# Punyashlok Ahilyadevi Holkar Solapur University, Solapur



# Name of the Faculty: Science & Technology

(As per New Education Policy 2020)

**Syllabus: Entrepreneurship** 

Name of the Course: M. Sc. II (Sem. III &IV)

(Syllabus to be implemented from June 2024)

# M. Sc. II, PHARMACEUTICAL CHEMISTRY COURSE SYLLABUS CHOICE BASED CREDIT SYSTEM (CBCS) (w.e.f. June 2024)

A two-year duration **M. Sc. Pharmaceutical Chemistry** course syllabus has been prepared as per the CBCS semester system. M. Sc. II, SEM-III & SEM-IV Pharmaceutical Chemistry syllabus will be implemented from June 2024. The syllabus has been prepared taking into consideration the syllabi of other Universities, SET, NET, UGC guidelines, and the specific inputs of the Expert Committee Members.

#### **General Structure of the Course:**

Level/ Difficulty	Semester	Paper Code	Title of the Paper	Semes	ter exa	m	L	T	P	Credit s
			Mandatory	Theory	IA	Total				
		DSC-5	Research Methodology	60	40	100	4		-	4
		DSC-6	Marketing Management	60	40	100	4		-	4
			Elective (Anyone)							
		DSE-3 A	Computer Application in Management	60	40	100	4		-	4
	***	DSE-3 B	Organizational Behaviour	60	40	100	4		-	
	III		Field Project/RP/Internship/Appre	nticeship/						
		RP	Research Project	60	40	100	4	-	0	4
			Practical	<u> </u>					- 4 - 4 - 4 - 2 - 2 - 2 - 2 - 2 - 4 - 4 - 4	
		DSC-5 P	Practical based on Research Methodology	30	20	50	-	-	2	6
6.5/400		DSC-6 P	Practical based Marketing Management	30	20	50	-	-	2	
0.2/400			Elective (Any one)							
		DSE-3A P	Practical based on Computer Application in Management	30	20	50			2	
		DSE-3B P	Practical based on Organisational Behaviour	30	20	50			2	
			Total for III semester	330	220	550	16	550	6	22
			Mandatory	· L						ı.
		DSC-7	Digital Marketing And Consumer Behavior	60	40	100	4		-	4
		DSC-8	Human Resource Management	60	40	100	4		-	4
			Elective (Any one)	· L						ı.
		DSE-4A	Operation Management	60	40	100	4		-	4
		DSE-4B	Decision Making And Taxation	60	40	100	4		-	
	IV		Field Project/RP/Internship/Appre	nticeship/						
		RP	Research Project	90	60	150	6	-	0	6
			Practical	-		-			0 4  2 6  2 2  4 - 4  - 4	-

	DSC-7 P	Practical based on Digital Marketing and Consumer Behavior	30	20	50	-	-	2	4
		Elective (Any one)							
	DSE-4A P	Practical based on Operation Management	30	20	50			2	
	DSE-4B P	Practical based on Decision Making And Taxation	30	20	50			2	
		Total for II semester	330	220	550	18	550	4	22

DSC- Discipline Specific Course,

DSE- Discipline Elective course

RM- Research Methodology, OJT- On Job Training

RP – Research Project

L – Lecture, T – Tutorial, P – Practical

Credits of Theory = 4 Hours of teaching per week

2 Credits of Theory = 4 Hours per week

#### **Nature of Examination:**

Each semester will have theory external assessment examination of 60 marks each (2.5 hrs. duration) and 40 marks college assessment. The practical examination of Semesters III to IV will be conducted at the end of each Semester. Duly certified copy of laboratory record must be produced at the time of examination.

#### Practical Examination of M. Sc. II

The practical examination will be of 3 days for each semester.

#### **Semester III:**

Practical courses each : 30 (UA)+ 20 (CA) Research Project work : 60 (UA) + 40 (CA)

#### **Semester IV:**

Practical courses each : 30 (UA)+ 20 (CA) Research Project work : 90 (UA) + 60 (CA)

<sup>\*\*</sup> The evaluation of Research Project will be done by both external and internal examiners at the time of examination.

#### **Nature of question paper (M. Sc. II):**

Time: 2 ½ hours

Maximu

m Marks: 60

#### **Instructions**

1. All questions are compulsory

- 2. All questions carry equal marks.
- 3. Figures to the right indicate full marks.
- 4. Use of log tables and calculators is allowed.

### **Question Paper**

### Q 1. A) Choose correct alternative Marks 8 (1 x 8)

Sub-questions (i) to (viii)

#### B) Fill in the blanks Marks 4 (1 x 4)

Sub questions (i) to (iv)

### Q 2. Answer the following (any six) Marks 12 (2 x 6)

Sub-questions (a) to (h)

#### Q 3. Answer the following (any three) Marks 12 (3 x 4)

Sub-questions (a) to (d)

### Q 4. Answer the following (any two) Marks 12 (6 x 2)

Sub-questions (a) to (c)

## Q 5. Answer the following (any two) Marks 12 (6 x 2)

Sub-questions (a) to (c)

At least 25 % questions should be problem oriented, where-ever possible, in view to train students for the SET/NET/GATE and other competitive examinations. These questions should test the understanding of candidate rather than the memory. The question paper should cover all the Units included in the syllabus of the respective paper and the weightage of the questions should correspond to the number of lectures allotted to the respective Units / Topics.

# **Semester III**

	DSE-5: Research Methodology
	(Credit: 04, Theory: 60 Periods, Marks: 100)
	Course Objectives:
•	The aim of the course is to build knowledge, understanding Computer Applications among the student.
•	The course seeks to give detailed knowledge about the subject matter by instilling them basic ideas about Computer Applications.
•	To give the basic knowledge of computer system use and working principles of various peripheral devices and information technology
•	To Gain familiarity with the concepts and terminology used in the development, implementation and operation of management application systems.
Unit 1:	Introduction to Research
	Meaning, Process, Defining, Research Problem: Selection, Understanding, Necessity of defined problem, Research Design, need and types of Research Design; Sampling Design: Steps of Sampling design, Characteristics of good Sampling Design, Different types of Sampling Design
Unit 3:	Data Collection
	Primary (Interview, Observation and Questionnaire) and Collection of Secondary Data; Data Analysis: Measure for Central Tendency, Dispersion, Correlation and Regression Analysis. Sampling: Census and sample survey-criterion of good sample, choice of sample, probability and non-probability sampling methods, sampling and non-sampling errors
Unit 3:	Hypothesis Testing
	Hypothesis Definition and Formulation, Role of Hypothesis, Types of Hypotheses, Null and Alternative Hypothesis, parameter and statistic, Type I and type ii errors, Level of significance, Critical region, t test, z test, ANOVA
Unit 4:	Report Writing
	Meaning and significance of a Research Report, Types of Research Report: Technical, Popular, Interim, Summary, Article, Format of a Research Report: Title to Bibliography
	Course Outcomes:
•	Accomplish projects utilizing business theories, Internet resources and computer technology.
•	Ability to familiarity with basics of computers, navigate the file system, to create and edit documents, spread sheets, and presentations.
•	Ability to perform basic data manipulation using spread sheets and use Indian languages in documents, to send and receive emails, follow email etiquette's, and communicate over the internet.
•	Ability to create and upload videos,to safely and correctly use websites, social networks, chat sites, and email.
	Reference books:

1. 1. Krishnaswamy, O.R. Methodology of Research In Social
Sciences, Himalya publishing House, 1993. 2. Wilkinson and Bhandarkar
Methodology and Techniques of Social Research, Himalaya Publishing
House.

- Kothari R.C. Research Methodology, Methods and Techniques,
   New Age International Publishers, IInd revised edition, reprint 2008.
   Les Oakshott Essential Quantitative Methods for Business Management
- and Finance, Palgrave.5. Any other relevant to the syllabus

	DSE - 6: Marketing Management	
	(Credit: 04, Theory: 60 Periods, Marks: 100)	
	Course Objectives:	
•	The aim of the course is to build knowledge, understanding Co Applications among the student.	omputer
•	The course seeks to give detailed knowledge about the subject m instilling them basic ideas about Computer Applications.	atter by
•	To give the basic knowledge of computer system use and working proof various peripheral devices and information technology	rinciples
•	To Gain familiarity with the concepts and terminology used development, implementation and operation of management appsystems.	
Unit 1:	Marketing Management	[15]
	Introduction, Concept, Needs, Wants and Demands; Products, Valu Cost and Satisfaction, Exchange, Relationships and Network, Market Marketers and Prospects, Demand Management, Company Orientatio Tools, Environmental Scanning, Techniques and Problems, Marketin Mix	ts, on,
Unit 3:	Product	[15]
	Introduction, New Product Development, Positioning, Re-positionin Test Marketing, Product Life Cycle, Marketing Research, Method Techniques & Tools	_
Unit 3:	Sales Management and Promotions	[1 <i>E</i> ]
		[15]
	Introduction, Choice of Distribution Channel, Organization of Sale Personnel, Purpose of Organization, Process of Organization, Territor Management, Sales Analysis, Problems in Sales of Industrial Goods, Sale Promotional Techniques.  Advertising and Branding: Introduction, Choice of Media, Message, Me effectiveness of advertising, Branding: Concepts and benefits, Packagin Labelling, Warranty vs. Guarantee	es ry es easuring

	Introduction, Nature, Factors affecting pricing decisions and Methods of pricing
	strategy, Selecting price level in today's competitive scenario, Tendering,
	Illustration with simple examples of how to determine price under, Different situations of competition
	Course Outcomes:
•	Accomplish projects utilizing business theories, Internet resources and computer technology.
•	Ability to familiarity with basics of computers, navigate the file system, to create and edit documents, spread sheets, and presentations.
•	Ability to perform basic data manipulation using spread sheets and use Indian languages in documents, to send and receive emails, follow email etiquette's, and communicate over the internet.
•	Ability to create and upload videos,to safely and correctly use websites, social networks, chat sites, and email.
	Reference books:
	1. Kotler, Philip; Armstrong, Gary; Agnihotri, Prafulla Y. and Ehsan Ul Ha Kotler, Philip; Armstrong, Gary; Agnihotri, Prafulla Y. and Ehsan Ul Haque, Principles of Marketing: A South Asian Perspective, Pearson.
	2. Etzel, Michael J., Walker, Bruce J., Staton, William J., and Ajay Pandit, Marketing Concepts and Cases, Tata McGraw Hill (Special Indian Edition).
	3. Chhabra, T.N., Principles of Marketing, Sun India Publication.
	4. Kazmi, SHH, Marketing Management Text and Cases, Excel Books.
	5. Zikmund, William G. and Michael D'Amico, Marketing: Creating and Keeping Customers in an E-Commerce World, South-Western College Pub.
	<ol> <li>Rajagopalan, Marketing Management: Text and Cases, Vikas Publishing House</li> </ol>

	DSE-3A: Computer Application And Management
	(Credit: 04, Theory: 60 Periods, Marks: 100)
	Course Objectives:
•	The aim of the course is to build knowledge, understanding Computer
•	Applications among the student.  The course seeks to give detailed knowledge about the subject matter by
	instilling them basic ideas about Computer Applications.
•	To give the basic knowledge of computer system use and working principles of various peripheral devices and information technology
•	To Gain familiarity with the concepts and terminology used in the development, implementation and operation of management application
Unit 1:	systems.  Basics of Information Technology [15]
	Computer Systems: characteristics of a computer, components of a computer system – CPU, memory, storage devices and I/O devices     Memory: primary (RAM and ROM) and secondary memory
	• Storage devices: hard disk, CD ROM, DVD, pen/flash drive, memory stick
	• I/O devices: keyboard, mouse, monitor, printer, scanner, web camera
	• Types of software: system software (operating system, device drivers), application software including mobile applications
	Computer networking: Type of networks: PAN, LAN, MAN, WAN, wired/wireless communication, Wi-Fi, Bluetooth, cloud computers
	(Private/public)
Unit 3:	• Multimedia: images, audio, video, animation  Office tools: [15]
Omt 3.	
	• Introduction to a word processor: create and save a document.
	• Edit and format text: text style (B, I, U), font type, font size, text colour, alignment of text. Format paragraphs with line and/or paragraph spacing. Add headers and footers, numbering pages, grammar and spell check utilities, subscript and superscript, insert symbols, use print preview, and print a document.
	• Insert pictures, change the page setting, add bullets and numbering, borders and shading, and insert tables – insert/delete rows and columns, merge and split cells.
	• Use auto-format, track changes, review comments, use of drawing tools, shapes and mathematical symbols.
	• Presentation tool: understand the concept of slide shows, basic elements of a slide, different types of slide layouts, create and save a presentation, and learn about the different views of a slide set – normal view, slide sorter view and hand-outs.
	• Edit and format a slide: add titles, subtitles, text, background, and watermark,

	headers and footers, and slide numbers.
	• Insert pictures from files, create animations, add sound effects, and rehearse
	timings.
Unit 3:	Spreadsheet [15]
	Features of spreadsheet-MS Excel – Features of MS Excel; Functions in Excel: Financial functions: NPV, IRR, PMT, IPMT. Statistical functions: AVERAGE, MEAN, MEDIAN, AVEDEV, CORREL, STDEV, RANK. Database functions: DAVERRAGE, DMAX, DMIN, DSUM; Graphics in Excel. Business applications of Excel: Managerial decision-making with Excel; Model development with Excel; Financial analysis using Excel: Break-even analysis, budgeting and ratio analysis with Excel; Inventory management with Excel, Investment appraisal with Excel. Goal seek, pivot table and scenario management for decision-making.
Unit 4:	Internet [15]
	Features of the Internet; WWW: Email, Telnet, FTP, News groups, search engines, portals, Business applications of the Internet. Security issues in E-commerce: security risks in e-commerce, security tools and risk management, IT Act 2000- digital signature, digital signature certificates, e-governance, electronic records, certifying authorities, network appellate tribunal, penalties.  Course Outcomes:
•	Accomplish projects utilizing business theories, Internet resources and computer
	technology.
•	Ability to familiarity with basics of computers, navigate the file system, to create and edit documents, spread sheets, and presentations.
•	Ability to perform basic data manipulation using spread sheets and use Indian languages in documents, to send and receive emails, follow email etiquette's, and communicate over the internet.
•	Ability to create and upload videos,to safely and correctly use websites, social networks, chat sites, and email.
	Reference books:
	<ol> <li>1.A. Goel, Computer Fundamentals, Pearson Education, 2010.</li> <li>2. P. Aksoy, L. DeNardis, Introduction to Information Technology, Cengage Learning, 2006</li> <li>3. P. K.Sinha, P. Sinha, Fundamentals of Computers, BPB Publishers, 2007</li> <li>4. Fundamentals of Computers by Rajaraman, Publisher: Prentice Hall of India, New Delhi</li> <li>5. Rayport: E-Commerce, Tata McGraw Hill, New Delhi.</li> </ol>
	<ul> <li>6. Ravi Kalkotta and Andrew B. Whinston: Frontiers of Electronic Commerce, Addison-Wesley, New Delhi.</li> <li>7. Heary Chan, et.el.: E-Commerce, John Wiley &amp; Sons.</li> <li>8. Edward C.Willet: MS Office, Wiley Publishing Co, New Delhi. 6. MS Excel 2000.</li> </ul>

	DSE-3B: Organizational Behaviour			
	(Credit: 04, Theory: 60 Periods, Marks: 100)			
	Course Objectives:			
•	To study the fundamental concepts of Organization Behaviour. And understand the			
	impact of individual and group behaviour on organizational effectiveness.  To learn on the motivation and leadership influence to Behaviour and Performance.			
•	As well Group Dynamics of people management and conflict management.			
•	To understand the diverse work culture and essence of Quality Work Life in an			
	Organization.			
•	The course emphasizes on Conflict a Stress Management in a workplace for better			
Unit 1:	Decision making.  Introduction to Organizational Pohysion  [15]			
Unit 1:	Introduction to Organisational Behavior [15]			
	Management and Organizational Behaviour, Theories of Management, Major Behavioural Science that contribute to Organizational Behaviour-Psychology, Sociology, Socio-Psychology, Political Science, Anthropology, Organizational structure, Dynamics of People and Organization, Models of Organizational Behaviour, Hawthorne studies, Challenges and opportunities in Organizational Behaviour.			
Unit 2:	Motivation, Personality & Perception: [15]			
	Motivation-Motivation and Behaviour, theories of Motivation, Reinforcement theory, Organisational Learning Process, Motivation and performance, Financial and Non-financial incentives, Personality-Determinants of personality, Type A and Type B personality, Values, Attitudes & Beliefs, Argyris's Maturity- Immaturity Continuum, Perception-Motivation and Perception, Meaning, Need of Perceptual process, Factors influencing Perceptual process, self-concept and self-esteem.			
Unit 3:	Group Dynamics and Stress Management: [15]			
	Group Dynamics-Team & Group difference, Group Effectiveness, Formal & Informal Group, Stages of Group Development, Group Decision Making, Inter group relation and Conflict, Stress Management-Stress and Behaviour, Sources of Stress, Consequences of Stress and Performance.			
Unit 4:	Leadership, Conflict Management and Power & Politics: [15]			
	Leadership-Introduction and characteristics of Leadership, Formal and Informal leadership, Theories of Leadership, Conflict Management-Nature of Conflict, Sources of Organizational Conflict, Modes of Conflict Resolution, Conflict Management, Power & Politics-Difference between Influence, Power & Authority, Sources of power, Organizational Politics, Machiavellian ism, Ethics of Power and Politics in Organizations.  Course Outcomes:			
•	Students will gain a comprehensive understanding of the concept of Organizational Behaviour and Relationship to other fields and Learning.			
•	Students will understand about the Attitude, changing of attitude and aspects of			
	personality.			
	Students will learn about the Perception, factors influencing perception, Group			

	Dynamics and Team Development.
•	Will enable the students to learn about Organizational Conflict, its Dynamics,
	Traditional and modern approaches to conflict and Organizational development.
	Reference books:
	1. Uma Sekaran, Organisational Behaviour, Tata McGraw Hill
	2. John W Newstrom, Organisational Behaviour, Tata McGraw Hill
	3. Stephen P.Robbins, Timothy A. Judge, Niharika Vohra (18th ed.), Pearson
	Education, New Delhi
	4. L. M. Prasad, Organisational Behaviour, Sultan Chand & Sons
	5. Fred Luthans- Organisational Behaviour- McGraw Hill Book Co.
	6. Organisational Behaviour: Text, Cases & Games Paperback – 2017,by K.
	Aswathappa (Author)

(Credit: 02, Practical: 60 Periods, Marks: 50) ractical's:  ature Review: Conduct a literature review on a topic of interest to restand existing research.  arch Proposal Writing: Develop a research proposal including objectives, odology, and expected outcomes.  ey Design: Design a survey questionnaire to collect data on a specific rech question.
ature Review: Conduct a literature review on a topic of interest to restand existing research.  arch Proposal Writing: Develop a research proposal including objectives, odology, and expected outcomes.  ey Design: Design a survey questionnaire to collect data on a specific
rstand existing research. arch Proposal Writing: Develop a research proposal including objectives, odology, and expected outcomes. ey Design: Design a survey questionnaire to collect data on a specific
oling Techniques: Explore various sampling techniques like random ling, stratified sampling, etc., and apply them to a hypothetical research ario.  Collection Methods: Practice data collection methods such as interviews, rvations, and experiments.  Analysis: Learn statistical analysis techniques like descriptive statistics, lation, regression, and apply them to analyze collected data. al Considerations: Discuss ethical issues in research and propose solutions thical dilemmas.  arch Presentation: Prepare and deliver a presentation of research findings,

DSE-6- P: Marketing Management
(Credit: 02, Practical: 60 Periods, Marks: 50)
List of Practical's :
1.To study project life cycle of any two products.
2. To marketing research of any two companies.
3. To study distribution channel of any two companies.
4. To study promotional strategies of any two companies.
5. To study advertisement strategies of any two companies.
6. Case study on branding of a product.
7. To study pricing strategies of any two companies.

	DSE-3A-P: Computer Application And Management (Credit: 02, Practical: 60 Periods, Marks: 50)
L	ist of Practicals :
1.	Browser settings for a secure connection
2.	Working with the operating system: Navigation of the file system using a mouse and keyboard.
3.	Word processing: create a text document; create a letter, report, and greeting card.
4.	Create a text document with figures in it. It should describe a concept taught in another course.
5.	Discuss the following in a text document about the basic organisation of a computer: CPU, memory, input/output devices, hard disk.
6.	Create a text document in an Indian language other than English.
7.	Create a presentation.
8.	Create a presentation with animation.
9.	Include existing images/ pictures in a presentation.
10	O. Animate pictures and text with sound effects in a presentation
1	1. Create a simple spreadsheet and perform the following operations: min, max, sum, and average.
1:	2. • Create different types of charts using a spreadsheet: line, bar, area and pie.

DSE-3 B-P: Organisational Behaviour
(Credit: 02, Practical: 60 Periods, Marks: 50)
List of Practicals :
Power Point Presentations: on theories of motivation linked with existed practices by MNC companies.
2. Practical Exercises on Learning and Perception
3. Study a leader of your choice and identify ten leadership qualities that make his/her a great leader. Prepare a chart for the same
4. To study stress management system of any organisation.
5. Case Study on Motivation

# **Semester IV**

	DSE-7: Digital Marketing and Consumer Behavior
	(Credit: 04, Theory: 60 Periods, Marks: 100)
	Course Objectives:
•	To understand the basic Concepts of Digital marketing and the road map for successful Digital marketing strategies
•	To know the importance of Social media Platforms importance in Digital Marketing
•	To understand the technological importance of SEO
•	How to creates effective Ad Words campaign & Advertising Positioning with respect to the Digital marketing
Unit 1:	Introduction to Digital Marketing [15]
	Introduction of the digital marketing, Digital vs. Real Marketing, Digital Marketing Channels, Creating initial digital marketing plan, Content management, SWOT analysis, Target group analysis. Digital marketing tools/e-tools; the online marketing matrix including business and Consumer markets; the online customer.
Unit 2:	Search Engine Optimization: [15]
	SEO- Search Engine Optimization, SEM - Search Engine Marketing, Social Media Marketing/Optimization, Website Designing and Development, Google AdWords- creating accounts, Google AdWords- types, Introduction to CRM, CRM platform, CRM models.
Unit 3:	Social Media Marketing: [15]
	Creating a Facebook page, Visual identity of a Facebook page, Types of publications, Creating Facebook Ads; Creating business accounts on YouTube, YouTube Advertising, and YouTube Analytics; Business opportunities and Instagram options, Optimization of Instagram profiles,
	Integrating Instagram with a Web Site and other social networks; Business

	tools on Linked-In, Creating campaigns on Linked-In; E-mail marketing, E-mail marketing plan, E-mail marketing campaign analysis.
Unit 4:	Consumer Buying Behavior [15]
	Introduction, consumer decision process, Consumer Motivation, Personality and Consumer Behavior, Consumer Perception, The Family and Social Class, Influence of Culture on Consumer Behavior, Consumers and the Diffusion of Innovation.
	Course Outcomes:
•	Students will be able to identify the importance of the digital marketing for marketing success
•	To gain the knowledge that how to manage customer relationships across all digital channels and build better customer relationships,
•	To create a digital marketing plan, starting from the SWOT analysis and defining a target group, then identifying digital channels, their advantages and limitations,
•	Develops and implements comprehensive digital marketing strategies to promote products or services online, ensuring a solid and impactful online brand presence.
	Reference Books
	<ol> <li>Vandana Ahuja, Digital Marketing, Cloud India.</li> <li>Seema Gupta, Digital Marketing, Mc-Graw Hill.</li> <li>Puneet Singh Bhatia, Fundamentals of Digital Marketing, Pearson.</li> <li>Philip Kotler, Marketing 4.0: – Moving from Traditional to Digital, Wiley.</li> <li>Dr.Ragavendra K. and Shruthi P., Digital Marketing, Himalaya Publishing House Pvt. Ltd.</li> <li>Bennet and Kassarjian, CONSUMER BEHAVIOUR, Prentice Hall of India, New Delhi</li> <li>Ramanuj Majumdar, CONSUMER BEHAVIOUR, Prentice Hall of India, New Delhi, 2011</li> </ol>

	DSC- 8 Human Resources Management (Credit: 4, Theory: 60 Periods, Marks: 100)
	Course Objectives:
•	To understand HRM practices and its influence on Environment.
•	To understand HR planning and Psychological issues in Human Resource Planning.
•	To provide knowledge about Industrial Development.
•	To Understand Recent Trends in HRM.
Unit 1:	Introduction to HRM: [15]
	Meaning, Importance and Evolution, importance of Human Organisations, HRM department as an integral part of organizations, Objectives of HRM

	department, HRM in global setting.	
Unit 3:	Human Resource Planning [15]	
	Role of HRP - Factors affecting HRP, Steps in HRP, Information Management in HRP - Importance of Human Resource Information System, Job Analysis Process - Tools and Techniques, Psychological and Behavioural Issues in HR Recruitment and Selection: Purpose, Importance and Sources of Recruitment - Factors, affecting recruitment process, Tools of selection and Selection Process.	s - P.
Unit 3:	Training:	
	Need, objectives and importance of training, Designing an Effective Training and Development Programme, Evaluation of the Effectiveness of Training Programmes, Challenges before a Trainer, Self-Development Mechanist Knowledge Enrichment and Career Advancement.  Appraising and Managing Performance: Introduction - definition, objective need and importance of Performance Appraisal, Process of Performance Appraisal, Traditional and Modern Techniques of Performance Apprais	ng m, es,
	Limitations of Performance Appraisal, Ethical aspects in Performance Apprais	
Unit 4:	Recent trends in Human Resources Management: [15]	
	"Work - Life Balance" as an important component of HRM, Corporate Soc Responsibility and HRM, HRM issues related to BPO - KPO - Organization Restructuring. Artificial intelligence in HR, Hybrid working.  Course Outcomes:	
•	To understand HRM from Environmental perspectives.	
•	To understand the HRM and its relevance in contest with global economy.	
•	Describe practices in the areas of recruitment, training, selection a development.	nd
•	To access and apply knowledge of recent global trends in HRM	
	Reference books:	
	<ol> <li>Management of Human Resource (A Behavioural approach to personnel) b Darovedo R.S. / Oxford and IBH Publishing Co., New Delhi - 1952.</li> <li>Personnel Management (Management of Human Resources) by Dr. C. B. Mmoria / Himalaya Publishing. House, Bombay - 1980.</li> <li>Managing Human Resource, Productivity, Quality of Work life, Profits Wayne F Cascio / McGraw Hill International Editions - 1986. 17</li> <li>Human Resource Development - Te Recent Experience by Sievera.</li> <li>Readings in Human Resource Development by T V Rao.</li> <li>Recent Experience in HRD by T V Rao and D Perera.</li> <li>Training for Development by Perera and Linton.</li> </ol>	-

DSE-4 A:	<b>Operation Management</b>

	(Credit: 04, Theory: 60 Periods, Marks: 100)
	Course Objectives:
•	To help to understand production and operation functions of business.
•	To help to understand and acquire knowledge of production planning
•	To make known the students with the quality management practice in business firm.
•	To make aware students about maintenance system of the organization.
Unit 1:	Operation Management Introduction: [15]
	Scope, characteristics of modern operations functions - recent trends in production / operations management.  Designing of operational systems and control: Product Design, Process design - Selection - Product Life Cycle - Process Planning - Process Selection.
Unit 3:	Operations Planning: [15]
	Demand forecasting – capacity planning - capacity requirement planning - facility location - facility layout – Resource aggregate planning – Material requirements planning – Manufacturing resource planning – Economic Batch quantity.
Unit 3:	Materials Management: [15]
	Basic Concept, Importance of Materials Management, Objectives of Material Management, Purchasing, Procurement Cycle, Bill of Materials, Vender Rating, Methodology of Rating, 5R's of Buying, Methods of Buying, Inspection & Quality Control, Concept of Inventory Management.
Unit 4:	Quality Management: [15]
	Quality Management Evolution of Quality Management and Contribution of quality Gurus, Importance and need for Quality Systems Six Sigma, SQC, ISO 9000 System, SPC Systematic Problem-Solving Methodology Lean Operations, Quality System Certification Procedure, Quality Circles.
	Course Outcomes:
•	Provide information about Maintenance and material Management for entrepreneurial activity
•	To provide information about how to maintain Quality in Management.
•	Calculate resource allocations using operations management tools and techniques and analyze performance using appropriate quantitative methods.
•	Apply operations management concepts to solve operational problems such quality management, supply chain, inventory management, facilities management, and scheduling.  Reference books:
	<ol> <li>Harold Koontz and Heinz Weihrich, Essentials of Management, Tata McGraw-Hill, 6th Edition</li> <li>Stephen P. Robbins, Organizational Behavior, Prentice Hall of India, 9th</li> </ol>

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- 3. Saxena., Principles and Practice of Management4. Production and Operations Management Chary
- 5. Schniederjans, M.J. Operations Management in a Global Context 6. https://icmai.in/upload/Students/Syllabus2016/Inter/Paper-9New.pdf

	DSE-4 B: Decision Making and Taxation (Credit: 04, Theory: 60 Periods, Marks: 100)
	Course Objectives:
•	To help the student to gain the knowledge about income tax.
•	To help the student to understand financial statements and sources of finance for business and enable students in creating and maintaining financial statement.
•	To introduce the student about Income Tax and its basic concepts.
•	To introduce the student about GST (Goods and Services Tax Introduction)
Unit 1:	Understanding Financial Management: [15]
	Ratio Analysis, Cash Flow Statements, Working Capital: Determination & Calculation, Operating Cycle, Computation of Working Capital Source of Finance: Long-Term and short-term sources of finance
Unit 3:	Costing: [15]
	What is Cost, Classification Cost, Cost Sheet, Marginal Costing, Cost-Volume Profit Relationship, Mathematical Relationship between Cost-Volume Profit, Margin of Safety, BEP Analysis: Graphical Analysis, Use of Marginal costing in decision making- pricing decision, make or buy etc.
Unit 3:	Income Tax: Introduction and basic concepts: [15]
	Residential status, - Computation of income from business or profession- Profits and gains of business or profession- Methods of Accounting, Deductions expressly allowed and expressly disallowed; Computation of income from other sources; Deductions from gross total income 80-C, 80-D, 80-E, 80-G, 80-U., Filing ITR under section 44AD, 44ADA, 44AB, Maintaining of books of accounts under section 44AA, Concept of ITR 3 and 4, Concept of Tax Return Preparer (TRP)
Unit 4:	Introduction to Goods and Services Tax: [15]
	Meaning, concept of CGST, SGST and IGST, concept of supply, input tax credit, Benefits of implementing GST, Concept of GSTR, Procedure of registration under GST law, Concept of GST Practitioner.
	Course Outcomes:
•	Identify taxation issues that commonly arise
•	Acquire basic knowledge of income tax and finance.

•	Acquire basic knowledge of GST.	
•	Understand the cost concept	
	Reference books:	
	<ol> <li>Jawahar Lal, Cost Accounting, Tata McGraw Hill New Delhi</li> <li>Bhabator Banerjee, Cost Accounting –Theory and Practice, PHI Pvt. Ltd, New Delhi.</li> <li>Taxman, Basis of GST.</li> <li>Singhanar V.K: Students' Guide to Income Fax; Taxmann, Delhi.</li> <li>Jain P K, M. Y. Khan, Management Accounting, Tata McGraw Hill New Delhi.</li> </ol>	

	DSE-7-P: Digital Marketing and Consumer Behavior
	(Credit: 02, Practical: 60 Periods, Marks: 50)
	List of Practicals :
•	1. Prepare case study on content management.
	2. To study on digital marketing channels of any business.
	3. Prepare case study on content management
	4. To study the significance of SEO with an example.
	5. To create the website using Google Sites.
	6. To prepare Google ads plan for new venture.
	7. To study procedure for creating Youtube channel for a business.
	8. To study procedure for creating Facebook page for a business.
	9. To study Consumer behavior process of a product.
	10. Student will plan and create a webpage will display web presence

		DSE-4-AP: Operation Management
	(Credit: 02, Practical: 60 Periods, Marks: 50)	
	List of Practicals :	
•	1.	Writing exercise: Well-designed Supply chain – An illustration
	2.	How to know how many to produce
	3.	How to understand and measure quality?
	4.	Prepare the assigned cases, readings, exercises, and discuss them in class;
	5.	Prepare a one-page review of the book Harold Koontz and Heinz Weihrich, Essentials of Management, Tata McGraw-Hill.
	6.	Manage a virtual plant in a simulation exercise and prepare a written report on this
		experience.

	DSE-4-BP: Decision Making and Taxation (Credit: 02, Practical: 60 Periods, Marks: 50)
	List of Practicals :
•	Prepare working capital determination statement for a business.
	2. Prepare problems on cost sheet.
	3. Prepare problem on make or buy decision.
	4. Calculate tax liability of a salaried person.
	5. Calculate tax liabilities from income from business and profession.
	6. Calculate GST liability of a business.
	7. Preparation of ITR 3 and 4
	8. Preparation of GSTR 3b, 1, 2A, 2B, 4A and CMP-08