## **Program Outcome: Bachelor of Commerce (B.Com.)**

Bachelor of Commerce, a widely respected and pursued degree, provides a range of subjects to be ingrained by the student. Accounts, Commerce and Math form the backbone and subjects like Environmental studies and Foundation Course supply the necessary input for the student to become socially aware. The benefits of this course are like, it makes students commercially aware of the legal and accounting aspects of business, it is a practical course that makes students job ready and also for post-graduate courses and certifications.

- This program could provide Industries, Banking Sectors, Insurance Companies, Financing companies, Transport Agencies, warehousing etc., well trained professionals to meet the requirements.
- · After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, over all Administration abilities of the Company.
- · Capability of the students to make decisions at personal & professional level will increase after completion of this course.
- · Students can independently start up their own Business.
- · Students can get thorough knowledge of finance and commerce.
- The knowledge of different specializations in Accounting, costing, banking and finance with the practical exposure helps the students to stand in organization.

### **Program Specific Outcome: Accountancy**

- The students can get the knowledge, skills and attitudes during the B.com degree course.
- The student can train to become a Business Manager, Accountant, Management Accountant, Cost Accountant, Bank Manager, Auditor, Company Secretary, Teacher, Stock Agent, Government employee, etc.
- · Students can prove themselves in different professional exams like C.A., CS, CMA, MPSC, UPSC, etc.
- The students acquire knowledge, skill in different areas of communication, decision making, innovations and problem solving in day to day business activities.
- · Students gain thorough and systematic subject skills within various disciplines of finance, auditing and taxation, accounting, management, communication, computer, etc.
- Students can also get the practical skills to work as accountant, audit assistant, tax consultant, and computer operator. As well as other financial supporting services.
- Students will learn relevant Advanced accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business.
- Students will be able to do their higher education and can make research in the field of finance and commerce.

## **Course Outcome: Accountancy**

## **FYBCom.:** Semester I & II: Financial Accounting:

- To enable the students to learn principles and concepts of Accountancy.
- · Students are enabled with the Knowledge in the practical applications of accounting.
- To enable the students to learn the basic concepts of Partnership Accounting, and allied aspects of accounting.
- The student will get thorough knowledge on the accounting practice prevailing in partnership firms and other allied aspects.
- · To find out the technical expertise in maintaining the books of accounts.
- · To encourage the students about maintaining the books of accounts for further reference.

## SYBCom.: Semester III & IV: Advanced Accounting

- · To provide the knowledge of various accounting concepts
- · To impart the knowledge about accounting methods, procedures and techniques.
- To acquaint students with practical approach to accounts writing by using software package and by learning various accounts.
- . Enable the students to understand amalgamation, absorption and external reconstruction of companies.

### **SYBCom: Semester III: Management Accounting**

- · Helps introduce students to the various tools and techniques of Management Accounting.
- · Helps enlighten students on Financial Statement Analysis from a practical point of view.
- · Provides knowledge about budgetary control and cost control.
- · Helps students understand the fundamentals of financial decision making.

### **SYBCom.: Semester IV: Auditing**

To have a basic working knowledge of the following:

- · Auditing Reports
- · Auditing Standards
- · Corporate Governance
- · Audit Risk and Client's Business Risk
- · Internal Controls over Financial Reporting
- · Auditing for Fraud
- · Audit Evidence
- · Audit Sampling

## TYBCom.: Semester V & VI: Cost Accounting

- · Aimed to familiarize the concept of cost accounting
- · Helps to gather knowledge on preparation of cost sheet in its practical point of view
- · To facilitate the idea and meaning of material control with pricing methods
- · Develop the knowledge about remuneration and incentives
- · To introduce the concept of overhead cost
- · To familiarize students with the concepts of marginal cost and fixed cost
- · To make students aware of standard costing techniques.

### TYBCom: Semester V & VI: Direct and Indirect taxation

- · Helps students understand the basic concepts, procedures and fundamentals of direct and indirect taxation.
- · Familiarizes students with the various heads of income, exemptions and deductions under income tax.
- · Helps students understand tax planning which helps them in becoming tax consultants.
- Makes students understand the fundamentals of Goods & Services Tax, filing of returns, exemptions, etc.

### **Course Outcome: Economics**

### **FYBCom: Semester I: Business Economics**

- · It provides an overall introduction to economics as dealing with problems of allocation of scarce resources at optimum level.
- Main aim is to make the students accustomed to various economic tools like opportunity cost and various revenue concepts
- · Students get familiar with demand and supply analysis with the help of case studies and theories.

### **FYBCom: Semester II: Business Economics**

- · It enables the learners to understand the basic knowledge of various market structures.
- The learners understand the clear distinction between competition, monopoly, monopolistic competition and oligopoly with the help of short run and long run equilibrium.
- · It provides better understanding of various pricing practices and capital budgeting with the help of case studies.

### **SYBCom: Semester III: Business Economics**

- · Students get familiarized with the fundamental concepts and issues of macroeconomics and public finance.
- It enables the students to understand the functioning of national economy and role of policy initiatives of the government
- · Students can interpret public policies and their impact on the economy. It provides understanding of monetary and fiscal policies of government

### **SYBCom: Semester IV: Business Economics**

- It provides the students with the knowledge of overall role of government and its taxation policies in an economy with the help of case studies
- Learners understand the various sources and canons of taxation along with GST. Students get accustomed with revenue and expenditure of the government with the help of public expenditure theories.
- Students gain knowledge about fiscal management and fiscal administration. Students also learn about the structure of the union budget.

### **TYBCom: Semester V: Business Economics**

- Students are accustomed with infrastructure, agriculture, industries and banking sector and its impact on Indian economy.
- Students understand NEP 1991, NAP 2000, Competition act 2002 with its impact on the primary, secondary and services sector.
- Students are provided with an in-depth understanding of the Indian financial sector. Learners are familiarized with the policies and programs of the government, evaluating them and analyzing their effects on the economy.

### **TYBCom: Semester VI: Business Economics**

- Students are introduced to international trade with the help of various international theories and terms of international trade.
- Learners learn the gains from international trade, and are made aware that international trade benefits all the participants. In a way it encourages them to be business minded.
- Students learn all about the process of doing international trade with the knowledge of free trade, protections, foreign exchange market, WTO, PPP Theory, commercial trade policy, tariff and economic integration.

### **Course Outcome: Business Law**

### SYBCom: Semester III & IV: Business Law

- · Make the students understand about business and corporate law
- · Develop knowledge on contract and various types of contracts
- · To help the students to understand the concept of sale of goods
- · Make the students understand about companies and its types

### **Course Outcome: Commerce**

### FYBCom: Semester I & II: Commerce

- It enables the learner to understand the basic knowledge of the concept of services and service strategies.
- · It aims the learners to understand the concept of Retailing and recent Trends in Retailing.
- · It enables the learners with a career in retailing.
- · Its emphasis on the concept of logistics.
- · It provides a better understanding of the Present Status of E-Commerce in India.

### **SYBcom: Semester III & IV: Advertising**

- · It aims to highlight the role of advertising for the success of brands.
- · To provide the learner with basic knowledge of traditional and new age media.
- · Students learn to plan an Advertising Campaign with practical aspects & techniques of advertising.
- It aims to orient the learners towards opportunities in advertising media.
- · It is expected that this course will prepare learners to lay down the foundation for advertising media.
- · To highlight the role of advertising and the fundamentals of creativity in advertising.

### SYBCom: Semester III & IV: Commerce

- To provide the learners with the basic concepts of Production Management, Quality Management, Indian Financial System & Recent Trends in Finance.
- To enhance the learners with knowledge of managing quality of production.
- The course aims at providing learners with knowledge of managing quality of production.
- · It aims at providing knowledge about Recent Trends in Finance & Types of Investment.
- To help the learner to understand the concept of quality and methods to improve standards.

## TYBcom: Semester V & VI: Human Resource Management

· It enables the learners to have a detailed insight about the topics included in the content.

- · It aims to ensure the availability of a competent human resource through the concept of human resource management.
- · It aims to develop a constructive mind and overall personality of the learner.
- · To develop capabilities of all such individuals in relation to their future role.
- To provide knowledge about the concept of human relation, leadership and motivational theories.
- · To make the learners aware of the recent trends in human resource management.

# TYBcom: Semester V & VI: Entrepreneurship and Management of Micro, Small and Medium Scale Enterprises

- · It enables learners to understand the basic concept of micro, small and medium enterprises.
- · It helps learners to understand the setting and start-ups of SSI/SME/MSME.
- It makes the learner aware of the legal framework and regulations governing for betterment of SSI.
- · It enables the learners to understand the problems and measures taken to deal with SSI.

### Course Outcome: Mathematical and Statistical technique

### **FYBCom: Semester I: Business Mathematics**

- To understand the different concept of population and sample and to make students familiar with Calculation of various types of averages and variation.
- · Knowledge of shares and mutual funds is a powerful tool for students to develop some basic investment decision skills.
- · Permutation and Combination and LPP develops mathematical curiosity and uses inductive and deductive reasoning with numerical.
- · Probability and decision theory develop abstract logical and critical thinking among students and it gives them the ability to reflect critically upon their work

### **FYBCom: Semester I: Business Mathematics**

- To make the learners aware about various business mathematical functions and even cost and revenue functions so as to calculate equilibrium point and break-even point.
- The concept of Interest and Annuity is a challenge to students to arrive at logical conclusions to command business math application.
- · To use correlation to estimate relationship between two variables.
- To use regression analysis to estimate the relationship between two variables and to use frequency distribution to make decisions.
- · To understand the techniques and concepts of different types of index numbers.

## **TYBCom: Semester V: Computer System & Application**

- · It enables the students to gain basic knowledge of internet which helps the students in their studies and day to day activities
- · To make students aware of Microsoft EXCEL by which the students are aware of various toolbar and their uses for business and other activities
- · Practical knowledge and practice of MY SQL is useful to create database and handle simple queries

## **TYBCom: Semester VI: Computer System & Application**

- To make the learners aware of the basic knowledge of E-Commerce and its utility in online business.
- The concept of Advance Spread Sheet is a challenge to students to arrive at data analysis and write a program.
- · Basic knowledge of Visual Basic programming helps the students to develop Windows application and interface database systems.

### **Course Outcome: Environmental Studies**

### FYBCom: Semester I & II: Environmental Studies

- The subject gives an overview to the students about the crucial issues related to the environment, thus sensitizing them about its importance and ways of preserving it.
- It connects the students to their natural surroundings and also impresses upon them to be more responsible towards the environment without compromising the needs of the future generations.

## **Course Outcome: English**

### **FYBCom: Semester I & II: Business Communication**

- · Students should be able to communicate effectively in the business world.
- · Students should be acquainted with the commercial terminology
- · Students Should handle business correspondence efficiently.

### **Program Specific Outcome: Bachelor of Management Studies**

Bachelor of Management Studies is a program which enables students to develop an advanced knowledge and skills in a range of business functions. The course introduces critical management skills involved in planning, structuring, controlling and leading an organization. It provides a framework to help students to understand managing and being managed. Thus, leading them to become a more effective contributor to the

organizations that they will join. The objective of the course is to educate the students to demonstrate employable skills so as to enable the student to stand out from the crowd and have an aptitude towards organization and management skills.

### **Course Outcome: Management Studies**

### **FYBMS: Semester I: Business Communication**

- · To make students understand to build the Team with effective Business Communication
- To make students understand to boost Employee Morale with effective Business Communication
- · To make students understand that Customer Satisfaction can be increased with effective Business Communication.

### **FYBMS: Semester I: Foundation of Human Skills**

- Students develop a high degree of self-awareness and a capacity for understanding the feelings of others.
- Students learn to interact well with others, engage in persuasive communications, deal successfully with disagreements and conflicts and more.
- Students learn culturally appropriate ways of behavior and social roles including gender roles.

### **FYBMS: Semester I: Business Economics-I**

- · Students develop the ideology of relationships between different economic elements.
- They study about the different markets and understand the concepts of total, average & marginal cost.
- · Most importantly they know about the market forces i.e. Demand & Supply & their impact on price.

### **FYBMS: Semester I: Foundation Course**

- To introduce students to the overview of the Indian Society in the time frame of Vedic era right up to the contemporary society
- · To help them understand the constitution of India, the amendments and how it impacts the functioning of our country
- To acquaint them with the socio-political problems of India and initiate critical thinking to help find implementation-based solutions for the same.

### **FYBMS: Semester I: Business Law**

• Students learn about the concepts of legal and illegal agreement, execution of Agreements.

- · Students learn about Cheque, promissory notes, Bills of exchange and their transaction
- · Students learn about patent, trademark, copyright, their uses and ways to protect it.

### **FYBMS: Semester I: Business Statistics**

- · To develop the students' ability to deal with numerical and quantitative issues in business
- To enable the use of statistical, graphical and algebraic techniques wherever relevant.
- To have a proper understanding of Statistical applications in Economics and Management.

### **FYBMS: Semester I: Introduction to Financial Accounts**

- Student acquainted the knowledge of various accounting principles and policies required for preparation of financial statements
- Students gained the knowledge of practical procedures like recording, posting and bank reconciliation.
- · Students enhanced the skill of systematic recording and preparation of Financial statements.

### **FYBMS: Semester II: Business Environment**

- · To introduce the students to the concepts of Globalization, Human Rights and Ecology
- To build up an understanding of the principles associated with stress and conflicts that take place in the running of business
- To help analyses and apply principles and practices related to stress and conflict management to real life situations with the help of case studies.

### **FYBMS: Semester II: Business Mathematics**

- To enable students to learn and to have a good working practice of mathematical tools for taking appropriate decisions in managerial situations
- To provide primary knowledge regarding some Mathematical techniques to be used in managerial decision making.

## **FYBMS: Semester II: Principle of Management**

- · The subject deals with human behavior, thought and actions which never remains static
- It denotes and establishes a cause and effect relationship and helps in the efficient discharge of functions.

### **FYBMS: Semester II: Industrial Law**

- · It's a law where we can learn about Legal and Illegal strikes in Industries.
- · Students learn rules and regulations of factories and industries.

• Students learn about the concepts like wages, provident fund, gratuity, bonus given to workers in industries.

### **FYBMS: Semester II: Foundation Course**

- · To introduce the students to the concepts of Globalization, Human Rights and Ecology
- To build up an understanding of the principles associated with stress and conflicts that take place in the running of business
- · To help analyses and apply principles and practices related to stress and conflict management to real life situations with the help of case studies.

### **SYBMS: Semester III: Business Research Methods**

- This course is designed to provide students with the necessary skills and knowledge to determine the information necessary to address an identified research problem (basic or applied) and, using this understanding, develop and use an actionable research proposal.
- To identify the Research objectives concisely, what the research is trying to achieve.
   They summarize the accomplishments a researcher wishes to achieve through the project and provides direction to the study
- · To Analyze a business problem and deliver reasonable solutions based on the interpretation of quantitative analysis result

## **SYBMS: Semester III: Information Technology I**

- At the end of the course students will be able to work with Microsoft Excel and will be capable of designing spread sheets.
- Students will be capable of designing the front end of web pages using HTML technologies.
- · Students will be able to implement SEO and Semester on their webpages.
- · Students learn the concept of Social Media Marketing.

### SYBMS: Semester III: Business Planning & Entrepreneurial Management

- · To create awareness of the role of entrepreneurs in the growth of Indian economy.
- · To understand the theories of entrepreneurship and applying them in real life.
- To understand the emergence of women in entrepreneurship and improving their knowledge.

### SYBMS: Semester III: MARKETING: Consumer Behavior

- Students learn about Buying Patterns of Consumer & their Phycology towards spending habits.
- Understanding the different stages of life that we are which defines our buying habits.
- · Understanding the classes & the social segmentation that the consumer belongs: too which influences their buying habits.

### **SYBMS: Semester III: FINANCE: Corporate Finance**

- Students develop a conceptual framework of finance function
- · Students acquaint the knowledge of core concepts of corporate finance
- · Students enhance the skill of financial decision making based on various tools and techniques.

### SYBMS: Semester III: HRM: Recruitment and Selection

The subject course helps HR Students to:

- · List the skills and knowledge needed to conduct full and fair recruitment and selection
- Design Job Profile Job Specifications
- · Undertake full and fair recruitment and selection systematically.
- · Induction and Orientation Skills
- · Online Job Portal Search
- · Skills for Presentation, Negotiation and Presentations
- · Analyze exit interviews

## SYBMS: Semester III: HRM: Organizational Behavior & HRM

- · Analysis individuals and group behavior and understand the implication of organizational behavior on the process of management.
- · Identify different motivational theories and evaluate and strategies used in a variety of organizational settings.
- Evaluate the appropriateness of various leadership styles and conflict management strategies used in origination.

### SYBMS: Semester IV: BUSINESS ECONOMICS-II

- · Students developed the ideology of relationships between different economic elements, mostly of Macro Economics.
- Students study the Monetary factors i.e., all about Money & Money supply, Inflation-tradecycles & investment.
- Students understand the constituents of Fiscal policy & the theory-issues of International trade.

# SYBMS: Semester IV: PRODUCTION & TOTAL QUALITY MANAGEMENT (PTQM)

- Students developed the ideology of different production lines including batch production under shorter-longer & medium run.
- · They studied about the Product design, process layout, also about Green production & Mass production.
- Students gain knowledge about the importance of Total Quality Product and its efficiency in managing it. Students study different Quality Standards.

## SYBMS: Semester IV: HRM: Human Resource Planning and Information System

The subject course helps HR Students to:

- · To Understand the Concept and Process of HRP
- · To Understand Ways of matching Job Requirements and Human Resource Availability
- To Explore the concept of Strategic HRP
- · To resolve conflicts and plan the ROI on HRP
- · To Understand the applications of HRIS
- · Steps in designing of HRIS, HRIS Subsystems, Mechanisms of HRIS, Benefits, Limitations, Barriers in Effective Implementation of HRIS.

### SYBMS: Semester IV: FINANCE: Financial Institutions and Market

- Students gain basic knowledge about the structure and role of financial institution and market
- · Students understand the functions of various financial institutions in the financial system
- · Students learn about managing financial systems design.

## **TYBMS: Semester V: Corporate Communications and Public Relations**

- To demonstrate an understanding of the principles of corporate communication and its global role in the theoretical and practical landscape of public relations, and be able to express this understanding clearly through oral and written communication
- To develop analytical skills to guide the development of communication objectives and public relations activities, evaluate their impact, and support organizational objectives and stakeholder relationships.
- Enhances Written and verbal communication along with, good speech writing and public speaking skills.

### **TYBMS: Semester V: Logistics and Supply chain**

- To gain skills and knowledge in all aspects and issues of logistics in a sustainable supply chain.
- · To assess, monitor and maintain quality systems in logistics through the effective use of information technology, human resources and accounting processes.
- · To reduce cost but have maximum satisfaction of customer service
- · To Find shorter routes and Sustainable development of supply chains

### **TYBMS: Semester V: MARKETING**

· Students learn about designing the service process; balancing demand and capacity; employee's role in service delivery; customer's role in service delivery along with

developing product and service strategy, product development; intermediaries and electronic channels; marketing communications and nuances of customer relationship management

- Students learn about interdisciplinary combination of theory and practice course concept
- · Centered around applied learning, the subject topics of sales and distribution management, along with digital marketing and CRM is covered.

### **TYBMS: Semester V: FINANCE: Wealth Management**

- Students' knowledge related to various aspects of wealth management is enhanced.
- Students acquainted with knowledge of issues pertaining to insurance and taxation.
- · They analyzed components of retirement planning

## TYBMS: Semester V: FINANCE: Commodities and Derivatives market

- · Students understood the concept relevant to commodities and derivatives market
- · Students studied the various aspects related to futures and options.
- Students acquired the knowledge about trading, clearing and settlement in the derivatives market

### TYBMS: Semester V: HRM: Strategic HRM & HR Policies

- · Understand and discuss the values of key strategic human resource management concepts.
- · Evaluate the strengths and weaknesses of SHRM practices across context.

## **TYBMS: Semester V: HRM: Stress Management**

- · Assess and analyses the symptoms, causes and effects of personal and academic stressors in order to implement appropriate stress management techniques.
- · Monitor effectiveness of stress management techniques and revise to meet current needs.

### **TYBMS: Semester V: HRM: Industrial Relationship**

- · Describe the basic framework for industrial relation including the mechanics of the grievances process, discipline, seniority, use of an outside arbitrator, and the issues surrounding local interpretation of collective agreement including the right to strikes.
- Applying the certification proves the bargaining process in given situations.
- Adhere to the appropriate laws in the day to day functioning of the organization.

## TYBMS: Semester V: HRM: Performance management and career planning

· To attract and retain effective persons in an organization.

- · To utilize human resources optimally.
- · To improve morale and motivation level of employees.
- · To reduce employee turnover.
- · To practice a balanced 'promotion from within' policy.

### **TYBMS: SEMESTER-VI: Operation Research**

- Operation research students learn to use quantities methods and techniques for effective decisions making model formulation and applications that are used in solving business decision problems.
- · It also helps to students in different environment that needs decision making
- · The modules cover includes transportation assignments and CPM / MSPT techniques.

### **TYBMS: SEMESTER-VI: MARKETING**

- Exposure on the topic of International Marketing is comprehensively provided along with the strategies, challenges and opportunities of *marketing* new and existing products and services to the *global* marketplace
- · Media Planning and buying management studies provides a base for the students to understand the budgeting for specific advertising strategy and media plan
- · Brand Management is another vertical of marketing, and its teachings is distributed to provide an essential framework to build and manage a great brand

### **TYBMS: SEMESTER-VI: Brand Building**

- · Students learn about Branding & its importance in today's day & age.
- · Students gain knowledge about Leveraging brands with possible extensions due to a competitive environment.
- · Students study about Brand building Techniques & strategies

## **TYBMS: SEMESTER-VI: Media Planning & Buying**

- · Students understand the concepts of Media vehicles, media units, reach, Frequency, TRP's
- · Students study working of the media Industry due to various segmentations.
- Students gain knowledge about the new form of advertising through the WWW, Internet & all the social media platforms.

### TYBMS: SEMESTER-VI: FINANCE: Financial Institutions and Market

• Students gained basic knowledge about the structure and role of financial institution and market

- · Students understood the functions of various financial institutions in the financial system
- · Students learnt about managing financial systems design

### **TYBMS: SEMESTER-VI: FINANCE: Project management**

- Students acquired the knowledge about project management as a separate area of the management
- They developed understanding of the basic concepts and techniques of project management
- · They enhanced the skills of application of project management techniques for analysis

## TYBMS: SEMESTER-VI: HRM: Human Resource Planning and Information System

- The subject course helps HR Students to:
- · To Understand the Concept and Process of HRP
- · To Understand Ways of matching Job Requirements and Human Resource Availability
- To Explore the concept of Strategic HRP
- · To resolve conflicts and plan the ROI on HRP
- · To Understand the applications of HRIS
- · Steps in designing of HRIS, HRIS Subsystems, Mechanisms of HRIS, Benefits, Limitations, Barriers in Effective Implementation of HRIS.

### **Program Outcome: Master of Commerce (M.Com.)**

M.COM Master of Commerce is a degree which specializes in Commerce, Accountancy, Management and Economics pursued by Commerce graduates. It enhances management skills required to take leadership role in the corporate world. The course provides an expertise in management of business skills that are required to take prompt and corrective decisions.

### **Program Outcome: Bachelor of Arts -Humanities (B.A.)**

Humanities are an academic discipline which deals with the study of human condition, utilizing methodologies that are usually analytical, critical or speculative. The subjects offered under humanities are languages / literature (English, Hindi & Urdu) and social sciences (History, Geography & Economics). The study of these subjects helps the students to understand the world around them, acquire competency in linguistic skills and develop analytical and interpretative abilities. There is a plethora of career options available to graduates from this stream. They can pursue careers in the fields like teaching, counselling, public relations, communicators, sales, advertising, town planning, banking and in the field of translation as well.

• BA Program could provide well trained professionals to meet the requirements of all the sectors of the economy.

- · It provides the opportunity for specialized study in various fields like Economics, Geography, Literature etc.
- · Along with the academics the holistic development of the student is ensured through imbibing human values.

### **Program Specific Outcome: Economics**

- · Along with the proper understanding of basic concepts in Economics, the real-life application of the same is also ensured.
- · Students are updated with the current affairs in the field of Economics.
- · A strong foundation for higher studies is led down during the graduation.

### **Course Outcome: Economics**

### **FYBA:** Semester I: Paper I: Microeconomics - I:

• Students become familiar with the basic concepts of microeconomics and its application in the real world.

## FYBA: Semester II: Paper II: Macroeconomics – I:

• Students understand the basic concepts of macroeconomics and its application in the real world.

### **SYBA: Semester III: Paper III: Microeconomics - II:**

• Students' knowledge about the concepts of microeconomics and its application in the real world is upgraded.

## SYBA: Semester III: Paper IV: Indian Economy:

• Students get awareness about the current problems and policies of the Indian economy.

### **SYBA:** Semester IV: Paper V: Macroeconomics – II:

· Students' knowledge about the concepts of macroeconomics and its application in the real world is up scaled.

### SYBA: Semester IV: Paper VI: Maharashtra's Economy:

• Students gain information about the current challenges of Maharashtra's economy and government measures to deal with it.

### **TYBA: Semester V: Paper VII: Microeconomics -III:**

• Students understand the advanced concepts of microeconomics and its application in the real imperfectly competitive world.

## **TYBA: Semester V: Paper VIII: Economics of Development:**

• The in-depth understanding of the students about the various theories, processes and policies of growth and development is ensured.

### **TYBA: Semester V: Paper IX: Economics of Agriculture and Cooperation:**

• Students gains awareness about the contribution of agriculture in economic development of India by critically analyzing its Strengths, Weaknesses, Opportunities and Challenges

## TYBA: Semester VI: Paper XIII: Macroeconomics-III:

• Students get introduced to formal modelling of a macroeconomic theory with analytical tools.

### **TYBA: Semester VI: Paper XI: International Economics:**

 A systematic exposition towards an analytical account of the causes and consequences of the rapid expansion of international financial flows in recent years gets developed among students with the help of abstract theoretical models as well as real-world examples and case studies.

### TYBA: Semester VI: Paper XV: Indian Financial System:

· Learners get acquainted with various components of the Indian financial system, its functioning and the trends and turns it has witnessed over the years especially from the post financial sector reform period.

## **Course Outcome: Geography**

### **FYBA: Semester I: Geomorphology:**

- · Students understand tectonic activity and structural evolution.
- Students gain knowledge about earth's interior.
- · Students could establish the relationships between landforms, processes and underlying structure with endogen etic and exogeneity forces.
- · An idea about the concept of plate tectonics, and resultant landforms is developed among students.
- Students acquire knowledge about types of folds and faults and earthquakes, volcanoes and associated landforms.
- · Students get the knowledge about work of river, glaciers, wind, sea waves and underground water and their resultant landforms.
- · Practical aspect provides the knowledge to students to identify the landform with the help of a contour map and can calculate the gradient of the slope.

## FYBA: Semester II: Human Geography

- · Students become aware of the scope and contents of human geography.
- Students understand Man's adaptation in various environments and also the Man and Environmental relation in different perspectives.
- Students get the knowledge about the different types of settlement and their characteristics.
- · An idea about the world population distribution and the factors that lead to uneven distribution of the population is developed among students.
- Students get information about the problem that is likely to arise due to an increase in the world population. It also focuses on migration causes and consequences of migration.
- · Practical aspect enhances the knowledge of how to calculate the nearest neighbor analysis, interpret and construct the age and sex pyramid.

## SYBA: Semester III: Paper II: Climatology:

- · Students understand how the planetary and periodic wind and pressure belts relate to each other and the development of the tropical cyclones, El Nino and La Nina.
- · Students realize the important role of water to create condensation and precipitation.
- Students learn about the interaction between the atmosphere and the earth's surface.
- They get knowledge about the composition and structure of the atmosphere.
- Students understand the importance of the atmospheric pressure and winds.
- · Students understand the working of atmospheric moisture.
- · Students get knowledge about the cyclone and anticyclone.

### **Practical**

- · Students learn to interpret the weather map and weather symbol.
- · Students learn to construct a graph related with climatic data.

### SYBA: Semester IV: Paper III: Physical Geography of India

- Students know about India's landscape and its formation, climate, soil and natural vegetation.
- · Students understand the economic resources of India.
- · Students understand the social distribution of the population of India.
- · Students learn about the Conservation of resources.

### **Practical**

- · Develop an idea about conversion of scale and draw graphical scale.
- · Students learn to locate the object on the map.

### **SYBA: Semester IV: Paper II: Oceanography:**

· Students comprehend the concepts of Hydrology and Oceanography.

- Students study the nature and characteristics of the global oceans.
- · Students understand the importance of the ocean.
- Students gain knowledge about the effects of ocean Currents.
- Students understand the human impacts on Ocean by studying types of tides, formation tides, waves, formation waves and ocean currents, their origin and types.
- **Practical** aspects enhance students' knowledge about the navigation symbol and can interpret the bathymetric and hydrographic map.

## SYBA: Semester IV: Paper III: Agricultural Geography of India:

- Students get introduced to agriculture, nature, scope, significance and development of agriculture geography, approaches to study.
- Students gain the knowledge about the types of farming, salient features of farming and problems associated with agriculture.
- Students learn about the newly introduced agricultural techniques like genetic engineering, poly-house agriculture, tissue agriculture, tourism agriculture and agroforestry.
- Students gain the information about the types of crops and their distribution and the livestock resources in India.
- · Students learn about the green revolution and white revolution.
- · Practical aspect enhances the skill to interpret the thematic map.
- · Students learn the Construction of different types of graph.

## **TYBA:** Semester V: Paper IV: Settlement Geography:

- Students build an idea about urban and rural settlements, and its relationship with environment and also different theories related to settlement geography.
- · Students know about classification and morphology of settlements rural and urban.
- · Students understand the trends and patterns of urbanization in the world and in India.
- · Students know about different theories of urban growth.

## TYBA: Semester V: Paper V: Geography of Maharashtra:

- · Students know about landscape and their formation, climate, soil and natural vegetation.
- · Students understand the economic resources of Maharashtra.
- · Students understand the social distribution of population.
- Students know about the salient features and types of farming in Maharashtra.
- · Students also know about the livestock and fisheries resources in Maharashtra.
- · Students know about the conservation of resources.

# TYBA: Semester V: Paper VI: Tools and Techniques in Geography for Spatial Analysis - I

### (Practical)

- · Students get an idea about scale and draw different types of scale.
- Students acquire knowledge about different types of map projection, basic elements of map and calculation, identification of relief, direction, bearing and distance.
- Students learn about Area calculation and demarcation of watershed on toposheet, Tracing of stream network and contours.
- Students learn to interpret the toposheets and also learn the construction of the thematic maps.
- · Students have the first-hand practice of the basic use of SPSS and MS word and excel.

## TYBA: Semester VI: Paper IV: Environmental Geography

- · Students gain knowledge about concept, scope of environmental geography and components of environment.
- · An idea about human-environment relationships is developed among students.
- An idea about the ecosystem, environmental program and policies is built up among Students.
- · Students know about biodiversity, their types and threat to biodiversity and conservation.
- Students know about various environmental issues and problems due to large and small dams.
- Students learn about sustainable development and environmental management.

## TYBA: Semester VI: Paper V: Geography of Tourism and Recreation

- · Students' knowledge about the concept, scope of tourism geography and factors of development of tourism in the world is enhanced.
- Students get an idea about the different types of tourism and their consequences negative and positive.
- Students also learn about the various aspects and their role in development of tourism like, accommodation, transportation, travel agencies, tour guide etc.
- Students also get the information about the development of tourism in Maharashtra and the major destination of tourism in Maharashtra.

# TYBA: Semester VI: Paper VI: Tools and Techniques in Geography for Spatial Analysis- II

## (Practical)

• Students learn the significance of statistics in geography.

- · Students understand the importance of use of data in geography.
- · Students learn about the Frequency Distribution and construction of the Histogram, Frequency Polygon and Ogive curve.
- Students learn various statistical concepts like Measures of Central Tendency- mean median and mode, Measures of Dispersion and Deviation, Correlation, Regression & Hypothesis Testing, types of sampling etc.
- · Field works give first-hand knowledge to Students regarding collecting the primary data and analyzing it.

### **Course Outcome: Urdu**

## FYBA: Semester I & II: Urdu Language

• The study of Urdu helps the students to develop a written and verbal competency in the language.

### FYBA: Semester I & II: Urdu Literature

· Through an in-depth study of literary texts, students develop an interest in the subject.

## SYBA: Semester III & IV: Paper -II: Urdu Literature

• At this level the student's ability is enhanced and they are able to critically analyses the poems prescribed in their syllabus.

## SYBA: Semester III & IV: Paper -III: Urdu Literature

· Student's interest is created in exploring the world through travel.

## TYBA: Semester V & VI: Paper -IV: Urdu Literature

- · Students learn to use the language fluently to express their ideas through essays.
- · Students learn to write correctly through rules of grammar and sentence structure.

## TYBA: Semester V & VI: Paper -V: Urdu Literature

• Students are able to relate to feelings, emotions & imaginative elements expressed through the works of great writers.

## TYBA: Semester V & VI: Paper -VI: Urdu Literature

• Students are made well-versed with the principles of journalism, local reporting, techniques writing editorial and conducting interviews.

Course Outcome: English

### FYBA: Semester I & II: Communication Skills

- Enhanced language proficiency through exposure to reading and writing exercises.
- · To be able to use the functional aspects of language in a variety of ways.
- · To be able to use lexical resources.

### FYBA: Semester I & II: Introduction to English Literature

- · To introduce the learners of literature to the various genres and literary terms
- · To sensitize them to themes and styles of literature
- · To inculcate reading skills and the reading habit in them
- · To enhance their vocabulary, style and language skills by introducing them
- to literary works
- · To nourish their creative faculty and to develop sensitivity to nature and
- · fellow human beings

Course Outcome: By the end of the course, a student should develop the ability:

- · To write clearly, coherently and effectively about various genres of literature
- · To recognize the culture and context of the work of literature
- · To develop sensitivity to nature and fellow human beings

## SYBA: Semester III & IV: Indian Literature in English

By the end of the course, a student should develop the ability to:

- · Understand the various phases of evolution in Indian Writing in English
- · Identify the pluralistic dimensions of this literature
- · Understand the different genres of this elective
- · Be sensitive to the value system of this literature
- · Understand the themes and concerns of Indian writers whose works have been translated in English.

### SYBA: Semester III & IV: American Literature

By the end of the course, a student should develop the ability to:

- · Be sensitive to the themes and styles of American Literature
- · Be familiar with the socio-cultural milieu of twentieth century America through literary texts
- · Enhance their understanding of American, African American and multicultural sensibilities representing them
- · Facilitate cross-cultural perspectives and discussions on American Literature

### **SYBA: Semester III & IV: Business Communication**

- · Students should be able to communicate effectively in the business world.
- · Students should be acquainted with the commercial terminology
- · Students Should handle business correspondence efficiently.

## TYBA: Semester V & VI: PAPER IV: 16the to 18the Century English Literature

After completion of the course, students are expected to be able to:

- · Understand the distinctive features of English literature of the 16th, 17th
- · and 18th centuries
- · comprehend how background influences shaped the writer's thinking.
- · recognize and appreciate the literary masters who dominated the scene.
- · grasp the different writing styles that each age adopted.

## TYBA: Semester V & VI: PAPER V: Literary Criticism: Theory and Practice

After completion of the course, students are expected to be able to:

- · use some important critical terms
- become aware the nature and function of literature and criticism
- · impart the technique of close reading of literary texts
- · understand the various literary theories and critical approaches
- · be familiar with the tenets of practical criticism

### TYBA: Semester V & VI: PAPER VI: Translation Studies: Theory and Practice

After completion of the course, students are expected to be able to:

- · Understand variety of translations
- · Able to undertake Literary Translation work at primary level.
- Able to undertake translation in official contexts and mass media
- · Equipped to take up jobs.

## Program Specific Outcome: Bachelor of Arts Multimedia and Mass Communication (BAMMC)

A Bachelor of Arts Multimedia and Mass Communication places less importance on knowledge gained by only books but promotes the acquiring of knowledge through a practical format of teaching. The course is taught by faculty and professionals who belong to and have a considerable experience across fields of media. BAMMC is a career-oriented course which enables multiple choices of fields such as movie making, advertising, theatre, radio, journalism and creative writing. It enhances communication, presentation and creative writing skills. It allows you to work your way through media in the language of your choice. Uses of computer software skills are also sharpened.

Course Outcome: Mass Media

### FYBAMMC: Semester I: Effective Communication Skills – I

To make the students aware of functional and operational use of language in media

To equip or enhance students with structural and analytical reading, writing and thinking skills.

To introduce key concepts of communications

### **FYBAMMC: Semester I: Fundamentals of Mass Communication**

To introduce students to the history, evolution and the development of Mass Communication in the world with special reference to India.

To study the evolution of Mass Media as an important social institution.

To understand the development of Mass Communication models.

To develop a critical understanding of Mass Media.

To understand the concept of New Media and Media Convergence and its implications.

### **FYBAMMC: Semester I: Foundation Course - I**

To introduce students to the overview of the Indian Society.

To help them understand the constitution of India.

To acquaint them with the socio-political problems of India.

### **FYBAMMC: Semester I: Current Affairs**

To provide learners with overview on current developments in various fields. To generate interest among the learners about burning issues covered in the media.

To equip them with basic understanding of politics, economics, environment and technology so that students can grasp the relevance of related news.

Twenty minutes of newspaper reading and discussion is mandatory in every lecture.

### **FYBAMMC: Semester I: Visual Communication**

To provide students with tools that would help them visualize and communicate.

Understanding Visual communication as part of Mass Communication

To acquire basic knowledge to be able to carry out a project in the field of visual communication. To acquire basic knowledge in theories and languages of Visual Communication. The ability to understand and analyze visual communication from a critical perspective.

### **FYBAMMC: Semester I: History of Media**

- · To acquaint the students with the basic foundations of Sociology.
- To establish the relationship between Sociology and Mass Media & highlight the need and relevance of Sociology in Mass Media.
- · To discuss Mass Media from a sociological perspective.

### FYBAMMC: Semester II: Effective Communication Skills – II

To make the students aware of the use of language in media and organization. To introduce key concepts of communications.

To equip or enhance students with structural and analytical reading, writing and thinking skills.

### FYBAMMC: Semester II: Foundation Course - I

To introduce students to the overview of the Indian Society.

To help them understand the constitution of India.

To acquaint them with the socio-political problems of India.

## **FYBAMMC:** Semester II: Content Writing

To help media students to acquaint themselves with an influential medium of journalism that holds the key to opinion formation & to create awareness.

## **FYBAMMC: Semester II: Introduction to Advertising**

To provide the students with basic understanding of advertising, growth, importance and types. To understand effective advertising campaigns, tools, models etc. To provide students with various advertising trends, and future.

To comprehend the role of advertising, various departments, careers and creativity.

### FYBAMMC: Semester II: Media, Gender, Culture

To discuss the significance of culture and the media industry

To understand the association between the media, gender and culture in the society.

To stress on the changing perspectives of media, gender and culture in the globalized era.

## **SYBAMMC: Semester III: Media Studies**

To improve the skills of students

To improve literacy skills and abilities in other subjects

## SYBAMMC: Semester III: Computer & Multimedia 1

To equip the students with an understanding of industry knowledge required to make a career In the field of print and Advertising, Digital Marketing, Television media, Film etc.

To train them with the software knowledge required in the above - mentioned Industries.

### **SYBAMMC: Semester III: Film Communication-1**

This paper should aim to sensitize the students towards Cinema as a medium of Mass Communication and help them to become critical viewers of movies today.

- a. From A Personal Point of View
- b. From A Social Point of View
- c. From A Business Point of View (in context of Box Office Success)

The students should get to study the similarities and differences between various movie cultures. (Have a contextual understanding)

The students should get to study Indian cinema through its similarities and differences with both Indian & Western traditions of art and culture.

### **SYBAMMC: Semester III: Electronic Media-1**

To acquaint students with the working of two powerful media i.e. radio and television. The content is useful for both advertising and journalism students in order to further their careers in their respective field

### **SYBAMMC: Semester III: Introduction to Photography**

To help students understand the principles and practice of photography. To enable students to enjoy photography as an art.

## **SYBAMMC: Semester III: Corporate Communications and Public Relation**

To prepare students for effective & ethical public communication on behalf of organizations. To help students acquire basic skills in the practical aspects of Media Relations & Crisis Management.

To equip students with basic skills to write & develop Press Release& Release& another PR communication.

To design a PR campaign.

### SYBAMMC: Semester IV: Mass Media Research

To introduce students to debates in Research approaches and equip them with tools to carry on research

To understand the scope and techniques of media research, their utility and limitations

### **SYBAMMC: Semester IV: Electronic Media-2**

To make the students acquainted with working of the two powerful media; i.e. radio and television. The content is useful for both advertising and journalism students in order to further their careers in their respective fields.

## SYBAMMC: Semester IV: Writing & Editing for Media

To encourage students to read stories, poems, plays

To develop further and build upon the writing and analytical skills acquired in Semesters I & II To acquaint students with basic concepts in literary writing.

To prepare students to write for the media.

## SYBAMMC: Semester IV: Computer & Multimedia-2

Since the introduction of computers in media every process of image editing and film editing is computerized. Various soft wares —beginners to professional- are developed and today software knowledge equals literacy in media. Image, Audio and Video in digital format are easy to share and store as well as saved to multiple places. The knowledge of software has become extremely essential to survive and grow in media today.

### **SYBAMMC: Semester IV: Media Laws & Ethics**

To provide the learners with an understanding of laws that impact the media - traditional and

online media.

To sensitize them towards the social and ethical responsibility of the media - Journalism and Advertising

To have knowledge of application of laws in India through case examples.

To be aware of Regulatory Bodies that self-regulate Print, Advertising & Broadcast Media.

### **SYBAMMC: Semester IV: Film Communication-2**

Movies cannot be studied apart from the technology used to produce them. Hence, the students should necessarily be given some practical exercises in the paper for internal marks.

The students should study cinema by watching through an open-ended list of movies. (Screening of films should depend to a great extent on the FORTE of the teacher and the type of students in the class)

The teacher must briefly address diverse films in the course of their lecture (Although there are some specific subjects that can deal with films of different types a special session must touch upon Cinema in all its possible forms - to encompass from the ordinary Factual Documentary format to the most effective Bumper Breaks/ Advertisements. From the special effects total Sci-fi and Fiction films to the harsh Reality bite films. Even from Promotional Corporate films and travelogues to the most stereotype telecast of Newsreels.

### **SEMSETER V: ADVERTISING**

## TYBMM: Sem V Media Planning and Buying

To develop knowledge of various characteristics of media.

To understand procedures, requirements, and techniques of media planning and buying.

To learn the various media mix and its implementation

To understand budget allocation for a Media plan

### **TYBMM: Sem V: Brand Building**

To study the concept of Brands

To study the process of building brands

To study its importance to the consumer and advertisers

### **TYBMM: Sem V: Advertising in Contemporary Society**

To understand the environment in Contemporary Society

To understand Liberalization and its impact on the economy

To study contemporary advertising and society

### **TYBMM: Sem V: Consumer Behavior**

To understand the role of marketing in influencing consumer behavior.

To analyze the role of marketer & the consumer in advertising.

To sensitize the students to the changing trends in consumer behavior.

### **TYBMM: Sem V: Copywriting**

To familiarize the students with the concept of copywriting as selling through writing.

To learn the process of creating original, strategic, compelling copy for various media.

To train students to generate, develop and express ideas Effectively.

To learn the rudimentary techniques of advertising - headline and body copywriting.

## TYBMM: Sem V: Ad Design

To make students understand the process of planning & production of advertisement

To highlight the importance of visual communication

To provide practical training in the field of advertising

### **SEMSETER V: JOURNALISM**

## TYBMM: Sem V: Editing

As an important segment of newspaper production, editing is a vital function. The syllabus lays stress on language skill improvement

It aims at orienting students to gain more practical knowledge in the print media scenario.

The syllabus encompasses the current trends of digital media as well as writing for e editions of papers.

The syllabus tackles editing from various beats points of view.

Editing of editorials, columns, etc. is included to acquaint the students about responsible journalism.

With global media and changing advertising concepts lay- outs in modern times can be imparted.

### **TYBMM: Sem V: Features and Opinion**

Understanding the differences between reporting and feature writing.

Understanding the other types of soft stories.

Learning the skills for writing features/ opinion/soft stories and interviewing.

### TYBMM: Sem V: Journalism and Public Opinion

To assess the importance of the media vis a vis the public

To project a fair idea of the role of the media in creating and influencing Public Opinion

To analyze the impact of the media and public opinion on socio political issue

### **TYBMM: Sem V: Indian Regional Journalism**

Study of the history and role of Indian press other than in English.

Understand the contribution and role of certain publications and stalwarts

Study of the regional press and television of today

### **TYBMM: Sem V: Reporting**

To prepare them to write or present the copy in the format of news. -To develop a nose for news.

- -To train them to acquire the skills of newsgathering with traditional as well as modern tools.
- To inculcate the skills for investigative journalism. -To make them understand the basic structure/ essential knowledge for various beats. -To make them responsible reporters and the face of the media.

### TYBMM: Sem V: Newspaper & Magazine Making

To study the design, elements of the newspaper and magazine

To study space distribution

To get exposure to design software such as Quark Express

To study the process of planning and production of newspaper and magazine

## **SEMESTER VI: ADVERTISING**

**TYBMM: Sem VI: Contemporary Issues** 

To understand and analyse some of the present day environmental, political, economic and social concerns and issues.

### TYBMM: Sem VI: Digital Media

Understand digital marketing platform Understand the key goals and stages of digital campaigns Learn to develop digital marketing plans

### TYBMM: Sem VI: Financial Management for Marketing and Advertising

To provide a brief overview of the basic concepts, goals, functions and types of finance available for new and existing business and marketing units.

To enable the understanding of the need for financial planning through Budgets and their benefits.

To enable students to evaluate the financial implications of marketing decisions through simple analytical tools.

## TYBMM: Sem VI: The Principles & Practice of Direct Marketing

To understand the concept and importance of Direct Marketing To understand the various techniques of direct marketing and its advantages

### **TYBMM: Sem VI: Agency Management**

To acquaint the students with concepts, techniques for developing an effective advertising campaign.

To familiarize students with the different aspects of running an ad agency

To inculcate competencies to undertake professional work in the field of advertising.

### **TYBMM: Sem VI: Advertising and Marketing Research**

To inculcate the analytical abilities and research skills among the students.

To understand research methodologies – Qualitative vs Quantitative

To discuss the foundations of Research and audience analysis that is imperative to successful advertising.

To understand the scope and techniques of Advertising and Marketing research, and their utility.

## **TYBMM: Sem VI: Legal Environment & Advertising Ethics**

To acquaint students to the Legal Environment in contemporary India highlighting the relevance of the same with reference to Advertising media.

To emphasize & reiterate the need to have ethical practices in the field of advertising media both in India & internationally.

To appreciate the role of advertising in contemporary consumerism, the need for consumer awareness & consumer protection.

Advertising as a profession today & how to protect it the future of advertising

- a. The socio economic criticisms
- b. Why do Advertising need to be socially responsible?
- c. The need for Critiques in Advertising

The syllabus has been redesigned to include advertising in both traditional & New Media.

### SEMESTER VI: JOURNALISM

### **TYBMM: Sem VI: Contemporary Issues**

To understand and analyse some of the present day environmental, political, economic and social concerns and issues.

### TYBMM: Sem VI: Digital Media

Understand digital marketing platform
Understand the key goals and stages of digital campaigns
Learn to develop digital marketing plans

### **TYBMM: Sem VI: Press Laws and Ethics**

To study media laws To understand media

## TYBMM: Sem VI: Business & Magazine Journalism

To understand the tools of business journalism and an overview of the economy To study the magazine sector and its specialization

### TYBMM: Sem VI: Issues of Global Media

Study the role of media in the 21st Century and the challenges facing traditional media Familiarize students about regional versus global media Highlight social media's relevance in information dissemination

### **TYBMM: Sem VI: News Media Management**

To make students aware about the responsibilities, structure and functioning of responsibilities of an Organization

Students will be able to analyse individual media businesses and understand the economic drivers of the media economy.

Students will have developed hands-on experience as content marketers using journalistic and digital techniques.

Students will have gained a perspective on the evolution of media in the last 25 years and on key current trends.

### TYBMM: Sem VI: Broadcast Journalism

To write in Broadcast style conforming to the ethical and practical principles that guide it To learn the skills and techniques to investigate new stories.

### **Program Outcome: BSC Computer Science**

As the computing field advances at a rapid pace, the students must possess a solid foundation that allows and encourages them to maintain relevant skills as the field evolves. Specific languages and technology platforms change over time. Thus students must continue to learn and adapt their skills throughout their careers. At the end of three-year Bachelor of Computer Science, the students will be able:

- To formulate, to model, to design solutions, procedure and to use software tools to solve
- real world problems.
- To design and develop computer programs/computer -based systems in the areas such as
- networking, web design, security, cloud computing, IoT, data science and other emerging
- technologies.
- To familiarize with the modern-day trends in industry and research based settings and
- thereby innovate novel solutions to existing problems.
- To apply concepts, principles, and theories relating to computer science to new situations.

- To use current techniques, skills, and tools necessary for computing practice
- To apply standard Software Engineering practices and strategies in real-time software
- project development
- To pursue higher studies of specialization and to take up technical employment.
- To work independently or collaboratively as an effective tame member on a substantial
- software project.
- To communicate and present their work effectively and coherently.
- To display ethical code of conduct in usage of Internet and Cyber systems.
- To engage in independent and life-long learning in the background of rapid changing IT
- industry.

### Course Outcome:

### FYBSC SEM I

## **Digital Systems & Architecture**

- After successful completion of this course, students would be able to
- learn about how computer systems work and underlying principles
- understand the basics of digital electronics needed for computers
- understand the basics of instruction set architecture for reduced and complex instruction sets
- understand the basics of processor structure and operation
- understand how data is transferred between the processor and I/O devices.

### **Introduction to Programming with Python**

- Ability to store, manipulate and access data in Python
- Ability to implement basic Input / Output operations in Python
- Ability to define the structure and components of a Python program.
- Ability to learn how to write loops and decision statements in Python.
- Ability to learn how to write functions and pass arguments in Python.
- Ability to create and use Compound data types in Python

### **LINUX Operating System**

- Work with Linux file system structure, Linux Environment
- Handle shell commands for scripting, with features of regular expressions, redirections
- Implement file security permissions
- Work with vi, sed and awk editors for shell scripting using various control structures
- Install softwares like compilers and develop programs in C and Python programming languages on Linux Platform

## **Open Source Technologies**

- Differentiate between Open Source and Proprietary software and Licensing.
- Recognize the applications, benefits and features of Open-Source Technologies
- Gain knowledge to start, manage open-source projects.

### **Discrete Mathematics**

- Define mathematical structures (relations, functions, graphs) and use them to model real life
- situations
- Understand, construct and solve simple mathematical problems.
- Solve puzzles based on counting principles.
- Provide basic knowledge about models of automata theory and the corresponding formal
- languages.

- Develop an attitude to solve problems based on graphs and trees, which are widely used in
- software.

## **Descriptive Statistics**

- Organize, manage and present data.
- Analyze Statistical data using measures of central tendency and dispersion.
- Analyze Statistical data using basics techniques of R.
- Study the relationship between variables using techniques of correlation and regression.

### **Soft Skills**

- Learners will be able to understand the importance and types soft skills
- Learners will develop skills for Academic and Professional Presentations.
- Learners will able to understand Leadership Qualities and Ethics.
- Ability to understand the importance of stress management in their academic & professional
- life.

### **FYBSC SEM II**

### **Design & Analysis of Algorithms**

- Students should be able to understand and evaluate efficiency of the programs that they
  write
- based on performance of the algorithms used.
- Students should be able to appreciate the use of various data structures as per need
- To select, decide and apply appropriate design principle by understanding the requirements of
- any real life problems.

## **Advanced Python Programming**

- Ability to implement OOP concepts in Python including Inheritance and Polymorphism
- Ability to work with files and perform operations on it using Python.
- Ability to implement regular expression and concept of threads for developing efficient program
- Ability to implement exception handling in Python applications for error handling.
- Knowledge of working with databases, designing GUI in Python and implement networking in Python

### Introduction to OOPs using C++

- Work with numeric, character and textual data and arrays.
- Understand the importance of OOP approach over procedural language.
- Understand how to model classes and relationships using UML.
- Apply the concepts of OOPS like encapsulation, inheritance and polymorphism.
- Handle basic file operations.

### **Database Systems**

- To appreciate the importance of database design.
- Analyze database requirements and determine the entities involved in the system and their relationship to one another.
- Write simple queries to MySQL related to String, Maths and Date Functions.
- Create tables and insert/update/delete data, and query data in a relational DBMS using MySQL commands.
- Understand the normalization and its role in the database design process.

- Handle data permissions.
- Create indexes and understands the role of Indexes in optimization search.

### **Calculus**

- Develop mathematical skills and enhance thinking power of learners.
- Understand mathematical concepts like limit, continuity, derivative, integration of functions,
- partial derivatives.
- Appreciate real world applications which use the learned concepts.
- Skill to formulate a problem through Mathematical modelling and simulation.

### **Statistical Methods**

- Calculate probability, conditional probability and independence.
- Apply the given discrete and continuous distributions whenever necessary.
- Define null hypothesis, alternative hypothesis, level of significance, test statistic and p value.
- Perform Test of Hypothesis as well as calculate confidence interval for a population parameter for single sample and two sample cases.
- Apply non-parametric test whenever necessary.
- Conduct and interpret one-way and two-way ANOVA.

## **E-Commerce & Digital Marketing**

- Understand the core concepts of E-Commerce.
- Understand the various online payment techniques
- Understand the core concepts of digital marketing and the role of digital marketing in business.
- Apply digital marketing strategies to increase sales and growth of business
- Apply digital marketing through different channels and platforms
- Understand the significance of Web Analytics and Google Analytics and apply the same.

## **SYBSC SEM III**

### **Principles of Operating Systems**

Work with any type of operating system

- Handle threads, processes, process synchronization
- Implement CPU scheduling algorithms
- Understand the background role of memory management
- Design file system.

### Linear Algebra

- Appreciate the relevance and applications of Linear Algebra in the field of Computer Science.
- Understand the concepts through program implementation.
- Instill a computational thinking while learning linear algebra.
- Express clear understanding of the concept of a solution to a system of equations.
- Find eigenvalues and corresponding eigenvectors for a square matrix.

### **Data Structures**

- Create different types of data structures.
- Understand which data structure to be used based on the type of the problem.
- Apply combined knowledge of algorithms and data structures to write highly effective programs in various domains.

### **Advanced Database Concepts**

- Master concepts of stored procedure, functions, cursors and triggers and its use.
- Learn about using PL/SQL for data management.
- Use efficiently Collections and records.
- Understand concepts and implementations of transaction management and crash recovery.

## **Java based Application Development**

- Design basic application in java using Graphical User Interface.
- The learner will be able to develop applications using swings
- The learner will be able to develop web based applications using servlet and jsp
- The learner will be able to connect databases with java through
- The learner will be able to perform programs using JSON objects

## Web Technologies

- Design valid, well-formed, scalable, and meaningful pages using emerging technologies.
- Understand the various platforms, devices, display resolutions, viewports, and browsers that
- render websites
- Develop and implement client-side and server-side scripting language programs.
- Develop and implement Database Driven Websites.
- Design and apply XML to create a markup language for data and document centric applications.

## **Creative Content Writing**

- Understand the fundamentals of content creation for Blog, Website etc.
- Acquire the ability to write and edit in a variety of styles and procedures
- To develop the creative abilities.
- To acquire essential language skills for editors.

### **SYBSC SEM IV**

## **Theory of Computation**

- Understand Grammar and Languages
- Learn about Automata theory and its application in Language Design
- Learn about Turing Machines and Pushdown Automata
- Understand Linear Bound Automata and its applications

### **Computer Networks**

Learn basic networking concepts and layered architecture.

Understand the concepts of networking, which are important for them to be known as a 'networking professionals'.

### **Software Engineering**

- Plan a software engineering process life cycle, including the specification, design, implementation, and testing of software systems that meet specification, performance, maintenance and quality requirements
- Analyze and translate a specification into a design, and then realize that design practically, using an appropriate software engineering methodology.
- Know how to develop the code from the design and effectively apply relevant standards and perform testing, and quality management and practice
- Able to use modern engineering tools necessary for software project management, time management and software reuse.

### **IoT Technologies**

• Understand SOC and IOT use different types of IOT Platforms and interfaces

• Understand and implement an idea of various types of applications built using IoT

### **Android Application Development**

- Build useful mobile applications using Kotlin language on Android
- Install and configure Android Studio for application development
- Master basic to intermediate concepts of Kotlin required for mobile application development
- Use built-in widgets and components, work with the database to store data
- Master key Android programming concepts and deploy the application on Google Play

### **Advanced Application Development**

- Store the data in NoSQL, document-oriented MongoDB database that brings performance and scalability.
- Use Node.js and Express Framework for building fast, scalable network applications
- Use AngularJS framework that offers declarative, two-way data binding for web applications. Integrate the front-end and back-end components of the MEAN stack.
- Develop robust mobile applications using Flutter.

## Research Methodology

- Define research, formulate problem and describe the research process and research methods.
- Understand and apply basic research methods including research design, data analysis and
- interpretation.
- Understand ethical issues in research, write research report, research paper and publish the
- paper.

### TYBSC SEM V

## **Artificial Intelligence**

After completion of this course, learner should get a clear understanding of AI and different search algorithms used for solving problems. The learner should also get acquainted with different learning algorithms and models used in machine learning.

### **Linux Server Administration**

Learner will be able to develop Linux based systems and maintain. Learner will be able to install appropriate service on Linux server as per requirement. Learner will have proficiency in Linux server administration.

### **Software Testing and Quality Assurance**

Understand various software testing methods and strategies. Understand a variety of software metrics, and identify defects and managing those defects for improvement in quality for given software. Design SQA activities, SQA strategy, formal technical review report for software quality control and assurance.

### **Information and Network Security**

Understand the principles and practices of cryptographic techniques. Understand a variety of generic security threats and vulnerabilities, and identify & analyze particular security problems for a given application. Understand various protocols for network security to protect against the threats in a network.

### **Architecting of IoT**

Learners are able to design & develop IoT Devices. They should also be aware of the evolving world of M2M Communications and IoT analytics.

### **Web Services**

Emphasis on SOAP based web services and associated standards such as WSDL. Design SOAP based / RESTful / WCF services Deal with Security and QoS issues of Web Services. Game Programming

Learner should study Graphics and gamming concepts with present working style of developers

where everything remains on internet and they need to review it, understand it, be a part of community and learn.

## TYBSC SEM VI

### **Wireless Sensor Networks and Mobile Communication**

After completion of this course, learner should be able to list various applications of wireless sensor networks, describe the concepts, protocols, design, implementation and use of wireless sensor networks. Also implement and evaluate new ideas for solving wireless sensor network design issues.

## **Cloud Computing**

After successfully completion of this course, learner should be able to articulate the main concepts, key technologies, strengths, and limitations of cloud computing and the possible applications for state-of-the-art cloud computing using open source technology. Learner should be able to identify the architecture and infrastructure of cloud computing, including SaaS, PaaS, IaaS, public cloud, private cloud, hybrid cloud, etc. They should explain the core issues of cloud computing such as security, privacy, and interoperability.

## **Cyber Forensics**

The student will be able to plan and prepare for all stages of an investigation - detection, initial response and management interaction, investigate various media to collect evidence, report them in a way that would be acceptable in the court of law.

### **Information Retrieval**

After completion of this course, learner should get an understanding of the field of information retrieval and its relationship to search engines. It will give the learner an understanding to apply information retrieval models.

## **Digital Image Processing**

Learner should review the fundamental concepts of a digital image processing system. Analyze the images in the frequency domain using various transforms. Evaluate the techniques for image enhancement and image segmentation. Apply various compression techniques. They will be familiar with basic image processing techniques for solving real problems.

## **Data Science**

After completion of this course, the students should be able to understand & comprehend the problem; and should be able to define suitable statistical method to be adopted.

### **Ethical Hacking**

Learner will know to identify security vulnerabilities and weaknesses in the target applications. They will also know to test and exploit systems using various tools and understand the impact of hacking in real time machines.