

Research Design

Meaning of Research design -Types of Research design – Data types – Sources of Error,Sampling Design – Census and Sample survey – Implications of a sample design, Types of sample design, Characteristics of a good sample design.

UNIT IV

Processing and Analysis of Data Data Collection, Processing & Analysis of Data- Processing operations; problems in processing; types of analysis Hypothesis.

UNIT V

Interpretation and Report Writing

Meaning of Interpretation – Techniques of Interpretation; Significance of Report Writing – layout of the Research Report – Types of Reports – Oral Presentation..

References:

1. Cooper R Donald & Pamela S Schindler,(2014).*Business Research Methods*, *McGraw Hill Education*,(12th Ed.) New Jersey,
2. Collis Jill & Hussey, (2013).*Business Research: A Practical Guide for Undergraduate and PostEducation*,(4th Ed.) Palgrave Macmillan, London.
3. Saunders N K Mark, Lewis Philip & Adrian Thornhill,(2012).*Research methods for Business Methods*, Prentice Hall of India(6th Ed.), New Delhi.
4. Kothari C R,(2004).*Research Methodology: Methods and Techniques illustrated*,(2nd Ed.), New AgeInternational, P Ltd., New Delhi,

25BBA37L - BASIC APPAREL CONSTRUCTION LABORATORY

0 0 4 2

Course Objectives

- Prepare samples for various types of stitches.
- Prepare samples for fullness, plackets, zippers, collars, pockets, sleeves and yokes.

Course Outcomes

Upon successful completion of this course the student would be able to,

	Course Outcome	**Level**
CO1	Identify the components and functions of basic apparel construction tools and equipment.	Remember
CO2	Demonstrate the ability to operate sewing machines and handle tools safely and effectively.	Apply
CO3	Draft basic patterns (bodice, sleeve, skirt, etc.) using standard and individual measurements.	Apply
CO4	Construct and assemble garment parts using fundamental sewing techniques like seams, darts, pleats, and gathers.	Apply
CO5	Evaluate and improve the quality and finishing of constructed garments.	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	S		M		
2		M	S		
3			M		S
4	S	M			
5	S	S		M	S

LIST OF EXPERIMENTS:

1. Study on parts and functions of sewing machine
2. Prepare samples for hand stitches

A) Temporary stitches: even basting, uneven basting, diagonal basting andslip basting.

B) Permanent stitches: running, hemming, run and back stitch, over casting,overhanding and whipping.

3. Prepare samples for seams and seam finishes

A) Seams: plain, single top stitch, double top stitch, welt, lapped, slot, flatfell, french, hemmed flat fell, mantua maker's and piped seam.

B) Seam Finishes: pinked, double stitch, edge stitch, herring bone, bound seamedge finish and overcast finish.

4. Preparation of samples for Fullness (darts, tucks, pleats, flares, godets, gathers and shirrs, frills and ruffles).
5. Prepare samples for facings and bindings in necklines- bias, shaped and decorative.
6. Prepare samples of plackets – Continuous bound placket, 2-piece placket,tailor placket, fly opening and zipper
7. Prepare samples of collars – PETER pan collar, shirt collar and stand collar
8. Prepare samples of pockets – Patch, set in seam and set in slot
9. Prepare samples of sleeves – Plain, puff, raglon and kimono
10. Prepare samples of yokes – Partial yoke, yoke with fullness
11. Prepare samples of fasteners – Zipper, hook and eye
12. Prepare samples of trimmings and decorations

REFERENCES:

1. Mathews, Mary. Practical clothing construction Part -I Basic Sewing Processes. (No Year and Publication)
2. Mathews, Mary. Practical clothing construction Part-II Designing, Drafting and Tailoring. (No Year and Publication)
3. Zarapkar, K. R. (2011). System of Cutting. India: Navneet Publications.
4. Laing, R. M., Webster, J. (1998). Stitches & Seams. India: The Textile Institute.
5. Claire, B. Shaeffer. (2012). Sewing for the Apparel Industry. Vol. 978. 2nd Edition. India: Pearson Publishers.
6. Cooklin, Gerry., Hayes, Steven. G., McLoughlin, John., Fairclough, Dorothy. (2012). Cooklin's Garment Technology for Fashion Designers. John Wiley & Sons.
7. Knight, Lorna. (2010). 200 Sewing Tips, Techniques and Trade Secrets. Griffin: St.Martin's Press.
8. Hosegood, Besty. (2006). The Complete Book of Sewing. London: Dorling Kindersley Ltd.

25BBA38L - TEXTILE BUSINESS INTELLIGENCE LABORATORY USING TABLEAU AND POWER BI

0 0 4 2

Course Objective

- To provide the basics of data visualization using Tableau and Power BI techniques
- To get exposure to Tableau and power BI user interface and data connection
- To get hands-on experience to work with data visualization techniques

Course outcome

Upon successful completion of this course the student would be able to,

	Course Outcome	**Level**
CO1	Understand the fundamentals of business intelligence and data visualization in the context of the textile industry.	Understand
CO2	Students would be able to visualize data using different Tableau and Power & BI techniques	Analyze
CO3	Create interactive and dynamic business dashboards for effective decision-making in the textile sector.	Create
CO4	Students would be able to work with Tableau and Power BI user interface and data connection	Apply
CO5	Evaluate the effectiveness of business intelligence reports for strategic and operational improvements.	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1		**S**			
2		**S**	M		
3			**S**		M
4	**S**			**M**	
5		**M**			**S**

List of Experiments:

1. Introduction to Tableau Desktop
    a. Understand the Tableau Desktop interface.
2. Connecting to Data in Tableau Desktop
    a. Import data from various sources.
    b. Clean and transform data.
3. Data Visualization in Tableau Desktop
    a. Build basic charts.
    b. Create advanced visuals.
    c. Customize visuals with formatting options.
4. Working with Data in Tableau Desktop
    a. Sort and filter data.
    b. Create sets, groups, and hierarchies.
    c. Build calculated fields and table calculations.
5. Dashboard Design in Tableau Desktop
    a. Design effective and user-friendly dashboards.
    b. Build filters, actions, and navigation.
6. Introduction to Power BI Desktop
    a. Understand the Power BI Desktop interface.
7. Data Sources and Data Modeling in Power BI Desktop
    a. Import data from various sources.
    b. Clean and transform data with Power Query.
    c. Create data relationships and a data model with Power Pivot.
8. Data Visualization in Power BI Desktop
    a. Build basic charts.
    b. Create advanced visuals.
    c. Customize visuals with formatting options.
9. Working with Data in Power BI Desktop
    a. Sort and filter data.
    b. Create measures, calculated columns, and tables.
    c. Build hierarchies and groups.
    d. Use DAX functions for advanced calculations.
    e. Build key performance indicators (KPIs).
10. Dashboard Design in Power BI Desktop
    a. Design effective and user-friendly dashboards.
    b. Build filters, slicers, and drill-through actions.

Mini Projects:

1) Super Sample Superstore Dashboard
2) Textile Sales Pipeline Dashboard
3) Quarterly Forecast Dashboard
4) Textile Sales Growth Dashboard

SEMESTER - IV

25BBA41 - MARKETING MANAGEMENT

4 0 0 4

Course Objectives

- To enable the students to understand concepts, and apply marketing tools for business growth and development.
- To gain an insight on the impact of the marketing environment on the marketingstrategies adopted by the business organizations.
- To provide an understanding about STP (Segmentation, Targeting, Positioning) inmarketing and give an comprehensive view about the individual buyer behaviour
- To give a detailed insight into the 4Ps of Marketing.

Course Outcomes

Upon successful completion of this course the student would be able to,

	Course Outcome	**Level**
CO1	Understand the fundamental concepts, principles, and functions of marketing.	Understand
CO2	Analyze consumer behaviour, market segmentation, targeting, and positioning strategies.	Analyze
CO3	Apply marketing mix strategies to real-world business scenarios.	Apply
CO4	Evaluate various marketing strategies for different types of markets including digital and international markets.	Evaluate
CO5	Develop integrated marketing plans aligned with organizational objectives and customer needs.	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	**M**		**S**		
2		**S**		**M**	
3	**M**		**S**		
4			**S**	**M**	
5		**S**			**S**

UNIT I

Marketing concepts - Marketing v/s Selling, marketing management, marketing mix, STP (Segmentation, Targeting, Positioning) concept, Strategic marketing, marketing plan

UNIT II

Product - Classification, levels, product line- Concepts and decisions, differentiation, standardization vs. adaptation, new product development process, product life cycle, packaging, labelling, tags.

UNIT III

Pricing -Process, methods, pricing strategies: price adaptation (geographical pricing, discounts and allowances, promotional pricing, discriminatory pricing, product mix pricing), Pricing in textiles and garment industry.

UNIT IV

Physical distribution - Channels, functions, levels of distribution channels, channel-management decisions: vertical, horizontal and multi-channel marketing systems, legal and ethical issues in channel relations, application in textile, apparel and retail organizations

UNIT V

Promotion – concept, promotion mix - Advertising: 5-M model; Sales promotion: Tools and techniques; Public relations - Techniques and methods of PR; Direct marketing, cataloguemarketing, telemarketing, e-marketing, m-commerce; Personal selling.

REFERENCES

1. Kotler Philip, Keller, Koshy & Jha,(2011).*Marketing Management*, (14th Ed.)Pearson Education / Prentice Hallof India, New Delhi.
2. Ramendra Singh,(2013).*Case Studies in Marketing Management*, Pearson Education, Noida.
3. Russell S Winer,(2015).*Marketing Management*, Pearson Education Inc., U.S.,.
4. RajanSaxena, (2006).*Marketing management*, Tata McGraw Hill Publishing Co., Ltd., Noida
5. Keith Blois,(2005.).*Marketing*, Oxford University Press, New York.
6. Perreault,(2005).*Basic Marketing*, Tata McGraw Hill Publishing Co., Ltd., Noida.
7. Etjel, Walker &Stanton,(2005).*Marketing*, Tata McGraw Hill Publishing Co., Ltd., Noida,.

25BBA42 - BUSINESS LAW

3 0 0 3

Course Objective:

- The course is designed to assist the participants in understanding basic laws affecting the operations of a business enterprise.
- To familiarize the students with case law studies related to Business Laws

Course Outcomes

Upon successful completion of this course the student would be able to,

	Course Outcome	**Level**
CO1	Understand the legal framework and concepts in business law and their application in the business environment.	Understand
CO2	Analyze different types of contracts, their elements, and legal enforceability in a business context.	Analyze
CO3	Apply the legal provisions related to agency, sale of goods, and negotiable instruments in business transactions.	Apply
CO4	Evaluate the legal procedures for resolving business disputes through alternative dispute resolution mechanisms.	Evaluate
CO5	Develop strategies to comply with business laws and minimize legal risks in business operations.	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	**M**	**S**			
2		**S**		**M**	
3	**M**	**S**			
4		**M**	**S**		
5		**M**		**S**	**S**

Unit I

Indian Contract Act - Definitions: essentials of a valid contract, offer, acceptance, free consent, consideration, legality of object, capacity to contract, discharge of contact; consequences of breach of contract & remedies; Bailment, Pledge, Indemnity & Guarantee.

Unit II

The Negotiable Instruments Act - Definitions, types of negotiable instruments; Negotiation; Holder and holder in due course; payment in due course; Endorsement andcrossing of Cheque.

Unit III

The Sales of Goods Act - Introduction to Act; Distinction between Sale and Agreement to Sell Conditions and Warranties – Performance of Contract of Sale – Transfer of Ownership Rights of an Unpaid Seller.

Unit IV

Contract of Agency - Meaning and Nature of Agency – Kinds of Agents Creation of Agency – Duties and Rights of Principal – Duties and Rights of Agents; Principals liability for the Agent – Personal Liability of Agent; Termination of Agency.

Unit V

The Companies Act - Definitions and types of companies; Memorandum of association; Articles of association; Prospectus; Share capital and membership Meetings and resolution; Company managements; Winding up and dissolution of companies; Latestamendments in Companies Act.

REFERENCES:

1. .Kapoor, N D ,*Mercantile Law* . Sultan Chand & Co., New Delhi.
2. Gulshan, S S., *Mercantile Law* S.S, Excel Books, Naraina Phase-I, New Delhi.
3. Avtar Singh ,*Principles of Mercantile Law* (8th Edition). Eastern BookCompany, Lucknow.
4. Saravanave, P., & Sumathi, S. *Business Law for managers*.Himalaya Publication,Mumbai.

25BBA43 - TEXTILE CHEMICAL PROCESSING AND FINISHING

3 0 0 3

Course Objectives

- To understand the need for fabric preparation in wet processing
- To understand the classification of dyes and application for textile materials.
- To recognize the different methods and machinery for textile processing.

Course Outcomes

Upon successful completion of this subject, the students should be able to:

	Course Outcome	Level
CO1	Understand the principles, processes, and types of chemical treatments used in textile processing.	Understand
CO2	Analyze the effects of various chemical processes on textile fibers and their properties.	Analyze
CO3	Apply appropriate finishing techniques to enhance the appearance, performance, and durability of textiles.	Apply
CO4	Evaluate the environmental impact and sustainability concerns in textile chemical processing and finishing.	Evaluate
CO5	Understand the principles, processes, and types of chemical treatments used in textile processing.	Understand

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1	S				M
2	M	S			
3	M		S		
4		M		S	M
5	S				M

UNIT I

Preparatory Processes: Introduction- water quality requirements – impurities in greige fabric. Objectives and types : shearing / cropping, desizing, singeing, scouring, bleaching and mercerization. Wet processing sequence of cotton, silk, wool, viscose, polyester, nylon and polyester / cotton blends.

UNIT II

Dyeing: Introduction - objectives - basic classification of dyes - selection of dyes - dyeing methods – mechanism - factors influencing the dyeing process. Types of dyeing machine – hank and yarn package, jigger, winch, j-box, jet, soft flow, HTHP, padding mangle and garment dyeing.

UNIT III

Printing: Introduction - difference between dyeing and printing- essential ingredients for printing paste - methods of printing: stencil - hand block- screen: hand, flat bed, rotary and roller - heat transfer - digital or inkjet. Styles of prints: direct, discharge, resist, pigment, blotch, flock, burn-out and duplex.

UNIT IV

Finishing: Introduction – classification - calendaring, sanforizing (0/0) / anti-shrink finishing, stentering, compacting, flame retardant, soil release, anti-static, enzyme wash, ultra-violet protection, insect resist, water proof, water repellent, bio polishing, stone wash and antimicrobial. Basic techniques and application of Micro-encapsulation, plasma and nanotechnology.

UNIT V

Pollution Control: Introduction - types and causes of pollution – determination of BOD, COD, TDS - waste water treatment methods – primary, secondary and tertiary treatment - zero liquid discharge.

TEXTBOOKS:

1. Shenai, V. A. (1995). *Technology of Textile Processing. Vol. III Technology of Bleaching and Mercerising.* Mumbai: Sevak Publications.
2. Walters, A., Santillo, D. & Johnston, P. (2005). *An Overview of Textiles Processing and Related Environmental Concerns*. UK: University of Exeter.
3. Shenai, V. A. (2000). *Technology of Dyeing*. Mumbai: Sevak Publications.
4. Shenai, V. A. (1999). *Technology of Printing*. Mumbai: Sevak Publications.
5. Schindler, W. D. & Hauser, P. J. (2004*). Chemical Finishing of Textiles*. England: Woodhead Publishing Ltd.

REFERENCES:

1. Shore, J. (1998). Blend Dyeing. London: Society of Dyers Colourists.
2. Shenai, V. A. (1995). Introduction to the Chemistry of Dyestuffs. Mumbai: Sevak Publications.
3. Mittal, R. M. & Trivedi, S. S. (1983). Chemical Processing of Polyester / Cellulosic Blends. Ahmedabad Textile Industries Research Association.
4. Shenai, V. A. (2003). Technology of Textile Finishing. Mumbai: Sevak Publications.
5. Parmer, M. S., Satsangi, S. S. & Jai Prakash (1996). Denim – A Fabric for All. Northern India Textile Research Association.
6. Perkins, W. S. (1996). Textile Colouration and Finishing. England: Woodhead Publishing Ltd.
7. Skelley, J. K. (2003). Water Recycling in Textile Wet Processing. England: Woodhead Publishing Ltd.
8. Rao, J. V. (2006). Denim Washing. Ghaziabad: Northern India Textile Research Association.

25BBA44 - TEXTILE COSTING AND EXPORT DOCUMENTATION

3 0 0 3

Course Objectives

- To impart knowledge on various costing techniques
- To know the export documentation procedures

Course Outcomes

Upon successful completion of this course the student would be able to,

	Course Outcome	Level
CO1	Understand the basic principles of costing in the textile industry and the role of cost accounting.	Understand
CO2	Analyze various types of costs involved in textile manufacturing, including direct and indirect costs.	Analyze
CO3	Apply costing techniques to determine the cost structure and profitability of textile products.	Apply
CO4	Evaluate the importance of export documentation and the legal aspects involved in international trade.	Evaluate
CO5	Develop and manage export documentation processes, ensuring compliance with international trade regulations.	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	CO				
PO	1	2	3	4	5
1	S				M
2	M	S			
3	M		S		
4		M	S	M	
5	S	M		S	M

UNIT I

Budgeting and Principles of costing: Budgeting – aims of Budgeting, types of budget. Costing - aims of costing, Elements of cost – Material cost, Labour cost and overheads,difference between

budgeting and costing. Depreciation cost – reasons and methods of calculating depreciation. Pricing policies, Factors influencing pricing. Pricing Methods - Full- cost pricing, Marginal cost pricing.

UNIT II

Costing of garments: Cost determinants - Raw material to finished product - cutting, making and trim cost (CMT) - lot size and design affecting cost. Cost of bought out components - Thread, button, zipper and interlining.

UNIT III

Costing Practices - Costing methods, Cost estimation bulk production. Cost calculation by interpreting Specification sheet Practical cost calculation for Ladies, Men's and Children's wear – woven and knitted.

UNIT IV

Selecting export markets: country identification, risk evaluation, pre-shipment export finance – role of commercial banks. Difference between foreign trade and domestic trade- legal requirements for exporting - IE code number definition – registration with sales tax department, central excise department and export promotion councils / commodity boards.

UNIT V

Export Document: Importance, terms of payment: Letter of credit – documentary collection – open account. Terms of shipment – Incoterms - essential elements of an export contract,different types of invoices, bill of lading, packing list, inspection certificates, delivery instructions and delivery orders, drafts of payment, letters of credit, negotiation of documents – action in the event of discrepancies. Online documentation. International trade policy

TEXT BOOKS

1. Charles T. Horngren.(2001).*Introduction to Management Accounting*, Prentice Hall.New Delhi,
2. M. I.Mahajan.(2007).*Export Policy, Procedures and Documentation*, Mumbai:Snow-white Publishers
3. Thomas E. Johnson & Donna L. Bade(2010).*Export/Import Procedures and Documentation*.

REFERENCES

1. Levi.(1997)International Finance, Tata McGraw-Hill,.
2. Narayanaswamy, R.(1997) *Financial Accounting – A Managerial Perspective*, Prentice HallIndia Pvt. Ltd.,New Delhi,
3. Bhattacharya, S. K., & John Dearden, (2000).*Accounting for Management Text and Cases.*Vikas Publishing House, New Delhi, Ministry of Commerce, Govt. of India.

25BBA45 - TEXTILE BUSINESS ANALYTICS WITH R PROGRAMMING

3 0 0 3

Course Objectives

- To explore and acquire skills in R Programming
- To use R programming tool for textile business analysis

Course Outcomes

Upon completion of this course, students will be able to:

	Course Outcome	Level
CO1	Understand the fundamentals of business analytics and the role of R programming in textile industry analytics.	Understand
CO2	Analyze business data using statistical and analytical techniques in R, focusing on textile business contexts.	Analyze
CO3	Apply R programming techniques to process and visualize textile business data for decision-making.	Apply
CO4	Evaluate the effectiveness of various analytical models in predicting textile business trends and performance.	Evaluate
CO5	Develop predictive models and actionable insights using R programming for improving business outcomes in the textile industry.	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	1	2	3	4	5
1	S				M
2	M			S	
3	M		S		
4	M	M	S		
5	S	M	S		M

Unit 1 Introduction

Features of R – How to install and run R – Comments in R – Reserved words – Identifiers – Constants – Variables – Operators (Arithmetic, Relational, Logical, Assignment, Miscellaneous Operators) – Operator Precedence – Strings.

Unit 2 Basic Data Types, Vectors, Lists and Matrices

Basic Data Types (Numeric, Integer, Complex, Logical, Character) – Creating, combining vectors – Accessing Vector Elements – Modifying Vectors – Deleting Vectors- Vector arithmetic and Recycling – Vector Element Sorting – Reading Vectors – Creating Lists –Accessing List elements – Updating List Elements –Merging Lists – List to Vector conversion – Creating matrices – Accessing Matrix Elements – Matrix Arithmetic – Matrix Manipulation – Matrix Operations.

Unit 3 Arrays, Factors and Data Frames

Creating Arrays – Accessing Array Elements – Array Element Manipulation – Array Arithmetic – Creating factors – Accessing Factor Components – Modifying factors – Creating Data Frames – Accessing Data Frames Components – Modifying Data Frames –Aggregating Data – Sorting Data – Merging Data – Reshaping data – Sub-setting data – Data Type Conversion – Applications with textile data

Unit 4 Flow Control & Functions

Decision making (using if statement - if…else statement - Nested If…Else statement - ifelsefunction - Switch statement) – Loops (for loop – while Loop – repeat Loop) – Loop Control statements – break statement – next statement – Function definition and Function Calling – Function without arguments – Built-in functions (Mathematical functions – Character functions – statistical functions – date and time functions – other functions – Recursive function) - Applications with textile data

Unit 5 Charts & Graphs

Bar charts (Plotting bars vertically and horizontally – Plotting categorical data – Grouped bar chart – Stacked bar chart) – Histogram (Simple histogram – Histogram with labels, breaks and density lines) – Line graphs (Simple line graph & Graphs with Multiple lines) – Pie charts (Simple Pie chart –Pie chart with slice percentages – 3D Pie charts) – Applications with textile data

TEXT BOOKS

1. Venables, W N., & D. M. Smith,(2008).*An Introduction to R*, R Core Team.

2. John Verzani,(2005) *simpleR – Using R for Introductory Statistics*, CRC Press, Taylor & Francis Group.

REFERENCE

1. Beginner's guide for Data Analysis using R Programming by Dr. Jeeva Jose

25BBA46 - TEXTILE DATABASE MANAGEMENT WITH SQL PROGRAMMING

3 0 0 3

Course Objectives:

- To introduce database development life cycle and conceptual modelling
- To learn SQL for data definition, manipulation and querying a textile database
- To learn relational database design using conceptual mapping and normalization
- To learn transaction concepts and serializability of schedules, data model and querying in object-relational and No-SQL databases

Course Outcomes

After the completion of this course, students will be able to:

	Course Outcome	**Level**
CO1	Understand the database development life cycle and apply conceptual modeling	Understand
CO2	Analyze the structure and design of relational databases, including schema and relationships in the context of textile data.	Analyze
CO3	Apply the conceptual-to-relational mapping and normalization to design relational database	Apply
CO4	Evaluate the efficiency of SQL queries for extracting meaningful business insights from textile-related data.	Evaluate
CO5	Develop and implement database management solutions for textile industry data using SQL programming.	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	**S**	**M**			**M**
2	**S**	**S**			
3	**M**	**S**	**M**		
4	**M**	**M**	**S**		
5	**S**	**M**	**S**	**M**	**M**

UNIT I CONCEPTUAL DATA MODELING

Database environment –Database system development lifecycle –Requirements collection –Database design --Entity-Relationship model –Enhanced-ER model –UML class diagrams.

UNIT II RELATIONAL MODEL AND SQL

Relational model concepts --Integrity constraints --SQL Data manipulation –SQL Data definition – Views – SQL programming.

UNIT III RELATIONAL DATABASE DESIGN AND NORMALIZATION

ER and EER-to-Relational mapping –Update anomalies –Functional dependencies –Inference rules – Minimal cover –Properties of relational decomposition –Normalization (upto BCNF).

UNIT IV TRANSACTION MANAGEMENT

Transaction concepts –properties –Schedules –Serializability –Concurrency Control –Two-phase locking techniques.

UNIT V OBJECT RELATIONAL AND NO-SQL DATABASES

Mapping EER to ODB schema –Object identifier –reference types –rowtypes –UDTs –Subtypes and supertypes –user-defined routines –Collection types –Object Query Language; No-SQL: CAP theorem –Document-based: MongoDB data model and CRUD operations; Column-based: Hbase data model and CRUD operations.

TEXT BOOKS:

1. Thomas M. Connolly, Carolyn E. Begg,(2015). *Database Systems –A Practical Approach to Design, Implementation, and Management*, Sixth Edition, Global Edition, Pearson Education

2. Ramez Elmasri, Shamkant B. Navathe,(2017). *Fundamental of Database Systems*, (7th Ed.), Pearson.

REFERENCES:

1. Toby Teorey, Sam Lightstone, Tom Nadeau, & Jagadish H. V.,(2011).*Database Modeling And Design -Logical Design(5th Ed.)*,Morgan Kaufmann Publishers,

2. Carlos Coronel, Steven Morris, & Peter Rob (2012). *Database Systems: Design, Implementation, and Management*, (9th Ed.), Cengage learning.

3. Abraham Silberschatz, Henry F., Korth, Sudharshan, S.(2011).*Database System Concepts*(6th Ed.) Tata Mc Graw Hill.

4. Hector Garcia-Molina, Jeffrey., D Ullman, &Jennifer Widom, *Database Systems:The Complete Book*, (2nd ed.), Pearson.

5. Sumathi, S & Esakkirajan, S.(2007).*Fundamentals of Relational Database Management Systems* , (Studies in Computational Intelligence), Springer-Verlag.

6. Raghu Ramakrishnan,(2010).*Database Management Systems(*4th Ed.*)*, , Tata Mc Graw Hill.

25BBA47L - TEXTILE BUSINESS ANALYTICS WITH R PROGRAMMING LABORATORY

0 0 4 2

Course Objectives

- Demonstrate use of basic functions
- Create their own customized functions
- Construct tables and figures for descriptive statistics
- Work on built in real time cases for analysis and visualization

Course Outcomes

After the completion of this course, students will be able to:

	Course Outcome	**Level**
CO1	Understand the fundamental concepts of business analytics and the role of R programming in analyzing textile industry data.	Understand
CO2	Analyze textile business data using various statistical and analytical techniques in R programming.	Analyze
CO3	Apply R programming techniques to process and visualize textile data for decision-making in the textile industry.	Apply
CO4	Develop and evaluate various business intelligence models to predict textile industry trends and performance using R programming.	Evaluate
CO5	Create interactive data visualizations and reports for textile business analysis and decision-making using R programming.	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	**S**	**M**			**M**
2	**S**	**S**	**M**		
3	**M**		**S**		
4	**M**	**S**	**S**		**M**
5	**S**	**M**		**M**	**M**

LIST OF EXPERIMENTS

1. Introduction to R programming
    a. Downloading and installing R, R Studio
    b. R environment, command line interface
    c. Installing and loading R package
2. Basics of R
    a. Variables
    b. Data types
    c. Vectors
    d. Calling functions
    e. Missing data
3. Advanced data structures in R
    a. Data frames
    b. Lists
    c. Matrices
    d. Arrays
4. Reading data into R
    a. Reading CSVs
    b. Excel data
    c. R binary files
    d. Extracting data from websites
5. Data visualization in R
    a. Base graphics
    b. ggplot2
6. Control statements in R
    a. if and else
    b. switch
    c. ifelse
    d. for loops
    e. while loops
7. Group manipulation in R
    a. apply family
    b. aggregate
    c. plyr
    d. data.table
8. Faster group manipulation with dplyr
    a. Pipes
    b. tbl
    c. select
    d. filter
    e. slice
    f. mutate
    g. summarize
    h. group_by
    i. arrange
9. Data reshaping in R
    a. cbind and rbind
10. Mini project – Use necessary R programming tools to analyze textile business data.

25BBA48L - TEXTILE DATABASE MANAGEMENT WITH SQL PROGRAMMING LABORATORY

0 0 4 2

Course objectives

- To understand the database development life cycle
- To learn database design using conceptual modelling, Normalization
- To implement database using Data definition, Querying using SQL manipulation and SQL programming
- To implement database applications using IDE/RAD tools
- To learn querying Object-relational databases

Course Outcomes

After the completion of this course, students will be able to:

	Course Outcome	**Level**
CO1	Understand the fundamentals of database management and SQL programming in the context of textile business data.	Understand
CO2	Analyze the structure and design of relational databases, including schema design and relationships, specific to textile business data.	Analyze
CO3	Apply SQL programming techniques to manage, query, and manipulate textile business data efficiently.	Apply
CO4	Evaluate the performance of SQL queries for extracting meaningful insights and information from textile-related data.	Evaluate
CO5	Develop and implement database management systems for textile industry data using SQL programming.	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	**M**				
2	**M**	**S**			
3		**S**		**S**	
4	**S**				
5	**S**	**M**	**S**		**M**

LIST OF EXPERIMENTS

1. Introduction to Databases and SQL
    a. Overview of databases and their importance in business analytics
    b. Introduction to SQL and its role in data manipulation
    c. Setting up a database environment
2. SQL Basics
    a. Basic SQL syntax and structure
    b. Retrieving data using SELECT statements
    c. Sorting and filtering data with ORDER BY and WHERE clauses
3. Data Manipulation with SQL
    a. INSERT, UPDATE, and DELETE statements
    b. Modifying data in tables
    c. Transaction management (COMMIT and ROLLBACK)
4. Advanced Querying
    a. JOIN operations (INNER JOIN, LEFT JOIN, RIGHT JOIN, FULL JOIN)
    b. Subqueries and nested queries
    c. GROUP BY and aggregate functions (SUM, AVG, COUNT, MAX, MIN)
5. Data Definition Language (DDL)
    a. Creating and modifying database structures with CREATE and ALTER statements
    b. Managing tables and relationships
    c. Indexes and constraints
6. Data Control Language (DCL)
    a. GRANT and REVOKE statements for access control
    b. User roles and permissions
    c. Securing the database
7. Stored Procedures and Functions
    a. Creating and executing stored procedures
    b. User-defined functions in SQL
    c. Parameterized queries for dynamic data retrieval
8. Mini project – Use necessary tools to analyse textile business data.

SEMESTER V

25BBA51 - SUPPLY CHAIN MANAGEMENT IN TEXTILE INDUSTRY

3 0 0 3

Course Objective:

- To help understand the importance of major decisions in supply chain management for gaining competitive advantage.
- To introduce the concept of supply chain and logistics.
- To familiarize the key drivers of supply chain performance.
- To enable the students to understand the analytical tools necessary to solve supply chain problems.

Course Outcomes

After the completion of this course, students will be able to:

	Course Outcome	Level
CO1	Explain the fundamental concepts and processes of supply chain management in the textile and apparel industry.	Understand
CO2	Analyze the challenges and risks in managing supply chains specific to the textile industry.	Analyze
CO3	Able to analyze the analytic methodologies for supply chain.	Apply
CO4	Evaluate the role of technology, sustainability, and globalization in modern textile supply chains.	Evaluate
CO5	Develop Network design and supply chain network optimization models.	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	1	2	3	4	5
1	S				
2		S	M		
3	S	S			
4	M	S			S
5	M	S	S		

UNIT 1

Introduction - Supply chain – Fundamentals – Evolution - Role in economy - Importance of SC in Textile Industry- Textile Supply Chain in India - SC Decision phases – Supplier – Manufacturer -

Customer chain – Enablers / Drivers of supply chain performance - Supply chain strategy - Supply chain performance measures.

UNIT 2

Strategic sourcing - Outsourcing – Make v/s buy - Identifying core processes - Market v/s Hierarchy - Make v/s buy continuum - Sourcing strategy - Supplier selection and contract negotiation - Creating a world class supply base - Supplier development – World-wide sourcing.

UNIT 3

Transportation – Modes – Measures – Design options – Transportation Costs in E- Retailing – Supply chain network – Role of Distribution – Influencing Factors – Online Sales and Distribution network – Role of network design – Factors – Framework for Design Decisions – Overview of Models for network design – Impact of uncertainty on network design - Network design decisions using decision trees.

UNIT 4

Planning demand, inventory and supply - Managing supply chain cycle inventory - Uncertainty in the supply chain – Analyzing impact of supply chain redesign on the inventory - Risk pooling - Managing inventory for short life - Cycle products - Multiple item - Multiple location inventory management – Overview on Pricing and revenue management in SC

UNIT 5

Current trends - Supply chain integration - Building partnership and trust in SC value of information: Bullwhip effect - Effective forecasting - Coordinating the supply chain - SC restructuring - SC mapping - SC process restructuring, postpone the point of differentiation – IT in supply chain - Agile supply chains - Reverse supply chain

REFERENCES

1. Janat Shah,(2009).*Supply Chain Management – Text and Cases*, Pearson Education Inc., USA.
2. Sunil Chopra., & Peter Meindl,(2007) "Supply Chain Management - Strategy Planning and Operation", Pearson Education Inc., USA, 2007.
3. Ballou Ronald , (2007).*Business Logistics and Supply Chain Management*,(5th Ed.) Pearson Education Inc., USA.
4. David Simchi-Levi, Philip Kaminsky & Edith Simchi-Levi,(2005).*Designing and Managing the Supply Chain: Concepts, Strategies & Cases*, Tata McGraw Hill Publishers Limited, Noida,
5. Altekar Rahul V., (2005).*Supply Chain Management Concept and Cases*, PHI Learning, New Delhi

25BBA52 - PROJECT PLANNING AND MANAGEMENT

3 0 0 3

Course Objectives

- It facilitates to understand project identification, appraisal and selection methods.
- It also aids to have thorough knowledge of all project management knowledge areas.

Course Outcomes

After the completion of this course, students will be able to:

	Course Outcome	Level
CO1	Understand the principles, life cycle, and methodologies of project management.	Understand
CO2	Identify and define project scope, objectives, and work breakdown structures (WBS).	Remember
CO3	Apply tools and techniques for project scheduling, budgeting, and resource allocation (e.g., Gantt chart, PERT, CPM).	Apply
CO4	Analyze risk factors and quality parameters in project execution and monitoring.	Analyze
CO5	Evaluate the success factors and sustainability aspects in managing projects effectively.	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES				
	(S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1	S	M			
2	M				
3	S	S	M		
4	M	S			M
5		M	S	M	S

Unit I

Introduction to Project Management

Concept of project management, project definition and key features of projects, project life cyclee phases, typical project management issues, basic project activities.

Unit II

Project Identification and Selection

Identification and screening (brainstorming, strength and weakness in the system, environmental opportunities and threats), Project evaluation methods- Payback period, Net present value, Internal rate of return and project evaluation under uncertainty.

Unit III

Project Organization

Roles and responsibilities of a project manager, Project Organization-The project as Part of the Functional Organization, Pure Project Organization, The Matrix organization, leadership styles

Unit IV

Scope, Time and Cost Management

Scope Management-define the project-SOW, WBS, Time Management-Network diagram, forward and backward pass, critical path, PERT and CPM, AOA and AON methods, tools for project network, Cost management-earned value method.

Unit V

Project Resource management

Scheduling resources, resource allocation methods, project crashing and resource leveling, Organizing systems and procedures - working of systems, design of systems, project work system design, project execution plan, project procedure manual project control system, planningscheduling and monitoring, monitoring contracts and project diary.

TEXT BOOKS

1. R. Panneerselvam and P. Senthil Kumar (2013), *Project Management*, PHI Learning Private Limited

2. Prasanna Chandra (2014), Projects: Planning, Analysis, Selection, Financing, implementationand Review

REFERENCES

1. ProjectManagement Institute, (2013).*A Guide to the Project Management Body of Knowledge: (PMBOK Guide).*

2. Gopala Krishnan, & Rama Murthy., (2004).*A Text book of Project Management*, McMillan India.

3. Choudhary S (2004).*Project Management,* Tata McGraw Hill Publication.

4.Clifford F Gray (2014*), Project Management: The Managerial Process, (Special Indian Ed..),* Oregon State University.

25BBA53 - Environment Compliance and Management

3 0 0 3

Course Objectives

- To sensitize students to environmental issues
- To mobilize them to adopt environment conservation strategies as management professionals.

Course Outcomes

After the completion of this course, students will be able to:

	Course Outcome	Level
CO1	Understand the importance of environmental regulations and compliance in the textile and apparel industries.	Understand
CO2	Identify national and international environmental standards and certifications	Remember
CO3	Apply environmental management tools and techniques such as Life Cycle Assessment (LCA), EMS, and audits.	Apply
CO4	Analyze the environmental impact of various textile production processes.	Analyze
CO5	Evaluate sustainability practices and propose improvements for compliance and eco-efficiency in textile operations.	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1	S				M
2	M				S
3	S	S		M	
4	M	S			
5		S	S		S

UNIT I

Multidisciplinary nature of environmental studies Definition, Scope and importance, need for public awareness

UNIT II

Natural resources and associated problems: Forest resources,Water resources, Food resources, Energy resources, Land resources.

UNIT III

Ecosystems: Concept of an ecosystem, Structure and function of an ecosystem, Producers, consumers and decomposers, Energy flow in the ecosystem, Ecological succession, Food chains, food webs and ecological pyramids. Introduction, types, characteristic features, structure and function of ecosystems. From Unsustainable to Sustainable development. Environmental ethics: Issues and possible solutions Climate change, global warming. Issues involved in enforcement ofenvironmental legislation

UNIT IV

Biodiversity and its conservation: Introduction – Definition: genetic, species and ecosystem diversity, Biogeographical classification of India Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values, Biodiversity at global, National and local levels, India as a mega-diversity nation, Hot-sports of biodiversity. Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts. Endangered and endemic species of India. Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.

UNIT V

Environmental Pollution: Definition, Cause, effects and control measures. Solid wasteManagement: Causes, effects and control measures of urban and industrial wastes. Disaster management: floods, earthquake, cyclone and landslides. Population growth, variation among nations, Environment and human health, Human Rights, Value Education, Women and Child Welfare, Role of Information Technology in Environment and human health.

REFERENCES

1. Townsend C.R., Begon, M & Harper J.L (2008), Essentials of Ecology Third Edition, United Kingdom, Oxford: Blackwell Publishing.
2. Jadhav H.V & Bhosale V.M (2006), Environmental Protection & Laws, Mumbai: Himalaya Publishing House.

25BBA54 - TEXTILE DATA SCIENCE USING PYTHON

3 0 0 3

Course Objectives

- Will gain knowledge in the basic concepts of Data Analysis
- To acquire skills in data preparatory and preprocessing steps
- To understand the mathematical skills in statistics
- To learn the tools and packages in Python for data science
- To gain understanding in classification and Regression Model
- To acquire knowledge in data interpretation and visualization techniques

Course Outcomes

At the end of the course Students will be able to

	Course Outcome	**Level**
CO1	Understand the fundamentals of data science and Python programming in the context of the textile industry.	Understand
CO2	Import, clean, and preprocess textile-related datasets for analysis using Python libraries such as Pandas and NumPy.	Apply
CO3	Analyze and visualize textile data using Python libraries such as Matplotlib, Seaborn, and Plotly.	Analyze
CO4	Apply machine learning algorithms to textile-related data for classification, regression, and clustering tasks.	Apply
CO5	Evaluate and interpret model performance metrics to optimize machine learning models in the context of textile business.	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	M				
2	S	M			
3	M	S	M		
4	S	S		M	
5	M	S	M		M

UNIT I INTRODUCTION

Need for data science –benefits and uses –facets of data –data science process –setting the research goal –retrieving data –cleansing, integrating, and transforming data –exploratory data analysis –build the models –presenting and building applications

UNIT II DESCRIBING TEXTILE DATA I

Frequency distributions –Outliers –relative frequency distributions –cumulative frequency distributions –frequency distributions for nominal data –interpreting distributions –graphs –averages –mode –median –mean –averages for qualitative and ranked data –describing variability –range –variance –standard deviation –degrees of freedom interquartile range –variability for qualitative and ranked data

UNIT III PYTHON FOR TEXTILE DATA HANDLING

Basics of Numpy arrays –aggregations –computations on arrays –comparisons, masks, boolean logic –fancy indexing –structured arrays –Data manipulation with Pandas –data indexing and selection –operating on data –missing data –hierarchical indexing –combining datasets –aggregation and grouping –pivot tables

UNIT IV DESCRIBING TEXTILE DATA II

Normal distributions –z scores –normal curve problems –finding proportions –finding scores –more about z scores –correlation –scatter plots –correlation coefficient for quantitative data –computational formula for correlation coefficient –regression –regression line –least squares regression line –standard error of estimate –interpretation of r2 –multiple regression equations –regression toward the mean

UNIT V PYTHON FOR TEXTILE DATA VISUALIZATION

Visualization with matplotlib –line plots –scatter plots –visualizing errors –density and contour plots –histograms, binnings, and density –three dimensional plotting –geographic data –data analysis using statmodels and seaborn –graph plotting using Plotly –interactive data visualization using Bokeh

TEXT BOOKS

1. David Cielen, Arno D. B. Meysman, & Mohamed Ali,(2016),*Introducing Data Science*, Manning Publications,.

2. Robert S. Witte and John S. Witte,(2017).*Statistics*, (11th Ed.), Wiley Publications

3. Jake VanderPlas, (2016).*Python Data Science Handbook*, , 2016.

REFERENCES

1. Allen B. Downey,(2014).*Think Stats: Exploratory Data Analysis in Python*, Green Tea Press

25BBA55 - ADVANCED TEXTILE BUSINESS ANALYTICS

3 0 0 3

Course Objectives

The objective of this course is to enable the students to

- To understand the basics of Machine Learning (ML)
- To understand the methods of Machine Learning
- To know about the implementation aspects of machine learning
- To understand the concepts of Data Analytics and Machine Learning
- To understand and implement usecases of ML

Course Outcomes

At the end of the course Students will be able to

	Course Outcome	**Level**
CO1	Understand the basics of ML	Understand
CO2	Explain various Machine Learning methods	Understand
CO3	Explore knowledge on Machine learning and Data Analytics	Apply
CO4	Demonstrate various ML techniques using standard packages	Apply
CO5	Apply Machine Learning techniques to real-world datasets using appropriate tools and programming languages	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	M				
2	S				S
3	S	M			
4			M		
5				M	

UNIT I MACHINE LEARNING BASICS

Introduction to Machine Learning (ML) - Essential concepts of ML – Types of learning – Machine learning methods based on Time – Dimensionality – Linearity and Non linearity – Early trends in Machine learning – Data Understanding Representation and visualization.

UNIT II MACHINE LEARNING METHODS

Linear methods – Regression -Classification –Perceptron and Neural networks – Decision trees – Support vector machines – Probabilistic models —Unsupervised learning – Featurization

UNIT III MACHINE LEARNING IN PRACTICE

Ranking – Recommendation System - Designing and Tuning model pipelines- Performance measurement – Azure Machine Learning – Open-source Machine Learning libraries – Amazon's Machine Learning Tool Kit: Sagemaker

UNIT IV MACHINE LEARNING AND TEXTILE DATA ANALYTICS

Machine Learning for Predictive Data Analytics – Data to Insights to Decisions – Data Exploration – Information based Learning – Similarity based learning – Probability based learning – Error based learning – Evaluation – The art of Machine learning to Predictive Data Analytics.

UNIT V APPLICATIONS OF MACHINE LEARNING

Applications of Machine Learning for Textile and Apparel Industry – Defects recognition – Fashion Forecasting – Fashion Designing

TEXT BOOKS:

1. Ameet V Joshi, Machine Learning and Artificial Intelligence, Springer Publications, 2020

2. John D. Kelleher, Brain Mac Namee, Aoife D' Arcy, Fundamentals of Machine learning for Predictive Data Analytics, Algorithms, Worked Examples and case studies, MIT press,2015

REFERENCES:

1. Christopher M., Bishop,(2011),*Pattern Recognition and Machine Learning*, Springer Publications

2. Stuart Jonathan Russell, & Peter Norvig, John Canny,(2020). *Artificial Intelligence: A Modern Approach*, Prentice Hall

3. Machine Learning Dummies,(2021). *John Paul Muller, Luca Massaron*, Wiley Publications,

25BBA56L - TEXTILE DATA SCIENCE USING PYTHON - LABORATORY

0 0 4 2

Course Objectives

- Understand the Python Programming packages Python, Numpy, Scipy, Matplotlib, Pandas,
- statmodels, seaborn, plotly, bokeh Language.
- To prepare data for data analysis through understanding its distribution.
- Exposure on data processing using NUMPY and PANDAS
- To acquire knowledge in plotting using visualization tools.
- To understand and implement classification and Regression Model.

Tools: Python, Numpy, Scipy, Matplotlib, Pandas, statmodels, seaborn, plotly, bokeh

Course Outcomes

Upon completion of the course, the students will be able to

	Course Outcome	**Level**
CO1	Develop relevant programming abilities.	Create
CO2	Demonstrate knowledge of statistical data analysis techniques	Apply
CO3	Exhibit proficiency to build and assess data-based models.	Apply
CO4	Demonstrate skill in Data management & processing tasks using Python	Apply
CO5	Apply data science concepts and methods to solve problems in real-world contexts and will communicate these solutions effectively	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	S	M			
2	S	S			
3	S	S	M		
4	S	M			
5	S	S	S	M	M

LIST OF EXPERIMENTS

1. Introduction to Python programming
    a. Downloading and installing Python, Anaconda
    b. Python Libraries
    c. Installing and loading Python Packages
2. Basics of Python
    a. Variables

   b. Data Types
   c. Operators
   d. Control Flow
3. Data Structures in Python
   a. List
   b. Tuple
   c. Set
   d. Dictionary
   e. Functions
4. NumPy Basics
   a. Creating ndarrays
   b. Data Types for ndarrays
   c. Arithmetic with NumPy Arrays
   d. Basic Indexing and Slicing
   e. Transposing Arrays
5. Pandas Basics
   a. DataFrame
   b. Read and Write Dataframe
   c. Indexing, Selection, and Filtering
   d. Iteration and Sorting
   e. Summarizing and Computing Descriptive Statistics
6. Data Cleaning and Preparation
   a. Handling Missing Data
   b. Data Transformation
   c. String Manipulation
7. Data Aggregation and Group Operation
   a. Aggregation
   b. Group By
   c. Summary
   d. Cross-Tabulation
   e. Pivot Tables
8. Data Wrangling
   a. Join
   b. Combine
   c. Reshape
9. Plotting and Visualization
   a. Figure and Subplots
   b. Colors, Markers, and Line Styles
   c. Ticks, Labels, and Legends
   d. Plotting with pandas and seaborn
10. Mini project – Use necessary Python tools to analyze textile business data.

REFERENCES:

1. Jake VanderPlas, (2016).*Python Data Science Handbook*, O'Reilly
2. Allen B. Downey,(2014) .*Think Stats: Exploratory Data Analysis in Python*, Green Tea Press,
3. Joel Grus,(2019) .*Data Science From Scratch: First Principles with Python*, (2nd Ed.)

SEMESTER – VI

25BBA61 - STRATEGIC MANAGEMENT AND CORPORATE GOVERNANCE

3 0 0 3

Course Objectives

- To help the students to learn the process of strategic decision making.
- To enable the students to have insight in implementation and control of strategic policies

Course Outcomes

Upon completion of the course, the students will be able to

	Course Outcome	Level
CO1	Understand the role and responsibilities of corporate governance in strategic management.	Understand
CO2	Analyze internal and external business environments to formulate effective strategies	Analyze
CO3	Evaluate strategic options and make informed strategic decisions	Evaluate
CO4	Analyze, develop strategies for corporations and evolve strategies to competitive environments	Apply
CO5	Apply strategic implementation and control techniques in real-world business scenarios	Apply

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES				
	(S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1	M	M			S
2	S	S	M		
3	S	S			M
4	S	S	S		
5	S	S	S	M	

UNIT I

Strategy: Meaning- Conceptual framework for strategic management, strategy formation process – Stakeholders in business – Vision, mission and purpose.

UNIT II

Capabilities and competencies – Core competencies, Competitive advantage – Porter's five forces model- Low cost and differentiation generic building blocks of competitive advantage– Globalisation and industry structure-Sustaining competitive advantage

UNIT III

The generic strategic alternatives – Stability, expansion, retrenchment and combination strategies - Business level strategy - Strategic analysis and choice.Tools: Environmental threat and opportunity profile (ETOP) - Organizational capability profile- Strategic advantage profile-Corporate portfolio analysis- SWOT analysis-GAP analysis-McKinsey's7s framework- GE9 cell model.

UNIT IV

Strategy implementation and evaluation– The implementation process, resource allocation, Designing organizational structure. Designing strategic control systems – Matching structure and strategy-Implementing strategic change –Techniques of strategic evaluation and control.

UNIT V

Corporate governance: concept, Relevance of The Board –Quality, Composition and role of Board, Outside Directors on the board (independent, nominee), Executive and Non-Executive directors, Role played by regulators to improve corporate governance, accounting standards and corporate governance, corporate disclosure, insider trading. SEBI clause 49

REFERENCES

1. John Pearce, Richard & Amitha Mittal,(2012).*Strategic Management*, McGraw Hill Education,(12 th Ed.),New Jersey.
2. Mason A Carpenter,(2011).*Strategic Management: Concepts and Cases*, Pearson Education Inc.,USA.
3. Adriau H Aberberg & Alison Rieple,(2018). *Strategic Management Theory &Application", OxfordUniversity Press*, New York.
4. Gopalswamy N, *Corporate governance a new paradigm* ,A H Wheeler Publishing Co Ltd.
5. Fernando,*Corporate A. C Governance*, Pearson Education.

25BBA62- APPLICATIONS OF CLOUD COMPUTING IN TEXTILE INDUSTRY

3 0 0 3

Course objectives

- To understand the concept of cloud computing.
- To appreciate the evolution of cloud from the existing technologies.
- To have knowledge on the various issues in cloud computing.
- To be familiar with the lead players in cloud.
- To appreciate the emergence of cloud as the next generation computing paradigm.

Course Outcomes:

On Completion of the course, the students should be able to:

	Course Outcome	**Level**
CO1	Learn the key and enabling technologies that help in the development of cloud	Understand
CO2	Develop the ability to understand and use the architecture of compute and storage cloud, service and delivery models.	Apply
CO3	Develop the ability to understand and use the architecture of compute and storage cloud, service and delivery models.	Create
CO4	Explain the core issues of cloud computing such as resource management and security.	Analyze
CO5	Evaluate and choose the appropriate technologies, algorithms and approaches for implementation and use of cloud.	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	S	M		S	
2	S	S	M		
3	S	S	S		
4	M	S			M
5	S	S	S		M

UNIT I INTRODUCTION

Introduction to Cloud Computing – Definition of Cloud – Evolution of Cloud Computing – Underlying Principles of Parallel and Distributed Computing – Cloud Characteristics – Elasticity in Cloud – On-demand Provisioning.

UNIT II CLOUD ENABLING TECHNOLOGIES

Service Oriented Architecture – REST and Systems of Systems – Web Services – Publish-Subscribe Model – Basics of Virtualization – Types of Virtualization – Implementation Levels of Virtualization – Virtualization Structures – Tools and Mechanisms – Virtualization of CPU – Memory – I/O Devices –Virtualization Support and Disaster Recovery.

UNIT III CLOUD ARCHITECTURE, SERVICES AND STORAGE

Layered Cloud Architecture Design – NIST Cloud Computing Reference Architecture – Public, Private and Hybrid Clouds - laaS – PaaS – SaaS – Architectural Design Challenges – Cloud Storage – Storage-as-a-Service – Advantages of Cloud Storage – Cloud Storage Providers – S3.

UNIT IV RESOURCE MANAGEMENT AND SECURITY IN CLOUD

Inter Cloud Resource Management – Resource Provisioning and Resource Provisioning Methods – Global Exchange of Cloud Resources – Security Overview – Cloud Security Challenges – Software-as-a-Service Security – Security Governance – Virtual Machine Security – IAM – Security Standards.

UNIT V CLOUD TECHNOLOGIES AND APPLICATIONS IN TEXTILE INDUSTRIES

Hadoop – MapReduce – Virtual Box -- Google App Engine – Programming Environment for Google App Engine — Open Stack – Federation in the Cloud – Four Levels of Federation – Federated Services and Applications – Future of Federation.

TEXT BOOKS:

1. Kai Hwang, Geoffrey C. Fox, Jack G. Dongarra, "Distributed and Cloud Computing, From Parallel Processing to the Internet of Things", Morgan Kaufmann Publishers, 2012.

2. Rittinghouse, John W., and James F. Ransome, ―Cloud Computing: Implementation, Management and Security‖, CRC Press, 2017.

REFERENCES:

1. Rajkumar Buyya, Christian Vecchiola, S. ThamaraiSelvi,(2013).Mastering Cloud Computing‖, Tata Mcgraw Hill,.

2. Toby Velte, Anthony Velte, Robert Elsenpeter,(2009).*Cloud Computing - A Practical Approach‖, Tata Mcgraw Hill*

3. George Reese,(2009).*Cloud Application Architectures: Building Applications and Infrastructure in the Cloud: Transactional Systems for EC2 and Beyond (Theory in Practice)‖*, O'Reilly.

25BBA63 - ENTREPRENEURSHIP DEVELOPMENT

3 0 0 3

Course Objectives

- To create awareness and enhance skills in identifying opportunities, develop ideas and startbusiness ventures.
- To emphasizes on entrepreneurial process.

Course Outcomes

Upon successful completion of this course the student would be able to,

	Course Outcome	**Level**
CO1	Understand the fundamental concepts and theories of entrepreneurship and the entrepreneurial process.	Understand
CO2	Prepare a basic business plan incorporating financial, marketing, and operational strategies	Apply
CO3	Develop entrepreneurial mindset, creativity, and problem-solving skills to launch and manage startups.	Create
CO4	Identify and assess business opportunities and develop viable business ideas	Analyze
CO5	Demonstrate knowledge of the legal, ethical, and regulatory aspects of starting and running a business.	Apply

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	M	M	S		
2	S	S	S	M	
3		S	S		
4		S	S		
5	M	M			S

UNIT I

Entrepreneurship: Internal and external factors, functions of an entrepreneur, entrepreneurial motivation and barriers, classification of entrepreneurship, theory of entrepreneurship, concept of entrepreneurship, development of entrepreneurship; culture, stages in entrepreneurial process.

UNIT II

Business plan development: Creativity and entrepreneurial plan - Idea generation, screening

and project identification, creative performance, feasibility analysis: Economic, marketing, financial and technical - Project planning - Evaluation, monitoring and control segmentation - Creative problem solving - Heuristics, brainstorming, value analysis and innovation.

UNIT III

Institutional support for new ventures - Supporting Organizations: Incentives and facilities: Financial institutions and small-scale industries, Government Policies for SSIs, Angel investors, and private equity.

UNIT IV

Family and non-family entrepreneur - Role of professionals, professionalism v/s family entrepreneurs, role of woman entrepreneur - Venture capital - Nature and overview, venture capital process, locating venture capitalists.

UNIT V

Role of support institutions and management of small business - Director of industries - DIC, SIDCO, SIDBI, TIIC, MSME small industries, development corporation (SIDC), SISI, NSIC, NISBUED, SFC.

TEXT BOOKS:

1. Poornima. M Charantimath,(2011 & 2014).*Entrepreneurship Development and Small Business Enterprise", Pearson Education India*, Noida,

2. Holt,(1998).*Entrepreneurship: New Venture Creation, Prentice-Hall Inc.*, USA

REFERENCES:

1.Simon Bridge & Ken O'Neill,(2012).*Understanding Enterprise: Entrepreneurship and SmallBusiness*,(4th Ed.),Palgrave Macmillan, London.

2.Dollinger M J,(1999).*Entrepreneurship, Prentice Hall Inc.*, USA.

25BBA65L - CLOUD COMPUTING LABORATORY USING AWS FOR TEXTILE INDUSTRY

0 0 4 2

Course objective

- To understands the concepts of AWS in Cloud computing
- To utilize the AWS tools and applications in real world

Course outcome

On Completion of the course, the students should be able to:

	Course Outcome	Level
CO1	Understand the fundamental concepts of AWS cloud services relevant to business and textile industry applications.	Understand
CO2	Demonstrate the ability to create and configure virtual machines and cloud storage using AWS	Apply
CO3	Develop and deploy cloud-based applications using AWS tools and services.	Create
CO4	Manage security, access control, and monitoring in an AWS environment	Apply
CO5	Analyze and evaluate cloud service performance and cost optimization for textile industry use cases.	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	1	2	3	4	5
1	S	M			
2	S	S	M		
3	S	S	S		
4	M	S		S	M
5	S	S	S		M

LIST OF EXPERIMENTS:

1. Introduction to Cloud Computing and AWS
    a. Overview of databases and their importance in business analytics
    b. Introduction to SQL and its role in data manipulation
    c. Setting up a database environment-algebra
2. AWS Storage Services
    a. Amazon S3 (Simple Storage Service) for data storage

b. Create, upload, store and publicly share files using Amazon S3.

3. AWS Compute Services
    a. Introduction to Amazon EC2 (Elastic Compute Cloud)
    b. Launch a Virtual Server (EC2) on AWS.
4. AWS Database Services
    a. Amazon RDS (Relational Database Service) for managed databases
    b. Create a Cloud-Based Relational Database using Amazon RDS.
5. AWS Analytics Services
    a. Amazon Redshift for data warehousing and analytics
    b. Analyze Business Data using Amazon Redshift.
6. AWS Machine Learning and AI Services
    a. Introduction to AWS machine learning services
    b. Creating a machine learning model using Amazon SageMaker.
7. AWS Security and Compliance
    a. Identity and Access Management (IAM) for access control
    b. Create and Manage Secure Access to AWS Resources Using IAM.
8. Mini project – Use necessary tools to analyse textile business data.

REFERENCES:

1. Rajkumar Buyya, Christian Vecchiola, S. ThamaraiSelvi,(2013).Mastering Cloud Computing‖, Tata Mcgraw Hill,.

2. Toby Velte, Anthony Velte, Robert Elsenpeter,(2009).*Cloud Computing - A Practical Approach‖, Tata Mcgraw Hill*

3. George Reese,(2009).*Cloud Application Architectures: Building Applications and Infrastructure in the Cloud: Transactional Systems for EC2 and Beyond (Theory in Practice)‖*, O'Reilly.

SEMESTER VII

25BBA71 – BIG DATA ANALYTICS

4 0 0 4

Course Objectives:

- The course aims to provide students with a foundational understanding of Big Data, its characteristics, types, and its relevance in the textile industry's business dynamics and architecture, emphasizing the role of technology.
- Understand the prerequisites and considerations for adopting Big Data, including data acquisition, privacy, security, governance, and performance challenges.
- Integration of enterprise technologies, data storage concepts, and processing techniques related to Big Data, preparing students to work with Online Transaction Processing, Online Analytical Processing, data warehousing, NoSQL databases, and various analysis techniques, including machine learning.

Course Outcomes:

i. Application of Big Data concepts, terminologies, and characteristics, as well as a deep understanding of the business motivations behind its adoption in the textile industry.
ii. Big Data adoption and planning, covering organizational prerequisites, data acquisition, privacy, security, and performance challenges.
iii. Understanding of enterprise technologies, data storage concepts, and processing techniques for Big Data, allowing them to work with various storage technologies, including NoSQL databases, and apply analysis techniques such as data mining and machine learning to extract meaningful insights from Big Data.

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S-STRONG, M-MEDIUM)																			
	PO																			
CO																				
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
I				**M**															**S**	**S**
II				**S**															**S**	**S**
III	**M**			**S**															**S**	**S**

Illustrations and examples must be from the textile and allied sector.

UNIT 1

Understanding Big Data: Concepts and Terminology, Big Data Characteristics, Data- types. Business Motivations: Textile Marketplace Dynamics, Textile Business Architecture, Business Process Management, ICT, Internet of Everything (IOE).

UNIT 2

Big Data Adoption and Planning: Organizational Prerequisites, Data Acquisition, Privacy, Security, Provenance, Realtime Support, Distinct Performance Challenges, Distinct

Performance Challenges, Distinct Governance Requirement, Distinct Methodology, Cloud

Technology. Big Data Analytics Life Cycle.

UNIT 3

Enterprise Technology and Big Data Intelligence: Online Transaction Processing (OLTP), Online Analytical Processing (OLAP), Extract Transform Load (ETL). Data Warehousing, Data Marts, Traditional BI, Big Data BI. Big Data Storage: Clusters, File Systems and Distributed File Systems (DFS).

UNIT 4

Big Data Storage Concepts: Clusters, File Systems and Distributed File Systems (DFS), NoSQL, Sharding, Replication, CAP Theorem, ACID, BASE. Big Storage Technology: On-disk Storage Devices, NoSQL Databases, In-Memory Storage Devices.

UNIT 5

Big Data Processing Concepts: Parallel Data Processing, Distributed Data Processing, Hadoop, Processing Workloads, Cluster, Processing in Batch Mode, Processing in Realtime Mode. *Big Data Analysis Techniques: Quantitative Analysis, Qualitative Analysis, Data Mining, Statistical Analysis, Machine Learning.

REFERENCES:

1. Frank J Ohlhorst, “Big Data Analytics: Turning Big Data into Big Money”, Wiley and SAS Business Series, 2013.
2. Colleen Mccue, “Data Mining and Predictive Analysis: Intelligence Gathering and Crime Analysis”, Elsevier, Second Edition, 2015.
3. Michael Berthold, David J. Hand, “Intelligent Data Analysis”, Springer, Second Edition, 2007.
4. AnandRajaraman and Jeffrey David Ullman, “Mining of Massive Datasets”, Cambridge University Press, 2014.
5. Bill Franks, “Taming the Big Data Tidal Wave: Finding Opportunities in Huge Data Streams with Advanced Analytics”, Wiley and SAS Business Series, 2012.
6. Paul Zikopoulos, Chris Eaton “Understanding Big Data: Analytics for Enterprise Class Hadoop and Streaming Data”, McGraw Hill, 2012.
7. Paul Zikopoulos, Dirk de Roos, Krishnan Parasuraman, Thomas Deutsch , James Giles, David Corrigan, “Harness the Power of Big data - The big data platform”, McGraw Hill, McGraw-Hill Osborne Media, 2012.

25BBA72- INDUSTRIAL MANAGEMENT

4 0 0 4

Course Objectives

- To acquaint the students with the basic nature of management, its process, tasks and responsibilities of a manager
- To introduce the basics of managerial functions like human resources, marketing, finance and production

Course Outcomes

Upon successful completion of this course the student would be able to,

	Course Outcome	Level
CO 1	Elaborate on the HRM policies in an organization	Understand
CO 2	Acquaint the students with the basic nature of management, its process, tasks and responsibilities of a manager	Understand
CO 3	Introduce the basics of managerial functions like human resources, marketing, finance and production	Apply
CO 4	Identify examples on marketing using case studies	Skill
CO 5	Point out the functions of HR, Marketing, Finance and Production departments in an organization	Skill

Mapping of Program Outcomes with Course Outcomes

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1		S			
2			S		
3	S				
4				S	
5					S

UNIT I

Management: Science, theory and practice - the evolution of management thoughts – management as art - management as profession - professionalization of management in India - functions of management - levels of management - case analysis.

UNIT II

Human Resource Management: Introduction - HRM policies and roles - The importance of the human factor - HRM and its interaction with other functional areas - line and staff functions – role of HR manager - case analysis.

UNIT III

Marketing: Concept of marketing and marketing management, marketing as a business process -marketing environment, marketing mix - relationship of marketing department with production, finance, purchase and human resource department - demand and market - concepts of consumer marketing, industrial marketing and services marketing – marketing research, demand and supply – price determination - case analysis.

UNIT IV

Finance: Introduction: Financial, management and cost accounting - accounting concepts and conventions - concept of finance and functions of financial management; objectives of the firm; time value of memory and risk - return relationship - case analysis.

UNIT V

Production: Production planning and control: production systems, types of production, re-planning and control functions, relations with other departments, efficiency of production planning and control – scheduling – GANTT charts - case analysis.

TEXT BOOKS:

1. Tripathi,P.C.&Reddy,P.N.(2013),Principles of Management,5th Edition, JBA publishers, New Delhi.

2. Rao,V.S.P.(2000),Human Resource Management : Text&Cases,1stEdition, Excel Books, New Delhi.

3. Pandey I.M.(2010),Financial Management,10thEdition, Vikas Publishing House P. Ltd., Noida.

25BBA73 - PRODUCT AND BRAND MANAGEMENT

3 0 0 3

Course Objective

- To understand the importance of Product / Brand Management in today's scenario
- To enable the students to understand the concept of brand and its value.
- To impart knowledge on brand extensions and brand positioning.
- To make the students understand the strategic issues in branding.

Course Outcomes

i. Able to create strategies for marketing a product at various stages of product life cycle
ii. Able to create a brand identity prism for any given brand.
iii. Able to judge when to go for line extensions and brand extensions.
iv. Able to appropriately position a brand.
v. Able to take effective decisions on issues pertaining to branding.
vi. Skill of creating, communicating and sustaining an appropriate brand personality.

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S-STRONG, M-MEDIUM)																			
	PO																			
CO																				
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
I		**S**	**M**																	
II			**S**					**M**												
III				**S**																
IV				**S**																
V																**S**				
VI																**S**				

Illustrations and examples must be from the textile and allied sector.

UNIT 1

Product – Meaning, types of products, product line, product mix, managing products in product life cycle and its stages, case study on textile and apparel - New product development process.

UNIT 2

Test marketing new products - Portfolio analysis, market analysis, competitor analysis, product positioning, packing and labelling.

UNIT 3

Brand- Definition, brand building process – Types of branding – Role of brand –Brand development – Brand loyalty – Brand equity.

UNIT 4

Brand names and its basic applications - Brand leverage and brand performance - Market segmentation – Brand Positioning-Pricing strategies –Market skimming – Penetration pricing, brand franchising and licensing.

UNIT 5

Designing and sustaining brand strategies, steps in branding, brand equity – Establishing brand values, integrated marketing communication to build brand - Managing brand over time – Repositioning brands

REFERENCES

1. Mathur, U. C. (2006). *Brand Management Text & Cases*, Macmillan Publishers. Noida.
2. Keller, K. L. (2008). *Best practice cases in Branding* (3rd ed.). Pearson Education. New Jersey.
3. Chunawalla, S. A. (2010). *Product management.* (2nd ed.). Himalaya publishing house. Mumbai.
4. Kotler Philip, (2009). *Marketing Management.* (13th ed.). Pearson Education Inc. USA.

25BBA74– DATA MINING AND WAREHOUSING

3 0 0 3

Course Objectives:

- Understanding of data mining concepts such as data types, patterns, preprocessing, data warehousing, and association rule mining, with a focus on applications and practical issues in the field.

Course Outcomes:

Capability to address real-world issues and challenges in data mining applications
Capabilities in in data preprocessing, data warehousing, and association rule mining

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S-STRONG, M-MEDIUM)																			
	PO																			
CO																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
I				S				M		S						S	S			S
II				S						S										S

Illustrations and examples must be from the textile and allied sector.

UNIT 1 DATA MINING

Introduction to Data Mining – Kinds of Data – Kinds of Pattern – Technologies Used –

Applications and Issues of Data Mining

UNIT 2 DATA

Data Objects and Attribute Types - Basic Statistical Descriptions of Data - Data Visualization - Measuring Data Similarity and Dissimilarity.

UNIT 3 DATA PRE-PROCESSING

Overview of Data Pre-Processing – Data Cleaning – Data Integration – Data Reduction – Data Transformation and Data Discretisation.

UNIT 4 DATA WAREHOUSING

Basic Concepts – Data Warehouse Modelling – Data Cube – Online Analytical Processing – Data Warehouse Design and Usage – Data Warehouse Implementation.

UNIT 5 ASSOCIATION RULE MINING

Mining Frequent Patterns, Associations and Correlations – Market Basket Analysis – Frequent Item set Mining Methods - *Pattern Evaluation Methods.

REFERENCES:

1. Alex Berson and Stephen J. Smith, “Data Warehousing, Data Mining & OLAP”, Tata McGraw – Hill Edition, Tenth Reprint 2007.
2. Jiawei Han and Micheline Kamber, “Data Mining Concepts and Techniques”, Second Edition, Elsevier, 2007.
3. Pang-Ning Tan, Michael Steinbach and Vipin Kumar, “Introduction To Data Mining”, Person Education, 2007.
4. K.P. Soman, Shyam Diwakar and V. Ajay “, Insight into Data mining Theory and Practice”, Easter Economy Edition, Prentice Hall of India, 2006.
5. G. K. Gupta, “Introduction to Data Mining with Case Studies”, Easter Economy Edition, Prentice Hall of India, 2006.
6. Soumendra Mohanty, “Data Warehousing Design, Development and Best Practices”, Tata McGraw – Hill Edition, 2006.

SEMESTER VIII-BBA HONS.

25BBA81-TOTAL QUALITY MANAGEMENT FOR TEXTILE AND APPAREL INDUSTRY

3 0 0 3

Course Outcomes (CO)

On the successful completion of the program, the student will be able to:

	Course Outcome	Level
CO 1	Understand the basic concepts of total quality management and appreciate its importance in today's business environment	Understand
CO 2	Acquire required diagnostic skills and use various quality tools	Understand
CO 3	Apply TQM concepts for improving the quality of products and services	Apply
CO 4	Use tools and techniques of TQM for continuous improvement in quality	Skill
CO 5	Implement Quality Management System	Skill

Mapping of Program Outcomes with Course Outcomes

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)				
	PO				
CO	1	2	3	4	5
1			S		
2		M			
3	S				
4				M	
5					M

UNIT 1

Introduction

Introduction and basic concepts, Definition of quality, Dimensions of quality, Evolution of TQM, TQM frame work, Cost of Quality.

UNIT 2

TQM Implementation

Leadership for TQM, Deming's quality principle, TQM implementation, PDSA cycle, Quality Circles, Quality Council, Supplier Partnership.

UNIT 3

Process approach to TQM

Process approach, Juran's Trilogy, Taguchi's loss function, Kaizen, Quality by design, 5S,

5M.

UNIT 4

Tools and Techniques

7 Old quality control tools,Total productive maintenance, Failure mode and effect Analysis, POKAYOKE, Six Sigma **,**Toyota and Six Sigma.

UNIT 5

Quality Management Systems: Management systems for TQM, ISO 9000 & 14000 Quality management systems, Auditing and certification Process - Quality Awards.

REFERENCES

1. Dale H. Besterfield etal, "Total Quality Management", New Delhi: Pearson Education, 2011.
2. Subburaj Ramasamy, "Total Quality Management", New Delhi: Tata McGraw Hill Publishing Co. Ltd, 2008.
3. J.R. Evans and W.M. Lindsay, "Quality control and Management", New Delhi: Cengage Learning first edition, 2010.
4. Barrie G Date, Ton Van Der Wiet and Jos Van Iwaarden, "Management Quality", New Delhi: Wiley Publications, 2012.
5. Greg Brue, "Six Sigma for Managers", New Delhi: Tata McGraw Hill Publishing Co. Ltd, 2002.

25BBA82 – NATURAL LANGUAGE PROCESSING AND TEXT ANALYTICS

3 0 0 3

Course Objectives

The ability to apply text mining and analysis techniques in real-world scenarios, making informed decisions and extracting valuable insights from textual data.

Course Outcomes

Effectively extract and evaluate keywords from text data, understanding their significance and quality.
Utilize clustering and classification techniques for organizing and categorizing textual information.
Apply visualization methods and adaptive threshold setting to detect anomalies and trends in text data.

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S-STRONG, M-MEDIUM)																			
	PO																			
CO																				
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
I			**M**	**S**										**S**						**S**
II			**M**	**M**										**S**						**S**
III			**M**	**S**										**S**						**S**

Illustrations and examples must be from the textile and allied sector.

UNIT 1 TEXT EXTRACTION

Introduction to Text Extraction: Rapid automatic keyword extraction - Candidate keywords - Keyword scores - Adjoining keywords - Extracted keywords - Benchmark Evaluation: Precision and recall metrics - Efficiency considerations - Stoplist generation techniques Evaluation on new articles

UNIT 2 DOCUMENT CLUSTERING

Introduction to Document Clustering - Multilingual Document Clustering: Multilingual Latent Semantic Analysis (LSA) - Tucker1 Method - PARAFAC2 Method - LSA with Term Alignments - Latent Multilingual Semantic Analysis (LMSA) - LMSA with Term Alignments - Constrained Clustering with K-Means Type Algorithms

UNIT 3 CONTENT BASED CLASSIFICATION

Classification Algorithms for Document Classification - Content-Based Spam Email Classification - Utilizing Nonnegative Matrix Factorization for Email Classification Problems.

UNIT 4 ANOMALY AND TREND DETECTION

Text Visualization Techniques: Visualization in Text Analysis - Tag Clouds - Authorship and Change Tracking - Data Exploration and the Search for Novel Patterns - Sentiment Tracking - Visual Analytics and FutureLens - Scenario Discovery - Adaptive Threshold Setting for Novelty Mining: Introduction to Adaptive Thresholds for Anomaly Detection -Experimental Study

UNIT 5 TEXT STREAMS

Events and Trends in Text Streams: Introduction to Text Streams - Feature Extraction and Data Reduction - Event Detection - Trend Detection - Event and Trend Descriptions Embedding Semantics in LDA Topic Models: Introduction to LDA Topic Models - Vector Space Modeling - Latent Semantic Analysis (LSA) - Probabilistic Latent Semantic Analysis - Latent Dirichlet Allocation (LDA) - Embedding External Semantics from Wikipedia - *Data-Driven Semantic Embedding

REFERENCES

1. Michael W. Berry & Jacob Kogan,"Text Mining Applications and Theory", Wiley publications, 2010.
2. Aggarwal, Charu C., and ChengXiangZhai, eds., “Mining text data”, Springer Science & Business Media, 2012.
3. Miner, Gary, et al., “Practical text mining and statistical analysis for non- structured text data applications”, Academic Press, 2012.
4. Srivastava, Ashok N., and MehranSahami, “Text mining: Classification, clustering, and applications”, Chapman and Hall/CRC, 2009.
5. Buitelaar, Paul, Philipp Cimiano, and Bernardo Magnini, eds., “Ontology learning from text: methods, evaluation and applications”, Vol. 123. IOS press, 2005.

25BBA83L- CREATIVITY AND INNOVATION LABORATORY

Total Hours: **0 0 4 2**

Course Objectives

- To understand the nuances involved in Creativity & Innovation.
- To get hands on experience in applying creativity in problem solving.

Course Outcomes

- Provides insights about approaches to creativity and innovation
- Understanding of heuristic models and its applications
- Enhances the knowledge of nature of creativity
- Ability to apply creativity in problem solving
- Knowledge about radical and disruptive models of innovation

MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M-Medium)

CO	PO																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
i.	S	S		S															M	S
ii.				S	S			M												
iii.			S																M	
iv.		S	S																S	M
v.				S	S														S	S

UNIT 1

Introduction - Need for Creative and innovative thinking for quality – Essential theory about directed creativity, Components of Creativity, Methodologies and approaches, individual and group creativity, Organizational role in creativity, types of innovation, barriers to innovation, innovation process, establishing criterion for assessment of creativity & innovation.

UNIT 2

Mechanism of Thinking And Visualization - Definitions and theory of mechanisms of mind heuristics and models: attitudes, Approaches and Actions that support creative thinking - Advanced study of visual elements and principles- line, plane, shape, form, pattern, texture gradation, colour symmetry. Spatial relationships and compositions in 2- and 3-dimensional space - procedure for genuine graphical computer animation – Animation aerodynamics – virtual environments in scientific Visualization – Unifying principle of data management for scientific visualization – Visualization benchmarking

UNIT 3

Creativity - Nature of Creativity: Person, Process, Product and Environment, Methods and tools for Directed Creativity – Basic Principles – Tools that prepare the mind for creative thought – stimulation – Development and Actions: - Processes in creativity ICEDIP – Inspiration, Clarification, Distillation, Perspiration, Evaluation and Incubation – Creativity and Motivation The Bridge between man creativity and the rewards of innovativeness – Applying Directed Creativity.

UNIT 4

Creativity In Problem Solving - Generating and acquiring new ideas, product design, service design – case studies and hands-on exercises, stimulation tools and approaches, six thinking hats, lateral thinking – Individual activity, group activity, contextual influences. Assessing Your Personal Creativity and Ability to Innovate, Enhancing Your Creative and Innovative Abilities

UNIT 5

Innovation - radical vs evolutionary, – Introduction to TRIZ methodology of Inventive Problem Solving – the essential factors – Innovator's solution – creating and sustaining successful growth – Disruptive Innovation model – Segmentive Models – New market disruption -— Managing the Strategy Development Process – The Role of Senior Executive in Leading New Growth – Passing the Baton, Entrepreneurial Tools for Creativity and Innovation

Note: Students will undergo the entire programme similar to a Seminar. It is an activity- based course. Students will undergo the programme with both theoretical and practical content. Each student will be required to come out with innovative products or services. This will be evaluated by the faculty member(s) handling the course and the consolidated marks can be taken as the final mark. No end semester examination is required for this course

1. REFERENCES:

1. Rousing. (1999). *Creativity: Think New Now Floyd Hurt*, ISBN 1560525479, Crisp Publications Inc. 1999
2. Geoffrey Petty. (2012). *How to be better at Creativity*. The Industrial Society.
3. Clayton, M. Christensen., & Michael, E. Raynor. (2007). *The Innovator's Solution*. Harvard Business School Press.
4. Semyon, D. Savransky. (2000). *Engineering of Creativity – TRIZ* (1st ed.). CRC Press New York.
5. Krishnamacharyalu, C.S.G., Lalitha, R. (2013). *Innovation management*. Himalaya Publishing House.

ELECTIVE - I

25BBA57(A) – TECHNICAL TEXTILES

4 0 0 4

Course Objectives

- To inculcate the knowledge of application of textile materials in various technical areas.
- To learn about technical textiles, and its applications in different field knowledge.

Course Outcomes

Upon successful completion of this course the student would be able to,

	Course Outcome	Level
CO1	Identify the various technical textiles used in the day to day life	Understand
CO2	Analyze the functional requirements and performance characteristics of technical textile products	Analyze
CO3	Explain the production technologies and raw materials used in different technical textile sectors.	Understand
CO4	Identify the emerging trends and opportunities in the global technical textile market.	Apply
CO5	Evaluate the quality standards and testing methods specific to technical textiles	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	1	2	3	4	5
1	S	M			
2	M	S	M		
3	M	M			
4	M	S	M	M	
5	M	M	S		M

UNIT I

Technical Textiles: Definition – Classification – Market growth and potential - Future of Technical Textiles industry in India. Fibres used - Technical yarns: staple yarns, monofilament, multifilament yarns - Technical fabrics: woven, nonwoven, knitted and braided structures.

UNIT II

Medical Textiles: Non-implantable materials, extra-corporeal devices, implantable materials, healthcare and hygiene products. Fibres used in medical textiles.

Industrial Textile: Fibres used - functions and properties - introduction to coated fabrics - Coating methods: Direct and indirect - Lamination methods: Flame bonding and adhesive lamination - Applications of coating and laminated textiles.

UNIT III

Geo-Textiles: Raw materials – properties – testing methods and application.
Agro Textiles: Raw materials – properties – classification and applications.
Build Textiles: Raw materials used – classification - properties and applications.

UNIT IV

Mobile Tech Textiles: Raw material selection – properties – classification and applications.
Protective Textiles: Raw materials – properties - applications: Fire Protective clothing, Heat resistant garments, Water proof materials, Ballistic resistant Vests, Biological and chemical Protective clothing.

UNIT V

Sports Textiles: Raw materials used – classification - properties and applications.
Smart and Intelligent Textiles: Active, passive and very smart textiles - Phase change materials - shape memory polymers - chromic and conductive Materials - applications in various fields.

TEXT BOOKS:

1. Adanur, Sabit (2017). Wellington Sears Handbook of Industrial Textiles. Rouledge.
2. Horrocks, A. R. & Anand, S. C. (2000). Handbook of Technical Textiles. Cambridge, England: Woodhead Publishing and The Textile Institute.
3. Hearle, J. W. S. (2001). High Performance Fibers. Cambridge, England: Wood Head Publishing limited.

REFERENCES:

1. Kumar, Senthil., R. (2013). *Textiles for Industrial Applications. (1st Ed.) CRC Press*.
2. Kothari V.K..,*Recent advances in technical textiles-Indian journal of fiber and textile research*
3. Johnson, J. S. and Mansdorf, S. Z. (1996). *Performance of Protective clothing.(5th Vol.) USA*: ASTM Publication.

25BBA57(B) - FASHION BRAND MANAGEMENT

4 0 0 4

Course Objectives

- To acquire knowledge on the basic fashion concepts, colour theories and to develop designing skills.
- To gain an insight into various brand management strategies and activities.

Course Outcomes

Upon successful completion of this course the student would be able to,

	Course Outcome	Level
CO1	Understand the core principles of branding in the fashion industry and their impact on consumer behaviour	Understand
CO2	Analyze fashion branding strategies and assess their effectiveness in various market contexts.	Analyze
CO3	Apply branding concepts to create or enhance a fashion brand's identity and positioning	Apply
CO4	Evaluate brand equity, brand communication, and promotional strategies in fashion marketing	Evaluate
CO5	Develop strategic brand management plans to sustain competitive advantage in the fashion industry	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	1	2	3	4	5
1	S	M			
2	M	S	M		
3	S	M	S		
4	M	S		M	M
5	S	S	S	M	

UNIT I

Design: Definition and types, structural and decorative design - Requirements of a good structural and decorative design. Elements of design – Line, shape of form, Colour size and texture. Principles of design: balance, rhythm, emphasis, harmony and proportion.

Colour: Definition - Colour theories – Prang colour chart and Munsell colour system, Dimensions of colour – Hue, value and intensity, standard colour harmonies.

UNIT II

Terms related to the fashion industry : Fashion, style, fad, classic, collection, chic, custom made, mannequin, fashion show, trend forecasting, high fashion cycle, haute couture, couture, couturier, fashion director, fashion editor, knock-off, avant grade, bridge, buying house, apparel fashion merchandising, pre-a-porter, sample.

UNIT III

Factors influencing fashion changes - Psychological needs of fashion - Social psychology of fashion - Technological, economical, political, legal and seasonal influence. Fashion evolution - Fashion cycles - Length of cycles - Consume groups in fashion cycles - Fashion leaders - Fashion innovators - Fashion motivation - Fashion victim - Fashion followers. Adoptions of fashion - Trickle down, trickle up and trickle across theory.

UNIT IV

Fashion forecasting - Market research - Evaluating the collection - Fashion services and resources - Portfolio development: Theme board, mood board, colour board, fabric board, customer profile and final design board.

UNIT V

Fashion show - Definition, planning, budgeting, location, timings, selection of models, collection, set design, music, preparing the commentary, rehearsal. Domestic fashion market - Market centre - Mart - Market week - Trade shows.

TEXT BOOKS:

1. Ruth E Glock & Grace I Kunz,(2005).*Apparel Manufacturing: Sewn Product Analysis,(4th Ed.) Pearson / Prentice Hall Inc.,*
2. Mike Easey,(2008.).Fashion Marketing,(3rd Ed.) Blackwell Publishing, ,
3. Marian L Davis, (1996).*Visual Design in DressPrentice Hall Inc.,(* (3rd Ed.) *New Jersey.*
4. Kathleen Colussy M & Steve Greenberg,(2004), *Rendering fashion, Fabric and Prints,*(1st Ed) Pearson Education,
5. Gini Stephens Frings,(2005).*Fashion – From Concept to Consumer,(* 9th Ed.*)* Pearson Education

REFERENCES:

1. Sharon lee Tate & Mona S Edwards, (2004).*Inside Fashion Design*,(5th Ed.) Pearson Education.
2. Ritu Bhargav,(2005),*Fashion Illustration & Rendering,(* 1st Ed.*)* B Jain Publishers Pvt. Ltd.,
3. Kathryn McKelvey & Janine Munslow,(2007),*Illustrating Fashion*,(2nd Ed.)Wiley-Blackwell Publishers.
4. Sumathi A,(2004).*Elements of Fashion and Apparel Design",(* 1st Ed.*) New Age International Pvt. Ltd.*, New Delhi.

25BBA57(C) – APPAREL MERCHANDISING AND MARKETING

4 0 0 4

Course Objectives

- To understand the functions of merchandiser on production and retail perspective.
- To inculcate the knowledge of apparel product lines, development, pricing and sourcing.

Course Outcomes

Upon successful completion of this course the student would be able to,

	Course Outcome	**Level**
CO1	Understand the concepts, functions, and flow of apparel merchandising in the fashion industry.	Understand
CO2	Analyze market trends and customer behaviour to develop effective merchandising strategies.	Analyze
CO3	Apply marketing principles to plan and execute apparel product development and sales initiatives.	Apply
CO4	Evaluate sourcing, pricing, and promotional strategies in domestic and international apparel markets.	Evaluate
CO5	Create merchandising plans that align with brand positioning and target market expectations.	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	S	M			
2	M	S			
3	S	M	S		
4	M	S			M
5	S	S	S	M	

UNIT I

Merchandising: Definition – functions - division - role and responsibilities. Types of buyers - communications with the buyers – awareness of current market trends – product development – tech pack analysis - order confirmation process. Export Merchandising. Classification of exporters: Manufacturer, Merchant, Job worker (CM/CMT). Introduction to buying house.

UNIT II

Merchandiser's Role: Proto type to production model – samples, types of samples, sampling procedures, production planning, vendor based rationalization, order placement, in-house and sub-contractor units. Approval: types of approval, approval procedure, buyer approval and organizational approval. Record maintenance. Vendor evaluation and rating.

UNIT III

Marketing: Fashion consumer typologies, Maslow's hierarchy of needs, 4 P's, SWOT analysis, marketing research process, importance of marketing. Marketing mix – pricing, product and brand distribution channels. Market size, structure and environment.

UNIT IV

Marketing Research: Definition, role in apparel business, use of research findings for marketing decisions and action plans. Marketing research techniques – translation of business and marketing problems into research issues and design, survey design, data types and collection methods, sample design and statistical inference. Model building and analysis methods.

UNIT V

Sourcing: Definition, types and methods of sourcing. Sourcing decision in practice – Bought out component.

Supply Chain Management: Introduction and benefits. Push/pull concepts. Supply Chain strategies. Use of barcoding and RFID. **Warehousing:** Introduction, types and importance.

TEXT BOOKS:

1. Grace I. Kunz.,(2005).*Merchandising- Theory, Principles and Practice,(* 2nd Ed.), Fairchild Publications, Inc. New York.
2. Fashion Marketing(1994).*Easey M(Ed), Blackwell Science* .
3. Jeremy A Rosenau & David Wilson,(2014),*Apparel Merchandising: the Line Starts Here*,(3rd Ed.). Fairchild Books
4. Ruth E Glock & Grace I Kunz,(2005) "Apparel Manufacturing: Sewn Product Analysis", Pearson / Prentice Hall Inc. 4th Edition,
5. Frances Harder,(2014).*Fashion for Profit*,(10th Ed.) *Harde*r Publication.
6. Elaine Stone, Jean A Samples,(1990),*Fashion Merchandising,(* 5th Ed.*) McGraw Hill*.

REFERENCES:

1. Mike Easey. .March (2009).*Fashion marketin,(* 3rd Ed.), ISBN 13:9781405/39533.
2. Tim Jackson and David show (2009*) Mastering Fashion marketing*

25BBA57(D) – TEXTILE COSTING

4 0 0 4

Course Objective

- To understand the methods of cost ascertainment
- To learn the principles of cost control in textile and apparel unit.
- To understand the costing fundamentals and its different methods

Course Outcomes

Upon successful completion of this course the student would be able to,

	Course Outcome	Level
CO1	Analyze the cost structure of garments from raw materials to finished goods, including trims and components	Analyze
CO2	Apply various costing methods and estimate production costs for different garment types using specification sheets.	Apply
CO3	Evaluate export markets, identify export documentation requirements, and understand legal and financial aspects of international trade	Evaluate
CO4	Understand the principles of budgeting, costing, pricing policies, and methods including depreciation.	Understand
CO5	Create and interpret export documents and apply international trade practices, including terms of shipment and payment	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	1	2	3	4	5
1	S	S	M		
2	S	M	S		
3	M	S			S
4	S			M	
5	S	M	S		S

UNIT 1

Cost accounting – Introduction-Preparation of cost sheet-Cost centres in a textile mill- Overhead classification, allocation and apportionment - Process cost accounting in textiles –Job order costing in garment industry – Marginal costing technique for decision making.

UNIT 2

Costing in spinning mills – Elements of cost and cost sheet for spinning –Net mixing cost- Power cost estimation- Yarn realisation statement- Decision making using contribution per frame shift among various counts of yarn production.

UNIT 3

Costing in weaving–Elements of cost and cost sheet for weaving –Cost statements– Cost centre wise conversion cost from winding to weaving -Cost of sales of cloth sold in grey stage and sales realization – Elements of cost and cost sheet for fabric processing.

UNIT 4

Costing in knitting and garments– Elements of cost and cost sheet for knitting and garmenting – Calculation of garment weight of different sizes, dyeing program- Calculation of CMT charges, cost sheet with profit margins.

UNIT 5

New concepts in costing – Activity based costing – Target costing – Cost restructuring issues and cost reduction measures in the textile industry – Cost audit and control measures in spinning, weaving, processing, knitting, garmenting and made-ups.

REFERENCES

1. Khan MY & Jain P K, (2003). *Cost Accounting*,(3rd Ed.) *Tata McGraw Hill Pub., Co., Ltd.*, New Delhi,
2. William E Shinn,(1995.)*Elements of Textile Costing*, *NCSU School of Textiles*, Raleigh.
3. Varma HK,(1992).*Costing in Textile Industry", Prentice Hall Inc.* New Jersey.
4. Robin Looper & Regine Salgmolder,(1997).*Target Costing and Value Engineering. Taylor & Francis*, Abingdon.
5. Ratnam T V,(1992) .*Cost Control and Costing in Spinning Mills*, SITRA Publications, Coimbatore

25BBA57(E) – RETAIL MANAGEMENT

4 0 0 4

Course Objectives

- To give an understanding to the students about the significant role of retailing in the marketing system.
- To give inputs to gain insights on the issues involved in organizing and establishing a retail format.
- To enable the students to understand about the pricing and promotion strategies in retailing.

Course Outcomes

Upon successful completion of this course the student would be able to,

	Course Outcome	**Level**
CO1	Understand the fundamentals of retailing and the evolution of the retail industry.	Understand
CO2	Analyze the types of retailers and retail formats to assess their suitability for different markets	Analyze
CO3	Apply retail marketing strategies including segmentation, targeting, positioning, and the retail mix.	Apply
CO4	Evaluate the role of customer relationship management and service in the success of a retail business.	Evaluate
CO5	Design a layout plan and manage store operations to improve efficiency and customer satisfaction.	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1			S	S	S
2		S	S		
3			S	M	
4			M	M	
5		S	S		S

UNIT 1

Concept of retailing, Functions of retailing, Terms and Definition, Retail formats and types, Retailing Channels, Non-Store Retailing- On-line sales, Retail Industry in India, Importance of

retailing, changing trends in retailing. FDI in Indian retail and its importance* - Strategies of international retailers in India*

UNIT 2

Importance of Retail locations, Types of retail locations, Factors determining the location decision, Steps involved in choosing a retail locations, Measurement of success of location, Retail value chain, Retail market segmentation, targeting and positioning

UNIT 3

Meaning of Merchandising, Factors influencing Merchandising, Functions of Merchandising Manager, Merchandise planning, Merchandise buying, Analysing Merchandise performance

UNIT 4

Store layout and Design, Visual Merchandising, Promotions Strategy, Retail Marketing Mix, Retail Communication Mix, Store administration, Premises management, Inventory Management, Store Management, Receipt Management, Customer service, Retail Pricing, Factors influencing retail prices, pricing strategies, controlling costs

UNIT 5

Changing nature of retailing*, organized retailing*, Modern retail formats, E-tailing, Challenges faced by the retail sector*

REFERENCES

1. Swapna Pradhan,(2009.),*Retailing Management, Tata McGraw Hill*.(3rdEd.) New Delhi
2. Levy M, Barton AWeitz & Ajay Pandit, (2008).*Retailing Management*, Tata Mc Graw Hill,(6th Ed.) ,New Delhi,
3. Chetan Bajaj,(2010).*Retail Management, Oxford University Press*.(2nd Ed)..
4. James R. Ogden & Denise T. Ogden,(2007).*Integrated Retail Management*, Biztantra,

Self-study topics

ELECTIVE – II
25BBA64(A) - CONSUMER BEHAVIOUR

4 0 0 4

Course Objectives

- To understand the role of consumer behaviour in marketing
- To identify qualitative and quantitative methods of measuring consumer behaviour
- To enable the students to understand the basics of consumer behaviour.
- To give insight to them on the various external and internal influences on consumer behaviour.
- To let them understand how individual consumers and organizational buyers differ in making purchase decisions.

Course Outcomes

Upon successful completion of this course the student would be able to

	Course Outcome	**Level**
CO1	Explain the fundamental concepts of consumer behaviour and marketing.	Understand
CO2	Interpret psychographic influences on consumer behaviour.	Understand
CO3	Analyze the stages of the consumer decision-making process and deduce relevant marketing strategies.	Analyze
CO4	Evaluate the impact of group influences on organizational and institutional consumer behaviour.	Evaluate
CO5	Analyze social and cultural influences affecting consumer behaviour.	Apply

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1		S	S		S
2			S	S	
3			S		M
4	S		M		
5		S			S

UNIT 1

Introduction - Concepts – Significance – Dimensions of consumer behaviour – Application of knowledge of consumer behaviour in marketing decisions

UNIT 2

Consumer behaviour models**–**Industrial and individual consumer behaviour models – Howared-Sheth, Engel–Kollart, Webstar and wind consumer behaviour models–Implications of the models on marketing decisions*

UNIT 3

Internal influences – Psychological influences on consumer behaviour–Motivation–Perception–Personality learning and attitude-Self-image and lifestyles–Consumer expectation and satisfaction*.

UNIT 4

External influences - Socio-cultural, – Family– Reference group–Communication- influences on consumer behaviour

UNIT 5

Purchase decision process**–** High and low involvement- Pre-purchase and post-purchase behaviour – Online purchase decision process– Diffusion of innovation–Managing dissonance –Emerging issues*

REFERENCES

1. Leon G Schiffman & Leslie Lasar Kanuk,(2002).*Consumer Behaviour", Pearson Education,* India, Noida.
2. Shri Prakash,(2012).*Theory of Consumer behaviour,Vikas Publishing House P Ltd.*,(1st Ed.) Noida.
3. Paul Peteretal,(2005).*Consumer Behaviour and Marketing Strategy",(* 7th Ed.*) Tata McGraw Hill Publishing Company Limited,* Noida
4. Frank R Kardes,*Consumer Behaviour and Managerial Decision Making", (2nd Ed.)Prentice Hall International*, New Jersey,.
5. Henry Assael,(2012),*Consumer Behaviour: A strategic approach, Wiley India P Ltd*, New Delhi.
6. Hed, Hoyer,(2012).*Consumer behaviour, Wiley & Sons*, New Jersey.
7. Srabanti Mukherjee,(2012).*Consumer behaviour, Cengage Learning, USA.*

Self-study topics

25BBA64(B) – FINANCE ANALYTICS

4 0 0 4

Course Objectives:

- Financial Analytics helps the student to answer all business questions.
- Financial Analytics leads to forecast the future of business trend

Course Outcomes:

Upon successful completion of this course the student would be able to

	Course Outcome	**Level**
CO1	Capable of applying different analytical tools for financial management of an organization	Apply
CO2	Apply business intelligence and analytical tool for managerial decision making under capital budgeting and rationing	Apply
CO3	Scientifically estimate the weighted average cost of capital for maximizing the firm's profits.	Understand
CO4	Evaluate investment decisions using risk-return analysis and financial models.	Evaluate
CO5	Analyze trends and patterns in financial data using statistical and computational methods	Analyze

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	S	S	M		
2	S	S		M	
3	S	M			
4	M	S			S
5	S	S		M	

Unit I

Business Intelligence (BI) Business Intelligence - Definitions - Evolution of Business Intelligence and Role of DSS, EIS, MIS and Digital dash boards-Difference between ERP and Business Intelligence-need for BI-BI for past, Present and Future. Business Intelligence Applications-technology solutions and business solutions-Business Intelligence Roles and Responsibilities.

Unit II

Essentials of Business Analytics Introduction: Decision Making- Business Analytics Definition-Business Analytics meaning – categorization of Analytical methods and models: Descriptive - Predictive -Prescriptive–Big data- Business Analytics in practice: Financial,Human Resource, Marketing, Health care, Supply chain Analytics. Analytics for government and Nonprofits, sports and web Analytics.

Unit III

Business Analytics for Managers Business analytics model: Overview of Business-driven environment & technically oriented environment-types of Reporting and Analytical process-case study.

Unit IV

Financial Analytics Introduction: Meaning-Importance of Financial Analytics uses-Features-Documents used in Financial Analytics:Balance Sheet, Income Statement, Cash flow statement-Elements of Financial Health: Liquidity, Leverage, Profitability.

Unit V

Analysts: Role and Responsibilities Information and Knowledge-Methodology-Data-Required Competencies for the Analyst-Hypothesis .Driven methods-Data Mining with Target variables-Explorative methods-Business requirements.

TEXT BOOKS AND REFERENCE BOOKS:

1. Business Analytics for Managers - GEAT H.N.LAURSEN JESPER THORLUND, P.No: 1-16-UnitIII, P.No:93-136-Unit V
2. Fundamentals of Business Analytics -R N Prasad,. Seema Achavya,Wiley IndiaPVTLtd,New Delhi, P.No: 87-100, P.No:115-125
3. Fundamentals of Business Analytics - R N Prasad SeemaAchavya, Cengage Learning, New Delhi, P.No: 87-100, P.No:115-125

25BBA64(C) - MARKETING ANALYTICS

4 0 0 4

Course Objectives

- This course will provide you with an introduction to marketing analytics.
- We will study various tools for generating marketing insights from data in such areas as segmentation, targeting and positioning, satisfaction management, customer lifetime analysis, customer choice, product and price decisions using conjoint analysis, and text analysis and search analytics.
- This will be a hands-on course based on the Marketing Engineering approach and Excel software, in which you apply the tools studied in class to actual business situations.
- You will also complete a group project in which you collect and analyze data or introduce your fellow students to a marketing analytics technique not studied in class.

Course Outcomes

	Course Outcome	**Level**
CO1	Understand the role and scope of marketing analytics in strategic and operational decisions.	Understand
CO2	Apply data-driven approaches to segment markets and target customers effectively.	Apply
CO3	Analyze customer behaviour and campaign performance using marketing metrics and KPIs.	Analyze
CO4	Evaluate marketing mix effectiveness using statistical models and data visualization tools.	Evaluate
CO5	Develop predictive models for customer lifetime value, churn, and market response.	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	S	M			
2	S	S	M		
3	S	S		M	
4	M	S			M
5	M	S	S		

UNIT I

Product Management – Marketing product selection – market insight – market sizing – strategic decision models

UNIT II

Product and service analytics – conjoint analysis – forecasting – inflection point – decision trees – product mix allocation

UNIT III

Metrics– BSC – Dashboards –strategic metrics – pricing analytics – web analytics

UNIT IV

Distribution analytics– sales analytics – Promotion analytics – allocating marketing budget

UNIT V

Customer Management– Digital Marketing – concepts and applications

REFERENCES

1. Wayne L. Winston,(2014),Marketing Analytics: Data–Driven Techniques with Microsoft Excel, Wiley.
2. Sorger, Stephan.(2013),Marketing Analytics: Strategic Models and Metrics.‖ Admiral Press/ Create Space.
3. Venkatesan, R., Farris, P., & Wilcox,(2014) R. T. Cutting–edge marketing analytics: real world cases and data sets for hands on learning. Pearson Education..
4. Grigsby, M., (2015).Marketing Analytics: A Practical Guide to Real Marketing Science. Kogan Page Publishers.

25MBA64(D) - HR ANALYTICS

4 0 0 4

Course Objective

- To understand the concepts, tools and techniques of HR Analytics that could be applied to make human applied as resource management evidence based.
- To understand HR reports & to understand the decisions technologies.
- Recognize the fundamental strategic priorities of the business and learn how to provide enhanced decision support leveraging analytics.
- Develop a structured approach to apply judgment, and generate insight from data for enhanced decision making.

Course Outcomes

At the end of the course, the students will be able to

	Course Outcome	**Level**
CO1	Understand the fundamentals and scope of HR analytics in workforce planning and decision-making.	Understand
CO2	Apply analytical tools to assess HR functions such as recruitment, performance, and retention.	Apply
CO3	Analyze appropriate internal and external human resource metrics.	Analyze
CO4	Apply quantitative and qualitative analysis to understand trends and indicators	Apply
CO5	Evaluate the impact of HR strategies using metrics and predictive models.	Evaluate

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	M				
2		S	S		
3		S	S		
4				S	M
5		S	S		

UNIT I INTRODUCTION TO HR ANALYTICS

HR analytics in Perspective: Basics of HR Analytics: Concept and Evolution of HR Analytics Defining HR Analytics. Use of work force to improve decision making. Analytics and Prediction.

Introduction to HR Metrics and predictive analytics. Importance of HR Analytics. Data Analytics techniques using software packages. Future of Human Resource Analytics.HR Metrics and HR Analytics; Intuition versus analytical thinking.

UNIT II HR METRICS

Creating business understanding for HR initiatives: Workforce segmentation and search for critical job roles; Statistical driver analysis – association and causation; Linking HR measures to business results; choosing the right measures for scorecards; Identifying and using key HR Metrics.

UNIT III HR COSTS

Forecasting budget numbers for HR costs: Workforce planning including internal mobility and career pathing; training and development requirement forecasting and measuring the value and results of improvement initiatives; optimizing selection and promotion decisions

UNIT IV PREDICTIVE MODELLING

Predictive modelling in HR: Employee retention and turnover; workforce productivity and performance; scenario planning.

UNIT V HR DATA

Communicating with data and visuals: Data requirements; identifying data needs and gathering data; HR data quality, validity and consistency; Using historical data; Data exploration; Data visualization; Association between variables; Insights from reports; Root cause analysis of HR issues

TEXT BOOKS

1. Jac Fitz-Enz , The New HR Analytics: Predicting the Economic Value of Your Company's Human Capital Investments, Amazon.
2. Gene Pease, Boyce Byerly and Jac Fitz-enz, Human Capital Analytics: How to Harness the Potential of Your Organization's Greatest Asset, John Wiley & Sons

REFERENCE BOOKS

1. The New HR Analytics: Predicting the Economic Value of Your Companys Human Capital Investments: Predicting the Economic Value of Your Company's Human Capital Investments Hardcover – Import, 1 Jun 2010, Jacfitz-Enz

25BBA64(E) - OPERATION AND SUPPLY CHAIN ANALYTICS

4 0 0 4

Course Objective

- To provide foundational knowledge associated with the supply chain analytics
- To describe the various tools and techniques for implementation of analytics based on the supply chain drivers such as location, logistics and inventory
- To describe the various techniques for analytics based on the Multi Attribute Decision Making (MADM) and risk
- To provide the applications of analytics in supply chain

Course Outcomes

At the end of the course, the students will be able to:

	Course Outcome	**Level**
CO1	Understand the fundamentals and role of analytics in operations and supply chain management.	Understand
CO2	Apply analytical techniques to optimize production planning, inventory, and logistics.	Apply
CO3	Analyze supply chain data to identify inefficiencies and performance bottlenecks.	Analyze
CO4	Evaluate supply chain strategies using metrics like cost, quality, service, and agility.	Evaluate
CO5	Design data-driven solutions for integrated and responsive supply chain systems.	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	M	M			
2		S	S		
3		M	M		
4		S	S		S
5	S			M	

UNIT I INTRODUCTION

Introduction – Overview on Supply Chain, Analytics and Supply Chain Analytics – Dashboards with relevant KPIs for Supply Chain – Optimization – Classification of optimization problems – Optimization for Analytics – Operations Research Techniques for Analytics

UNIT II LOCATION AND LAYOUT

Plant/Warehousing Decisions – Location Methods – Location Models – Network Models – Layout Methods – Line Balancing: KPIs (Cycle time, Idle time) – Inventory Management

UNIT III TOTAL QUALITY MANAGEMENT

Introduction – Statistical Quality Control (SQC) – Statistical Process Control (SPC) – Pareto Analysis – Histogram – Scatter Diagram – Control Charts – Process Capability Analysis: KPIs (Cp and Cpk)

UNIT IV PLANNING & MULTI ATTRIBUTE DECISION MAKING

Capacity Planning – Measurement of Capacity: KPIs (Efficiency and Utilization) – Aggregate Production Planning (APP): Model, Techniques – Multi Attribute Decision Making (MADM) – Analytic Hierarchy Process

UNIT V SIMULATION & DOE

Introduction to simulation – Type: Discrete and Continuous simulation – Simulation models – Steps in Simulation study – Simulation for Analytics – Experimental Designs (Taguchi, RSD, Mixture Design)

TEXT BOOKS:

1. James R. Evans.,(2012), *Business Analytics – Methods, Models and Decisions, (*1st Ed.*)Pearson Publications,*
2. G.V.Shenoy,U.K.Srivastava,S.C.Sharma,(2005), *Operations Research for Management,(2nd Ed.)* New Age International..

REFERENCE BOOKS:

1. Gerad Feigin,(2011*). Supply Chain planning and analytics – The right product in the right place at the right time, Business Expert Press,*
2. Peter Bolstorff, Robert G.(2007), *Rosenbaum, Supply Chain Excellence: A Handbook for Dramatic Improvement Using the SCOR Model,* AMACOM Div American Mgmt Assn,
3. Robert Penn Burrows, Lora Cecere, Gregory P. Hackett,(2011*). The Market-Driven Supply Chain: A RevolutionaryModel for Sales and Operations Planning in the New On-Demand EconomyAMACOM Div* American Mgmt Assn,

ELECTIVE – III

25BBA75(A) - RETAIL ANALYTICS

4 0 0 4

Course objective

- To create an understanding of the use of analytics in Marketing and Retail Management.
- To use the predictive analysis in decision making.

Course outcomes

At the end of the course, the students will be able to:

CO	PO				
	CO1 Understand the market place and the changing				Understand
	1	**2**	**3**	**4**	**5**
1	M		M		
2		S			
3		S		S	S
4			S		S
5		S	S		S

UNIT I INTRODUCTION TO MARKETING

Understanding the marketplace and consumer needs, Designing a Customer Driven Marketing Strategy, Building Customer Relationships, Consumer Behaviour and Business Buyer Behaviour

UNIT II MARKETING STRATEGY

Market Segmentation and Product Positioning, Market Segmentation, Market Targeting, Target Market Strategies, Product Positioning and Differentiation, Choosing a Differentiation and Positioning Strategy.

UNIT III PRODUCT AND SERVICE

Products and services, product and service classifications, consumer products, industrial products, product and service decisions, product and service attributes, product support services, services marketing – the nature and characteristics of a service

UNIT IV RETAIL ANALYTICS

Customer Analytics Overview; Quantifying Customer Value. Using Stata for Basic Customer Analysis. Predicting Response with RFM Analysis, Statistics Review, Predicting Response with Logistic Regression, Predicting Response with Neural Networks. Predicting Response with Decision Trees.

UNIT V RETAIL ANALYTICS

The digital evolution of retail marketing, Digital natives, Constant connectivity Social interaction, Predictive modelling, Keeping track, Data availability, Efficiency optimization.

HOURS TEXT BOOKS:

1. Kotler, P., Keller, K. L. ,Koshy, A., Jha, M.,(2013) Marketing Management: A South Asian Perspective.(14th Ed.) New Delhi: Pearson Education , ,.

2. Rajan, S.,(2005) Marketing Management. India: New Delhi: Tata McGraw-Hill Education.

REFERENCE BOOKS:

1. Karunakaran, K.(2013).Marketing Management.(3rd Ed.): Himalaya Publishing House, New Delhi

2. Kumar, A., Meenakshi.(2013). *Marketing Management.(* 2nd Ed.*) New Delhi: Vikas Publishing House Pvt Ltd*. ,

3. Ramaswamy, V. S., Namakumari, S.(2009), *Marketing Management Global Perspective, Indian Context(*3rd Ed.*).* New Delhi: Macmillan India Limited.

25BBA75(B) - MULTIVARIATE ANALYSIS

4 0 0 4

Course objectives

- Introduce the language of multivariate data analysis
- Understand the characteristics of multivariate quantitative research, including strengths and weaknesses
- Understand the principles and characteristics of the multivariate data analysis techniques

Course Outcomes

On successful completion of the course the student

	Course Outcome	**Level**
CO1	Understand the concepts, assumptions, and applications of multivariate analysis techniques.	Understand
CO2	Apply multivariate techniques such as factor analysis, cluster analysis, and discriminant analysis.	Apply
CO3	Analyze complex datasets to extract meaningful insights using statistical software tools.	Analyze
CO4	Evaluate the appropriateness and robustness of multivariate methods in solving business problems.	Evaluate
CO5	Construct models and interpret results to support data-driven decision-making.	Create

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S – Strong, M - Medium)				
	PO				
CO	**1**	**2**	**3**	**4**	**5**
1	M	M			M
2	S		M	M	S
3	S	S			S
4	S	M		M	S
5	S	S	M		S

Unit I

MLE's for parameters of Multivariate normal distribution. MLE's of Total ,partial and multiple correlations – Regressions – Distribution of sample mean vector – Null distributions of total ,simple, multiple Correlation Coefficients and regression coefficients

Unit II

Hotelling's T2 statistics – its Null distribution – its relation with LR test criterion and Mahalanobis – D2 , Wishart matrix – its distribution and properties.

Unit III

Testing for mean vectors (with known and unknown dispersion matrix) and dispersion matrix (Large sample test)of one and two multivariate normal distributions.

Unit IV

Classification and discrimination procedures among two multivariate normal populations only – probabilities of misclassification and their estimation .Fisher's discriminant function – sample discriminant function – Tests associated with discriminant function – concept of cluster analysis.

Unit V

Principal Component – dimension reduction – Canonical correlation and variables – definition, use, estimation and computation – Factor analysis – Orthogonal factor model, principal component solution to factor model – Concept of path analysis – construction of path diagram and its use in linear regression model .

Books & Reference

1. Anderson, T.W. (1983): An introduction to Multivariate Statistical Analysis, 2nd edition John Wiley.
2. Johnson and Wichern.(1996): Applied Multivariate Statistical Analysis"3rd edition, PHI (p) Ltd.
3. Giri, N.C. (1977): Multivariate Statistical inference, Academic press.
4. Harison D.F. (1978): Multivariate Statistical Methods, Academic 2nd edition McGraw Hill.
5. Rao, C.R. (1973): Introduction to Linear Statistical Inference and its Applications, Wiley Eastern.

25BBA75(C) – DIGITAL MARKETING

4 0 0 4

Course Objective:

- Customer-centric digital marketing skills, including creating customer avatars, defining value propositions, and understanding the customer journey, enabling them to set marketing objectives and design effective campaigns.
- Competencies in crafting winning offers, perfecting content marketing, blogging for business, and leveraging essential tools for digital marketing success, from website development and email marketing to analytics and optimization.

Course Outcome:

i. Competencies to create drivers for highly profitable digital value-proposition
ii. Capability to analyse customer journey in the digital landscape.

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S-STRONG, M-MEDIUM)																		
	PO																		
CO																			
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
I					**M**					**S**						**S**				
II					**S**					**S**						**S**				

Illustrations and examples must be from the textile and allied sector.

UNIT 1 – CUSTOMER JOURNEY

Creating a Customer Avatar - Getting Clear on the Value You Provide - Stages of the Customer Journey- Preparing Your Customer Journey Road Map - Establishing Marketing Objectives - Defining a Digital Marketing Campaign - Understanding the Types of Campaigns.

UNIT 2 – CRAFTING WINNING OFFERS

Offering Value in Advance - Designing an Ungated Offer - Designing a Gated Offer - Designing Deep-Discount Offers - Maximizing Profit.

UNIT 3 – PURSUING CONTENT MARKETING PERFECTION

Knowing the Dynamics of Content Marketing - Finding Your Path to Perfect Content Marketing - Executing Perfect Content Marketing - Distributing Content to Attract an Audience.

UNIT 4 – BLOGGING FOR BUSINESS

Establishing a Blog Publishing Process - Applying Blog Headline Formulas - Auditing a Blog

Post - Building High-Converting Landing Pages - Capturing Traffic with Search Marketing - Following Up with Email Marketing.

UNIT 5 – TOOLS FOR DIGITAL MARKETING SUCCESS

Building a Website - Hosting a Website - Choosing Email Marketing Software - Considering Customer Relationship Management (CRM) - Adding a Payment Solution - Using Landing Page Software - Sourcing and Editing Images - Managing social media -
*Measuring Your Performance: Data and Analytics - Optimizing Your Marketing.

REFERENCES

1. Deiss, Ryan, and Russ Henneberry, (2020-21), Digital Marketing for Dummies. John Wiley and Sons.
2. Puneet Bhatia ,Fundamentals of Digital Marketing, Pearson education, Second Edition,2019
3. Deiss, R., and Henneberry, R. (2020-21). Digital marketing for dummies. John Wiley and Sons.
4. Ian Dodson, The Art of Digital Marketing, Wiley publication, 2016 3 Seema Gupta, Digital Marketing, McGrawhill publication, 2017
5. Puneet Singh Bhatia, Social Media and mobile marketing, wiley publication, 2019.
6. Philip Kotler, Marketing 4.0, wiley publication, 2017

25BBA75(D)– INTEGRATED MARKETING COMMUNICATION

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Course Objectives

- To gain an understanding of the fundamentals needed to build a clear, integrated communication strategy for an organization.
- To prepare the students with the ability to design, develop and execute effective creative communication content and media strategies for advertising campaigns.
- To throw light on the contemporary and non-conventional media vehicles

Course Outcomes

i. Ability to focus on the coordination of all aspects of marketing communication such as advertising, sales promotion, public relations, and direct marketing, in an effort to provide a consistent message to consumers.
ii. Able to decide on communication mix and media mix
iii. Able to arrive at appropriate message content and structure
iv. Ability to effective use digital marketing communication platforms
v. Decide on the right advertising agency

	MAPPING OF COURSE OUTCOMES AND PROGRAMME OUTCOMES (S-STRONG, M-MEDIUM)																			
	PO																			
CO																				
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
I																**S**			**M**	
II													**S**							
III									**S**											
IV												**S**								
V																**S**				

Illustrations and examples must be from the textile and allied sector.

UNIT 1

Evolution and significance of IMC, role of various promotional elements in marketing communication - The IMC planning process, consumer buying decision process and factors affecting it - History of advertising, classification of advertising, the structure of the advertising and promotions world, advertisers, advertising agencies, and media
- Economic social and ethical issues in advertising*.

UNIT 2

Basic communication model, traditional communication response hierarchy models, consumer involvement, planning an advertisement campaign - Setting the advertising objective, sales v/s communication objective, DAGMAR, defining the target audience, advertising budget

UNIT 3

Role of creativity in advertising, relevance of brand positioning - Advertising appeals, finding the big idea, creative execution themes - Demonstration, testimonial etc., creative execution in print advertising*, creative execution in TV advertising* - Types of media, media characteristic, factors affecting media selection, media scheduling, establishing reach and frequency objectives, audience measurement.

UNIT 4

Agency structure, flow of work in an agency, agency compensation*, client agency relationship* - Testing advertising effectiveness and communication and sales effectiveness, various methods of pre and post testing.

UNIT 5

The New Age promotional media - Integrating the internet in the IMC programme, communicating through websites, search engine marketing, banner advertisements, blogs and community forum, marketing communication through social media*, merchandising, mobile advertising public relations, publicity, direct marketing, sales promotion, event marketing*.

REFERENCES

1. George Belch., & Michael Belch. (2014). *Advertising & Promotion: An integrated marketing communications perspective* (10th ed.). McGraw Hill Education.
2. Schultz, D. E., Patti, C. H., & Kitchen, P. J. (2011). The Evolution of Integrated Marketing Communications. *Abingdon: Routledge*.
3. Percy, L. (2008). *Strategic integrated marketing communications*. Routledge.
4. Kitchen, P., & Pelsmacker, P. D. (2014). *A Primer for Integrated Marketing Communications.* (1st ed.). Routledge Publishers.