



# VEER BAHADUR SINGH PURVANCHAL UNIVERSITY

JAUNPUR - 222003 (U.P.)

vbspu.ac.in

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**Course Outcome as Job Prospects are highlighted as provided then in side the Green Box**





VEER BAHADUR SINGH PURVANCHAL UNIVERSITY, JAUNPUR

Department of Financial Studies

Semester – I

Title of course- Essentials of Banking – I

Nodal Department of HEI to run course	Department of Financial Studies
Broad Area/Sector-	Banking and Finance
Sub Sector-	Banking
Name of course – Independent/Progressive	Independent
Name of suggestive Sector Skill Council	Banking & Financial Services Insurance [BFSI]
Aliened NSQF level	Level 6
Expected fees of the course – Free/Paid	Free
Stipend to student expected from industry	₹15000.00 - ₹25000.00
Number of Seats-	20
Course Code- F070101P	Credits- 03 (1 Theory, 2 Practical)
Max Marks... 100..... Minimum Marks.....	Max. Marks – 100; Min. Marks – 50
Name of proposed skill Partner (Please specify, Name of industry, company, etc. for Practical/training/internship/OJT)	Indian Institute of Banking and Finance; National Institute of Bank Management; Indian Society for Legal Research
Job prospects- Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company etc.)	Financial planning and decision making for banks and individuals and act as bank executive

Syllabus

Unit	Topics	General/Skill component	Theory/ Practical/ OJT/ Internship/ Training	No of theory hours (Total – 15 Hours=1 credit)	No of skill Hours (Total – 60 Hours=2 credit)
Unit I	<b>Banking [Primary]:</b> Meaning, Evolution and Structure of Banking System. Banking Terminologies. Functions and Types of Banks. Types of Deposits and Loan, Loan Processing System. Banker Customer Relationship. Accounting for Banks. Bank Lab.	Learner will be able to understand the banking system in India and calculate and record the financial figures and transactions respectively in books of accounts.	Theory/ Practical/ OJT/ Internship/ Training	07	25
Unit II	<b>Banking [Regulation]:</b> Reserve Bank of India Act, 1934, Banking Regulation Act, 1949, Prevention of Money Laundering Act, 2002, KYC, AML and CFT, Grievance Redressal	Learner will be able to understand about how to comply with the legal formalities related to banks; prevent money laundering and dispose	Theory/ Practical/ OJT/ Internship/ Training	08	35

	Mechanism Banking Ombudsman, Bank Lab.	complaints received against banking personnel.			
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**Suggested Readings:**

1. Essentials of Banking, Deborah K. Dilley, Wiley, [2008]
2. The Principles of Banking, Moorad Choudhry, Wiley, [2022]
3. Banking Law and Practice, Sukhvinder Mishra, S. Chand., [2012]
4. Principles of Banking Regulation, Kern Alexander, Cambridge University Press, [2019]

**Suggested Digital platforms/web links for reading-**

1. <https://blogmedia.testbook.com/blog/wp-content/uploads/2020/05/basics-of-banking-097aed24.pdf>
2. <https://www.icsi.edu/media/webmodules/publications/9.1%20Banking%20Law%20Professional.pdf>

**Suggested OJT/Internship/Training/Skill partner**

- Indian Institute of Banking and Finance
- National Institute of Bank Management
- Indian Society for Legal Research

**Suggested Continuous Evaluation Methods:** The learners will be evaluated on the basis of quiz and assessed through presentation and hands on practice.

**Course Pre-requisites:**

- No pre-requisite required, open to all
- To study this course, a student must have the subject **science/commerce/arts** in class 12<sup>th</sup> certificate/diploma
- If progressive, to study this course a student must have passed previous courses of this series.

**Suggested equivalent online courses: Economic of Banking and Finance [NPTEL]**

**Any remarks/suggestions:** Learners will be acquainted with practices and regulations of bank and by visiting the reputed and concerned banking institute.

**Notes:**

- Number of units in Theory/Practical may vary as per need
- Total credits/semester-3 (it can be more credits, but student will get only 3credit/semester or 6credits/ year)
- Credits for Theory =01 (Teaching Hours = 15)
- Credits for Internship/OJT/Practical = 02 (Training Hours = 60)



Nodal Department of HE to run course	Department of Financial Studies
Broad Area/Sector-	Banking & Finance
Sub Sector-	Banking
Name of course – Independent/Progressive	Independent
Name of suggestive Sector Skill Council	Banking & Financial Services Insurance [BFSI]
Aliened NSQF level	Level 6
Expected fees of the course – Free/Paid	Free
Stipend to student expected from industry	₹15000.00 - ₹25000.00
Number of Seats-	20
Course Code- F070201P	Credits- 03 (1 Theory, 2 Practical)
Max Marks...100..... Minimum Marks.....	Max. Marks – 100; Min. Marks – 50
Name of proposed skill Partner (Please specify. Name of industry, company, etc. for Practical/training/internship/OIT)	Indian Institute of Banking and Finance; National Institute of Bank Management
Job prospects- Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company etc.)	Providing consultancy to unbanked people and act as a bank facilitator through BCBF Model.

Syllabus

Unit	Topics	General/Skill component	Theory/ Practical/ OJT/ Internship/ Training	No of theory hours (Total – 15 Hours=1 credit)	No of skill Hours (Total – 60 Hours=2 credit)
Unit I	<b>Banking [Operation]:</b> Retail and Wholesale Banking. Types of Customers, Opening, Operation and Closing of Accounts, Nomination, Banking Negotiable Instruments like Cheques, Banker's Cheques, Demand Drafts, ATM & Debit Cards, Credit Cards, Charge Cards, Crossing of Cheques, Endorsement, Filling Up of Different Banking Instruments, RTGS, NEFT, BCBF Model, Bank Lab.	Learner will be able to understand the necessary procedural formalities for banking transaction and develop skill for fulfilling banking needs of people.	Theory/ Practical/ OJT/ Internship/ Training	08	30
Unit II	<b>Banking [Digitalization]:</b> Bank Computerisation,	Learner will be exposed to the use of computer in	Theory/ Practical/ OJT/	07	30

	Digital Banking, Branchless Banking, Digital Banking Products, Payment Banks, Electronic Fund Management System: ECS, RTGS, NEFT, CBS, ATMs, POS Terminals, CTS, NPCI etc., Cyber Crime and Fraud Management, Integrated Communication for Security and Control, Bank Lab.	executing banking actions and acquainted with the possibility of happening of cybercrime.	Internship/ Training		
<p>Suggested Readings:</p> <ol style="list-style-type: none"> <li>1. Banking Operations, Colin Watson, Global Professional Publishing, [2013]</li> <li>2. An Introduction to Banking: Principles, Strategy and Risk Management, Moorad Choudhry, John Wiley &amp; Son, [2018]</li> <li>3. Digital Transformation in Financial Services, Claudio Scardovi, Springer, [2017]</li> <li>4. The Digital Journey of Banking and Insurance, Volker Liermann &amp; Claus Stegmann, Palgrave Macmillan, [2021]</li> </ol>					
<p>Suggested Digital platforms/web links for reading-</p> <ol style="list-style-type: none"> <li>1. <a href="https://www.mckinsey.com/industries/financial-services/our-insights/banking-matters/banking-operations-for-a-customer-centric-world">https://www.mckinsey.com/industries/financial-services/our-insights/banking-matters/banking-operations-for-a-customer-centric-world</a></li> <li>2. <a href="https://www.researchgate.net/publication/333709259">https://www.researchgate.net/publication/333709259</a> Digitalization in Banking Sector</li> </ol>					
<p>Suggested OJT/Internship/Training/Skill partner</p> <ul style="list-style-type: none"> <li>• Indian Institute of Banking and Finance</li> <li>• National Institute of Bank Management</li> </ul>					
<p>Suggested Continuous Evaluation Methods: The learners will be evaluated on the basis of quiz and assessed through presentation and hands on practice.</p>					
<p>Course Pre-requisites:</p> <ul style="list-style-type: none"> <li>• No pre-requisite required, open to all</li> <li>• To study this course, a student must have the subject <b>science/commerce/arts</b> in class 12<sup>th</sup>/ certificate/diploma</li> <li>• If progressive, to study this course a student must have passed previous courses of this series.</li> </ul>					
<p>Suggested equivalent online courses: Money and Banking [NPTEL]</p>					
<p>Any remarks/suggestions: Learners will be acquainted with practices of banking operations and understand the digital function and malpractices in banking by visiting reputed and concerned banking institute.</p>					
<p>Notes:</p> <ul style="list-style-type: none"> <li>• Number of units in Theory/Practical may vary as per need</li> <li>• Total credits/semester-3 (it can be more credits, but student will get only 3credit/semester or 6credits/ year)</li> <li>• Credits for Theory =01 (Teaching Hours = 15)</li> <li>• Credits for Internship/OJT/Practical = 02 (Training Hours = 60)</li> </ul>					

Semester – III

Title of course- Essentials of Finance – III

Nodal Department of HEI to run course	Department of Financial Studies
Broad Area/Sector-	Banking and Finance
Sub Sector-	Financial Services
Name of course – Independent/Progressive	Independent
Name of suggestive Sector Skill Council	Banking & Financial Services Insurance [BFSI]
Aliened NSQF level	Level 7
Expected fees of the course – Free/Paid	Free
Stipend to student expected from industry	₹20000.00 - ₹30000.00
Number of Seats-	15
Course Code- F070301P	Credits- 03 (1 Theory, 2 Practical)
Max Marks...100..... Minimum Marks.....	Max. Marks – 100; Min. Marks – 50
Name of proposed skill Partner (Please specify, Name of industry, company, etc. for Practical/training/internship/OJT)	Indian Institute of Finance; Indian Institute for Finance and Management; National Institute of Financial Management; Insurance Institute of India
Job prospects- Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company etc.)	Managing wealth of people and act as an agent of life insurance company

Syllabus

Unit	Topics	General/Skill component	Theory/ Practical/ OJT/ Internship/ Training	No of theory hours (Total – 15 Hours=1 credit)	No of skill Hours (Total – 60 Hours=2 credit)
Unit I	<b>Finance [Personal]:</b> Meaning, Managing Money through Saving, Spending and Investment, Financial Values, Goals and Strategies, Various Avenues of Investment, Risk Management, Choice of Best Investment Alternative, Make Life Simple through Financial Literacy, Tips for Investment Decision, Finance Lab.	Learner will be equipped with the various modes of investment for creation of wealth and a better understanding of risk factor in investment.	Theory/ Practical/ OJT/ Internship/ Training	07	30
Unit II	<b>Finance [Life Insurance]:</b> Meaning, Need, Types and Principles of Life	Learner will be able to understand the importance of life insurance	Theory/ Practical/ OJT/	08	30

	Insurance. Life Insurance: Selection and Procedure, Joint Life Policy, Premium, Revival, Lapse, Surrender, Claim, Assignment, Accidental Benefit and Suicide Aspect of Policy, Annuity and Unit Linked Insurance Policy, Finance Lab.	policy in the life of an individual and become an insurance agent.	Internship/ Training		
<p><b>Suggested Readings:</b></p> <ol style="list-style-type: none"> <li>1. Personal Financial Literacy, Joan S. Ryan, South-Western/Cengage, [2011]</li> <li>2. 16 Personal Finance Principles, Manish Chauhan, Networking 18 Publication, [2013]</li> <li>3. Selling Life Insurance: The Practical Way, B. Raman, Macmillan Publishers, [2009]</li> <li>4. Managing Life Insurance, Shashidharan K. Kutty, Prentice-Hall of India, [2008]</li> </ol>					
<p><b>Suggested Digital platforms/web links for reading-</b></p> <ol style="list-style-type: none"> <li>1. <a href="https://www.adityabirlacapital.com/abc-of-money/beginners-guide-for-personal-finance">https://www.adityabirlacapital.com/abc-of-money/beginners-guide-for-personal-finance</a></li> <li>2. <a href="https://www.insuranceinstituteofindia.com/web/guest/e-book">https://www.insuranceinstituteofindia.com/web/guest/e-book</a></li> </ol>					
<p><b>Suggested OJT/Internship/Training/Skill partner</b></p> <ul style="list-style-type: none"> <li>• Indian Institute of Finance</li> <li>• Indian Institute for Finance and Management</li> <li>• National Institute of Financial Management</li> <li>• Insurance Institute of India</li> </ul>					
<p><b>Suggested Continuous Evaluation Methods:</b> The learners will be evaluated on the basis of quiz and assessed through presentation and hands on practice.</p>					
<p><b>Course Pre-requisites:</b></p> <ul style="list-style-type: none"> <li>• No pre-requisite required, open to all</li> <li>• To study this course, a student must have the subject <b>science/commerce/arts</b> in class 12<sup>th</sup>/ certificate/diploma</li> <li>• If <b>progressive</b>, to study this course a student must have passed previous courses of this series.</li> </ul>					
<p><b>Suggested equivalent online courses:</b> Behavioural and Personal Finance [NPTEL]; Compliance, Governance and Risk Management in Insurance [Insurance Institute of India]</p>					
<p><b>Any remarks/suggestions:</b> Learners will get an insightful experience about insurance practices by visiting reputed and concerned insurance institute.</p>					
<p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>• Number of units in Theory/Practical may vary as per need</li> <li>• Total credits/semester-3 (it can be more credits, but student will get only 3credit/semester or 6credits/ year)</li> <li>• Credits for Theory =01 (Teaching Hours = 15)</li> <li>• Credits for Internship/OJT/Practical = 02 (Training Hours = 60)</li> </ul>					







VEER BAHADUR SINGH PURVANCHAL UNIVERSITY, JAUNPUR

Department of Financial Studies

Semester – IV

Title of course- Essentials of Finance – IV

Nodal Department of HEI to run course	Department of Financial Studies
Broad Area/Sector-	Banking and Finance
Sub Sector-	Financial Services
Name of course – Independent/Progressive	Independent
Name of suggestive Sector Skill Council	Banking & Financial Services Insurance [BFSI]
Aliened NSQF level	Level 7
Expected fees of the course – Free/Paid	Free
Stipend to student expected from industry	₹20000.00 - ₹30000.00
Number of Seats-	15
Course Code- F070401P	Credits- 03 (1 Theory, 2 Practical)
Max Marks...100..... Minimum Marks.....	Max. Marks – 100; Min. Marks – 50
Name of proposed skill Partner (Please specify, Name of industry, company, etc. for Practical/training/internship/OJT)	Indian Institute of Finance; Indian Institute for Finance and Management; National Institute of Financial Management

Job prospects- Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company etc.) Act as a financial and investment advisor for various financial organisation, trade in stock market

**Syllabus**

Unit	Topics	General/Skill component	Theory/ Practical/ OJT/ Internship/ Training	No of theory hours (Total – 15 Hours=1 credit)	No of skill Hours (Total – 60 Hours=2 credit)
Unit I	<b>Finance [Corporate]:</b> Meaning, Concept and Use of Finance, Financial Assets, Financial Planning, Financial Advisor, Fund Raising, Issue <b>Management.</b> Financial <b>Statement:</b> Analysis and Interpretation. Finance Lab.	Learner will be able to prepare financial plan, goal for corporates and advise how to depict sound financial statements.	Theory/ Practical/ OJT/ Internship/ Training	07	30
Unit II	<b>Finance [Investment Management]:</b> Meaning and Basics of Investment, Speculation and Gambling, Types of Security, Money Market, Capital Markets, Forex Market, Derivatives Market, Fundamental Analysis:	Learner will be able to understand the importance of investment and suggest rational decision to potential investor and provide consultancy and training to the	Theory/ Practical/ OJT/ Internship/ Training	08	30



Economic, Industry and Company, Technical Analysis: Indicators, Oscillators and Charts, Construction of Portfolio, Stock Trading, Finance Lab.	people having willingness either to make investment or make career in stock market.			
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#### Suggested Readings:

1. Corporate Finance: Theory and Practice, Pierre Vernimmen, Pascal Quiry, Maurizio Dallochio, Yann Le Fur, Antonio Salvi, John Wiley and Sons, [2017]
2. Advanced Corporate Finance, Chandrasekhar Krishnamurti, Prentice-Hall of India, [2010]
3. Investment Management: A Modern Guide to Security Analysis and Stock Selection Ramanna Vishwanath, Chandrasekhar Krishnamurti, Springer, [2009]
4. Investment Management: Theory and Practice, Dr. R.P. Rustagi, S. Chand & Sons., [2021]

#### Suggested Digital platforms/web links for reading-

1. <https://corporatefinanceinstitute.com/course/corporate-finance-fundamentals/>
2. [https://kanchiuniv.ac.in/coursematerials/IM%20UNIT-%20I%20\(2\).pdf](https://kanchiuniv.ac.in/coursematerials/IM%20UNIT-%20I%20(2).pdf)

#### Suggested OJT/Internship/Training/Skill partner

- Indian Institute of Banking and Finance
- National Institute of Bank Management
- Indian Institute of Finance
- National Stock Exchange
- Bombay Stock Exchange

**Suggested Continuous Evaluation Methods:** The learners will be evaluated on the basis of quiz and assessed through presentation and hands on practice.

#### Course Pre-requisites:

- No pre-requisite required, open to all
- To study this course, a student must have the subject **science/commerce/arts** in class 12<sup>th</sup> certificate/diploma
- If progressive, to study this course a student must have passed previous courses of this series

**Suggested equivalent online courses:** Financial Markets: A Beginner's Module [NSE]

**Any remarks/suggestions:** Learners will be acquainted with the management of finance in corporates and understand the financial environment by visiting reputed and concerned financial institute.

#### Notes:

- Number of units in Theory/Practical may vary as per need
- Total credits/semester-3 (it can be more credits, but student will get only 3 credit/semester or 6 credits/ year)
- Credits for Theory = 01 (Teaching Hours = 15)
- Credits for Internship/OJT/Practical = 02 (Training Hours = 60)



**INFORMATION TECHNOLOGY**  
**Semester-I**

Title of the Course	Information Technology
Nodal Department of HEI to run course	Computer Science and Engineering
Broad Area/ Sector	Information Technology
Nature of Course- Independent/Progressive	Progressive
Expected Fees of the Course- Free/Paid	Nil.
Stipend of student expected from industry	Rs. -10000 and more
Number of Seats	30
Course Code	CSESDC-3101
Max Marks	100
Minimum Marks	33
Job Prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry)	Computer Networking, hardware, software industry as well as in public/private sector.

UNIT	Topics	Periods
UNIT 1	<b>1.0 Introduction to Computer &amp; Basic Concepts</b> 1.1 What is Computer? 1.2 Objective of Computer System 1.3 Characteristics of Computer System 1.4 Basic Applications of Computer System 1.5 Components of Computer System 1.6 Generation of Computer	3L-6P
UNIT 2	<b>2.0 Computer Hardware</b> 2.1 Introduction to Computer Hardware 2.2 Getting started with PC hardware support 2.3 Electricity and power systems 2.4 CPUs and motherboards 2.5 Basic I/O System, Memory systems, Bus structures, color combination of network cable, Expansion cards, Ports, connectors, and cables 2.6 Data storage devices, Video and multimedia input/output devices, 2.7 Printers, Portable computers and devices, Connecting computers	3L+6P
UNIT 3	<b>3.0 Computer Software</b> 3.1 Introduction to Computer Software 3.2 Aim and objective of software 3.3 Application Software 3.4 System Software 3.5 Role of Software in Computer System 3.6 Comparison between Application Software and System Software	3L-6P
UNIT 4	<b>4.0 Operating System</b> 4.1 Introduction to Operating System 4.2 Basics of Operating System	

	4.2 Aim and objective of Operating System 4.3 Function of Operating System 4.4. Types of Operating System	3L - 6P
UNIT 5	<b>5.0 Install and setup Operating System and related software in a computer</b>	
	5.1 Identify basic first aid and use them under different circumstances 5.2 Identify basic first aid and use them under different circumstances. 5.3 Install and configure Windows OS 5.4 Install the printer and other peripheral devices 5.6 Install application software 5.7 Troubleshoot the PC 5.8 Execute DOS and LINUX commands 5.9 Customize Windows and LINUX OS settings	3L - 6P
	<b>Total (Lecture:1 Hr, Practical:2 Hr)</b>	<b>15L+30 P</b>

References:

1.P.K Sinha &P.Sinha, Computer Fundamentals, BPB Publications

2.Nelson, MS-Office 2000 , Tata McGraw -Hill



**VBS Purvanchal University, Jaunpur (U.P.) -222003**  
**Uma Nath Singh Institute of Engineering & Technology**  
**Department of Computer Science & Engineering**  
**Department of Information Technology**

**INFORMATION TECHNOLOGY**  
**Semester-II**

Title of the Course	Information Technology
Nodal Department of HEI to run course	Computer Science and Engineering
Broad Area/ Sector	Information Technology
Nature of Course- Independent/Progressive	Progressive
Expected Fees of the Course- Free/Paid	NIL
Stipend of student expected from industry	Rs. -10000 and more
Number of Seats	30
Course Code	CSESDC-3102
Max Marks	100
Minimum Marks	33
<b>Job Prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry)</b>	Computer Networking, hardware, software industry as well as in public/private sector.

UNIT 1	1.0 Word Processing (MS-Word)	Periods
	<p>1.1 Word Processing Basics: Opening Word Processing Package, Menu Bar, Using The Help, Using The Icons Below Menu Bar;</p> <p>1.2 Opening and closing Documents: Opening Documents, Save and Save as, Page Setup, Print Preview, Printing of Documents;</p> <p>1.3 Text Creation and manipulation: Document Creation, Editing Text, Text Selection, Cut, Copy and Paste, Spell check, Thesaurus,</p> <p>1.4 Formatting the Text: Font and Size selection, Alignment of Text, Paragraph Indenting, Bullets and Numbering, Changing case;</p> <p>1.5 Formatting a document: Set page margin, paragraphs and sections within a document, Adjust indents and hanging indents;</p> <p>1.6 Table Manipulation: Draw Table, Changing cell width and height, Alignment of Text in cell, Delete / Insertion of row and column Border and shading, Table formulas;</p> <p>1.7 Inserting Graphic Elements: Insert a clip art picture, insert symbols and special characters, adding a watermark.</p> <p>1.8 Mail Merge: Using mail merge; printing mailing labels, merging for sending emails.</p>	3L+6P

UNIT 2	<p><b>2.0 Spreadsheet (MS-Excel)</b></p> <p>2.1 Elements of Electronic Spread Sheet: Opening of Spread Sheet, Addressing of Cells, Printing of Spread Sheet, Saving Workbooks;</p> <p>2.2 Manipulation of Cells: Entering Text, Numbers and Dates, Creating Text, Number and Date Series, Editing Worksheet Data, Inserting and Deleting Rows, Column, Changing Cell Height and Width;</p> <p>2.3 Formulas and Function: Using Formulas, Function, basic mathematical operators, using AutoSum etc., using formulas with multiple cell references, finding the right function, relative and absolute cell references, fixing formula errors;</p> <p>2.4 Charts: learning about charts, creating charts: Working with graphics; Clip Art; Smart Art. Use of Pivot Table and Pivot Chart</p>	3L -6P
UNIT 3	<p><b>3.0 Presentation (Power Point Presentation)</b></p> <p>3.1 Basic Concepts of presentation: Using PowerPoint, Opening A Power Point Presentation, Saving A Presentation;</p> <p>3.2 Creation of Presentation: Creating a Presentation Using a Template, Creating a Blank Presentation, Entering and Editing Text, Inserting And Deleting Slides in a Presentation;</p> <p>3.3 Preparation of Slides: Inserting Word Table or An Excel Worksheet, Adding Clip Art Pictures, Inserting Other Objects, Resizing and Scaling an Object;</p> <p>3.4 Presentation of Slides: Viewing A Presentation, Choosing a Set Up for Presentation, Printing Slides And Handouts;</p> <p>3.5 Slide Shows: Running a Slide Show, Transition and Slide Timings, Automating a Slide Show.</p>	3L -6P
UNIT 4	<p><b>4.0 MS-Access</b></p> <p>4.1 Overview of database concepts</p> <p>4.2 Exploring the User Interface</p> <p>4.3 Opening an Existing Database</p> <p>4.4 Customizing the Access Environment</p> <p>4.5 Designing a Database</p> <p>4.6 Creating a Relational Database in Access</p> <p>4.7 Managing Data in a Table</p> <p>4.8 Querying a Database</p>	3L -6P
UNIT 5	<p><b>5.0 Paint</b></p> <p>5.1 Introduction to Paint</p> <p>5.2 Title Bar, Menu Bar, Tool Box, Color Box, Status Bar, Scroll Bar, Minimize Button, Maximize Button, Close Button</p> <p>5.3 File Menu</p> <p>5.4 Home Menu</p> <p>5.5 View Menu</p> <p>5.6 Shortcuts Keys</p>	3L -6P
<b>Total (Lecture:1 Hr, Practical:2 Hr)</b>		<b>15L.+30P</b>

**References:**

1. MICROSOFT OFFICE WORD 2007
2. MICROSOFT OFFICE EXCEL 2007
3. MICROSOFT OFFICE POWERPOINT 2007
4. MICROSOFT OFFICE ACCESS 2007
5. MICROSOFT WINDOWS





**VBS Purvanchal University, Jaunpur (U.P.) -222003**  
**Uma Nath Singh Institute of Engineering & Technology**  
**Department of Computer Science & Engineering**  
**Department of Information Technology**

**INFORMATION TECHNOLOGY**  
**Semester-III**

Title of the Course	Information Technology
Nodal Department of HEI to run course	Computer Science and Engineering
Broad Area/ Sector	Information Technology
Nature of Course- Independent/Progressive	Progressive
Expected Fees of the Course- Free/Paid	NIL
Stipend of student expected from industry	Rs.-10000 and more
Number of Seats	30
Course Code	CSESDC-3103
Max Marks	100
Minimum Marks	33
Job Prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry)	Computer Networking, hardware, software industry as well as in public/private sector.

UNIT	Topics	Periods
UNIT 1	<b>1.0 Introduction to Internet</b> 1.1 History of internet -The early years 1.2 The global Internet-A global information infrastructure 1.3 Review of packet switching and its relevance to the internet. topologies 1.4 Routers 1.5 Dial-up access 1.6 IP address 1.7 Transmission Control Protocol (TCP) 1.8 Domain names. 1.9 Flexibility, Reliability and efficiency	3L+6P
UNIT 2	<b>2.0 World Wide Web (WWW)</b> 2.1 Browsing the World Wide Web (WWW) 2.2 HTML. 2.3 Web page design with HTML 2.4 Features and importance of HTML. 2.5 Advanced WEB technologies.	3L+6P
UNIT 3	<b>3.0 HTML.</b> 3.1 General Introduction to Internet and WWW 3.2 Text tags; Graphics, Video and Sound Tags 3.3 Link and Anchor Tags 3.4 Table Tags 3.5 Frame Tags 3.6 Miscellaneous tags (layers, image maps etc) 3.7 CSS 3.8 DHTML-Example Applications 3.9 HTML-Forms and Fields.	3L+6P

UNIT 4	<b>4.0 Javascript</b> <b>4.1</b> Introduction to Operating System <b>4.2</b> Basic data types <b>4.3</b> control structures <b>4.4</b> standard functions; arrays and objects <b>4.5</b> event driven programming in Javascript: Example Applications	3L+6P
UNIT 6	<b>5.0 Internet Applications /Cyber Security</b> <b>5.1</b> Internet, sources of information, browsing, searching email, cloud storage, digital locker. <b>5.2 Cyber Security:</b> Basic concepts of threats, vulnerabilities, controls; risk; confidentiality, integrity, availability; security policies; security mechanisms <b>5.3</b> Data Security and protection: concept, creating strong passwords, how to stay safe when surfing on internet: "In private Browsing", identifying secure website, clear cookies.	3L+6P
	<b>Total (Lecture:1 Hr, Practical:2 Hr)</b>	<b>15L+30P</b>

References:

1. Foundations of Computing, P.K. Sinha and P. Sinha, BPB, 2006.
2. Fundamentals of Information Technology, Chetan Srivastva, Kalyani Publishers, 2008.
3. Software Engineering, Roger S.Pressman, Tata Mcgraw Hill, 2007.
4. Software Engineering, Ian Somerville, PHI, 2008.
5. Fundamental of Software Engineering, Rajib Mall, PHI, 2004.



**INFORMATION TECHNOLOGY**  
**Semester-IV**

Title of the Course	Information Technology
Nodal Department of HEI to run course	Computer Science and Engineering
Broad Area/ Sector	Information Technology
Nature of Course- Independent/Progressive	Progressive
Expected Fees of the Course- Free/Paid	NIL
Stipend of student expected from industry	Rs -10000 and more
Number of Seats	30
Course Code	CSESDC-3104
Max Marks	100
Minimum Marks	33
Job Prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry)	Computer Networking, hardware, software industry as well as in public/private sector

UNIT 1	<b>1.0 ICT in e-governance</b> 1.1 Introduction 1.2 Role of ICT in e-Governance 1.3 Back bone of e-Governance 1.4 e-governance maturity model 1.5 Infrastructure of e-Governance 1.6 Challenges of e-governance in India	3L+6P
UNIT 2	<b>2.0 e-learning</b> 2.1 What is e-learning? 2.2 Benefits and Drawback of online learning 2.3 Future of e-learning 2.4 Learning Management System -What is LMS? 2.5 Types of LMS 2.6 Content Authoring tool 2.7 SCROM and Tincan 2.8 E-learning Trends	3L+6P
UNIT 3	<b>3.0 e-Commerce</b> 3.1 e-Commerce Overview 3.2 Advantages and Disadvantages 3.3 Business Models 3.4 Payment Systems 3.5 Security Systems 3.6 B2B and B2C Model	3L+6P

UNIT 4	<b>4.0 Cyber Law And IT</b> 4.1 Introduction 4.2 Cyber Crime definition 4.3 Classification of cyber Crime 4.4 Other Cyber Crimes 4.5 Cyber law and terrorism 4.6 Cyber Offenders 4.7 Criminal law principles 4.8 Positive aspects of IT Act 2000 4.9 Grey Areas of IT Act 2000 4.10 Major laws on Privacy	3L-6P
UNIT 5	<b>5.0 Internet of Things</b> 5.1 Definition and characteristics of IOT 5.2 Physical Design of IOT 5.3 Things in IOT 5.4 IOT Protocols 5.5 Logical Design of IOT- IOT functional blocks 5.6 IOT communication model 5.7 IOT communication API 5.8 IOT Enabling Technologies Wireless Sensor Network	3L-6P
	<b>Total (Lecture:1 Hr, Practical:2 Hr)</b>	<b>15L+30P</b>

References:

1. E-LEARNING concepts Trends and Applications Epignosis LLC
2. R M Kamble - Cyber Law and Information Technology
3. Arshdeep Bahga, Vijay Madiseti, "Internet of Things - A hands-on approach", Universities Press



VBS Purvanchal University, Jaunpur (U.P.) -222003  
Uma Nath Singh Institute of Engineering & Technology  
Department of Computer Science & Engineering  
Department of Information Technology

Ref. No: CSI & IT 843

Date: 19/09/2022

सेवा में,

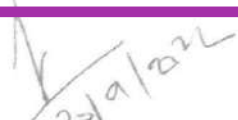
सहायक कुलसचिव

वीर बहादुर सिंह पूर्वांचल विश्वविद्यालय, जौनपुर।

विषय - राष्ट्रीय शिक्षा नीति -2020 के परिपेक्ष में स्नातक स्तर पर रोजगार परक पाठ्यक्रम के निर्माण के सम्बन्ध में

महोदय,

उपर्युक्त विषय के सम्बन्ध में अवगत करना है कि कंप्यूटर साइंस एंड इंजीनियरिंग एवं इनफार्मेशन टेक्नोलॉजी विभाग को आवंटित दो विषयों वेब डिजाइनिंग (Web Designing) एवं इनफार्मेशन टेक्नोलॉजी (Information Technology) का कोशल पाठ्यक्रम तैयार कर अग्रिम कार्यवाही हेतु प्रेषित है।

  
विभागाध्यक्ष  
Computer Science & Engg.  
Faculty of Engg. & Technology  
V.B.S. Purvanchal University  
Jaunpur





**Web Designing**  
**Semester-I**

Title of the Course	Web Designing
Nodal Department of HEI to run course	Information Technology
Broad Area/ Sector	Web Development
Nature of Course- Independent/Progressive	Progressive
Expected Fees of the Course- Free/Paid	NIL
Stipend of student expected from industry	Rs.-10000 and more
Number of Seats	30
Course Code	CSESDC-2101
Max Marks	100
Minimum Marks	33
Job Prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry)	Web designing and maintenance in Software industry as well as in public/private sector.

Content (Name of Topic)		Periods
<b>Unit1</b>	<b>1.0 Web Design Principles</b>	
	1.1 Basic principles involved in developing a website 1.2 Planning process 1.3 Five Golden rules of web designing 1.4 Designing navigation bar 1.5 Page design 1.6 Home Page Layout 1.7 Design Concept.	3L+6P
<b>Unit2</b>	<b>2.0 Basics in Web Design</b>	
	2.1 Brief History of Internet 2.2 What is World Wide Web 2.3 Why create website 2.4 Web Standards 2.5 Audience requirement.	3L+6P
<b>Unit 3</b>	<b>3.0 Introduction to HTML</b>	
	3.1 What is HTML 3.2 HTML Documents 3.3 Basic structure of an HTML document 3.4 Creating an HTML document 3.5 Mark up Tags 3.6 Heading-Paragraphs 3.7 Line Breaks 3.8 HTML Tags.	3L+6P

<b>Unit 4</b>	<b>4.0</b>	<b>Elements of HTML.</b>	
	4.1	Introduction to elements of HTML	
	4.2	Working with Text	
	4.3	Working with Lists, Tables and Frames	
	4.4	Working with Hyperlinks, Images and Multimedia	3L-6P
	4.5	Working with Forms and controls.	
<b>Unit 5</b>	<b>5.0</b>	<b>Features of HTML.</b>	
	5.1	Working with Encoding URL.	
	5.2	Introduction to XHTML	
	5.3	Handling of multiple file upload using multiple attribute	
	5.4	HTML Local Storage	
	5.5	HTML form validation/no validation	
	5.6	HTML Canvas	
	5.7	Embedding audio and video in a webpage	3L-6P
	<b>Total (Lecture:1 Hr, Practical:2 Hr)</b>		<b>15L+30P</b>

**Text Books:**

1. "Introduction to Web Technology" by Pankaj Sharma; Katson Publication.
2. "Web Designing and Development Training Guide" by Prof. Satisgh Jain, Ambarish K Rai, M. Geetha; BPB Publication.

**Reference Books:**

1. "HTML and CSS: The Complete Reference" 5<sup>th</sup> edition by Thomas A. Powell; TMH Publication.



**VBS Purvanchal University, Jaunpur (U.P.) -222003**  
**Uma Nath Singh Institute of Engineering & Technology**  
**Department of Computer Science & Engineering**  
**Department of Information Technology**

**Web Designing**  
**Semester-II**

Title of the Course	Web Designing
Nodal Department of HEI to run course	Information Technology
Broad Area/ Sector	Web Development
Nature of Course- Independent/Progressive	Progressive
Expected Fees of the Course- Free/Paid	NIL
Stipend of student expected from industry	Rs -10000 and more
Number of Seats	30
Course Code	CSESDC-2102
Max Marks	100
Minimum Marks	22
Job Prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry)	Web designing and maintenance in Software industry as well as in public/private sector.

Content (Name of Topic)		Periods
<b>Unit1</b>	<b>1.0 Introduction of Web Design</b>	
	1.1 Basics of website designing	
	1.2 Designing process and planning	
	1.3 Essential features and elements of HTML	
	1.4 Creating a web service account and deploy a static website	
	1.5 Drag and Drop, HTML web workers and server sent events	3L-6P
<b>Unit2</b>	<b>2.0 Introduction to Cascading Style Sheets</b>	
	2.1 Concept of CSS	
	2.2 Creating Style Sheet	
	2.3 CSS Properties	
	2.4 CSS Styling(Background, Text Format, Controlling Fonts)	
	2.5 Working with block elements and objects	3L+6P
<b>Unit 3</b>	<b>3.0 HTML and CSS</b>	
	3.1 Styling of HTML elements-text	
	3.2 Links, Lists and Tables	
	3.3 Different ways to write CSS e.g. external, internal, inline	
	3.4 Creating navigation bars	
	3.5 Writing media rules	
	3.6 Hide visibility of an element	
	3.7 CSS image sprites and gradients	
	3.8 CSS pseudo class and pseudo elements	3L+6P

<b>Unit 4</b>	<b>4.0</b>	<b>CSS Text Effects, Transformation and Animation</b>	
	4.1	CSS text effects using different text fonts	
	4.2	Creating 2D and 3D transformations	
	4.3	Applying animations and transitions to HTML elements	
	4.4	CSS resize UI and multiple columns features	3L.+6P
<b>Unit 5</b>	<b>5.0</b>	<b>Advanced Cascading Style Sheets</b>	
	5.1	Working with Lists and Tables	
	5.2	CSS Id and Class	
	5.3	Box Model(Introduction, Border properties, Padding Properties, Margin properties)	
	5.4	CSS Advanced(Grouping, Dimension, Display, Positioning, Floating, Align, Pseudo class, Navigation Bar, Image Sprites, Attribute selector)	3L.+6P
	5.5	CSS Color	
	5.6	Creating page Layout and Site Designs.	
		<b>Total (Lecture:1 Hr, Practical:2 Hr)</b>	<b>15L.+30P</b>

**Text Books:**

1. "HTML CSS and Java Script" by Julie C. Meloni; Pearson Publication.

**Reference Books:**

1. "HTML and CSS: The Complete Reference" 5<sup>th</sup> edition by Thomas A. Powell; TMH Publication.



VBS Purvanchal University, Jaunpur (U.P.) -222003  
 Uma Nath Singh Institute of Engineering & Technology  
 Department of Computer Science & Engineering  
 Department of Information Technology

**Web Designing**  
**Semester-III**

Title of the Course	Web Designing
Nodal Department of HEI to run course	Information Technology
Broad Area/ Sector	Web Development
Nature of Course- Independent/Progressive	Progressive
Expected Fees of the Course- Free/Paid	NIL
Stipend of student expected from industry	Rs.-10000 and more
Number of Seats	30
Course Code	CSESDC-2103
Max Marks	100
Minimum Marks	33
Job Prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry)	Web designing and maintenance in Software industry as well as in public/private sector

Content (Name of Topic)		Periods
<b>Unit1</b>	<b>1.0 Overview of HTML and CSS</b>	
	1.1 Brief introduction of HTML and CSS	3L-6P
	1.2 Basic elements of cascade style sheet	
	1.3 Introduction to XHTML	
	1.4 Different ways to write CSS	
	1.5 CSS effects, transformation and transition to HTML	
<b>Unit2</b>	<b>2.0 Introduction to JavaScript</b>	
	2.1 How to communicate with the computer	3L-6P
	2.2 What is JS	
	2.3 JS – Advantages and Limitations	
	2.4 Where is JS used today	
	2.5 Development tools	
	2.6 Online development environment	
	2.7 Local development environment (code editor, interpreter, debugger)	
	2.8 How can you run your JavaScript code?	
	2.9 Executing the code directly in the console.	
<b>Unit 3</b>	<b>3.0 JavaScript, Operators and Control Flow</b>	
	3.1 What are operators	3L-6P
	3.2 Variables and Array	
	3.3 Assignment operators	
	3.4 Arithmetic operators	
	3.5 Arithmetic operators – compound assignment operators	
	3.6 Logical operators	
	3.7 Logical operators – compound assignment operators	
	3.8 String operators: concatenation and compound assignment	
	3.9 Comparison operators	
	3.10 Other JS operators (typeof, instanceof, delete, and ternary)	
	3.11 Operator precedence	



	3.12 How to interact with the user in JavaScript	
	3.13 Dialog boxes alert	
	3.14 Dialog boxes confirm	
	3.15 Dialog boxes prompt	
<b>Unit 4</b>	<b>4.0 Functions and JavaScript</b>	
	4.1 What are functions	
	4.2 Declaring functions	
	4.3 Calling functions	
	4.4 Local variables	
	4.5 The return statement	
	4.6 Function parameters	
	4.7 Shadowing	3L-6P
	4.8 Parameter validation	
	4.9 Recursion	
	4.10 Functions as first-class members	
	4.11 Function expressions	
	4.12 Synchronous callbacks	
	4.13 Asynchronous callbacks	
	4.14 Arrow functions.	
<b>Unit 5</b>	<b>5.0 Errors, Exceptions, Debugging and Troubleshooting with JavaScript</b>	
	5.1 Errors – the programmer’s daily bread	
	5.2 Natural languages and communication errors	
	5.3 Errors vs exceptions	
	5.4 Errors without exceptions	
	5.5 Types of errors – SyntaxError, ReferenceError, TypeError, RangeError	
	5.6 The try-catch statement	
	5.7 Conditional exception handling	3L-6P
	5.8 The finally statement	
	5.9 The throw statement and custom errors	
	5.10 What is debugging	
	5.11 Step-by-step execution	
	5.12 The debugger statement	
	5.13 The resume option	
	5.14 Code debugging without the debugger statement	
	5.15 The step over/into/stack option	
	5.16 Viewing and modifying variables	
	5.17 The step out option	
	<b>Total (Lecture:1 Hr, Practical:2 Hr)</b>	<b>15L+30P</b>

**Text Books:**

1. “Web Designing and Development Training Guide” by Prof. Satishg Jain, Ambarish K Rai, M. Geetha; BPB Publication.
2. “HTML CSS and Java Script” by Julie C. Meloni; Pearson Publication.

**Reference Books:**

1. “HTML and CSS: The Complete Reference” 5<sup>th</sup> edition by Thomas A. Powell; TMH Publication.



**VBS Purvanchal University, Jaunpur (U.P.) -222003**  
**Uma Nath Singh Institute of Engineering & Technology**  
**Department of Computer Science & Engineering**  
**Department of Information Technology**

**Web Designing**  
**Semester-IV**

Title of the Course	Web Designing
Nodal Department of HEI to run course	Information Technology
Broad Area/ Sector	Web Development
Nature of Course- Independent/Progressive	Progressive
Expected Fees of the Course- Free/Paid	NIL
Stipend of student expected from industry	Rs -10000 and more
Number of Seats	30
Course Code	CSESDC-2104
Max Marks	100

Minimum Marks	33
Job Prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry)	Web designing and maintenance in Software industry as well as in public/private sector.

Content (Name of Topic)		Periods
<b>Unit1</b>	<b>1.0 Introduction to HTML, CSS and JavaScript</b>	
	1.1 Basic Building blocks of HTML and CSS	
	1.2 Overview of JavaScript	
	1.3 JavaScript and functions	
	1.4 JavaScript and error handling	
	1.5 JavaScript and Exceptions	3L-6P
<b>Unit2</b>	<b>2.0 CSS and JS framework: Twitter Bootstrap</b>	
	2.1 Getting started with twitter bootstrap	
	2.2 Bootstrap features like fixed dropdown menu	
	2.3 Carousel, Text and image grids	
	2.4 Custom thumbnails	
	2.5 Bootstrap Models	
	2.6 Using font awesome icons	3L-6P
<b>Unit 3</b>	<b>3.0 Bootstrap ScrollSpy, JQuery and JQuery UI</b>	
	3.1 Bootstrap ScrollSpy	
	3.2 Including JQuery in HTML	
	3.3 Using JQuery UI Components e.g. Datepicker into your HTML pages	
	3.4 Creating a countdown timer using JQuery timer AP	3L-6P
<b>Unit 4</b>	<b>4.0 Ajax, Google API, Social plugins</b>	
	4.1 AJAX HTML	
	4.2 HTTP request object	
	4.3 Making an AJAX call and retrieving the response	
	4.4 Working with GoogleAPIs adding social plugins on your web page provided by LinkedIn, Facebook, Quora and Twitter	3L+6P

Unit 5	5.0 Project	
	5.1 Building a real world website using Twitter	
	5.2 Drink mate web applications: HTML Video Background	
	5.3 E-Commerce website menu: HTML CSS Big Dropdowns	
	5.4 Edureka Bootstrap Application: Twitter Bootstrap	
	5.5 Putluck application: JQuery countdown timer Plugins	3L-6P
	<b>Total (Lecture:1 Hr. Practical:2 Hr)</b>	<b>15L+30P</b>

#### Text Books:

1. Advanced Programming in Web Design, V.K. Jain. Cyber Tech Publications, 2008.
2. Internet and Worldwide web programming: How to Program, H M Deitel, P J Deitel, A B Goldberg, Pearson, 2007.
3. Web Technologies: A Computer Science Perspective, Jackson, Pearson Education, 2007.
4. PHP: The Complete Reference, S. Holzner, TMH, 2007.
5. HTML & Web Design, K. Jamsa, Konrad King, TMH, 2002.
6. Servlet Programming, J. Hunter, William Crawford, O'REILY, 2010.
7. Murach's Java Servlets and JSP, J. Murach, Andrea Steelman, Murach's, 2008.
8. Java Servlet & JSP Cookbook, R. Hoekman Jr., Schorr Pub, 2004.

#### Reference Books:

1. "HTML and CSS: The Complete Reference" 5<sup>th</sup> edition by Thomas A. Powell, TMH Publication.



**Department of Business Management**  
V.B.S. Purvanchal University  
Jaunpur - 222 003(India)

30.09.2022

To

The Assistant Registrar (Academic)  
VBS Purvanchal University  
Jaunpur-222 003

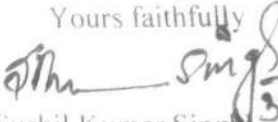
Subject: Syllabus of Vocational Course

Madam

Kindly find enclosed the syllabus of vocational course of "Post Harvest Management and Food Preservation".

Encl: As above.

Thanking you  
Yours faithfully

  
30/09/22

(Dr, Sushil Kumar Singh)

Department of Agri-Business Management

### Format for syllabus Development of

<b>Title of Course- Post Harvest Management and Food Preservation-I</b>	Department of Agri-Business Management, VBSPU
<b>Nodal Department of HEI to run course</b>	Agri-Business
<b>Broad Area Sector</b>	Food Preservation
<b>Sub Sector</b>	Progressive
<b>Nature of Course- Independent/Progressive</b>	ICAR, FSSAI
<b>Name of suggestive Sector Skill Council</b>	Yes
<b>Aliened NSQF level</b>	Paid
<b>Expected fees of the course- Free/Paid</b>	As per industry norms
<b>Stipend to student expected from industry</b>	10
<b>Number of Seats.....</b>	Credits-03 (1 Theory ,2 Practical)
<b>Course Code.....</b>	Max marks: 100 Minimum: 36
<b>Max. Marks..... 100.... Minimum Marks..... 36.....</b>	Department of Horticulture and Food Processing, Government of Uttar Pradesh. in collaboration with Agriculture Department, under the guidance of District Agricultural Officer, Jaunpur.

<b>Job prospects-Expected Fields of Occupation where student will be able to Get job after completing this course in(Please specify name/type of industry, company etc.)</b>	Food Processing Industries, Central and State Warehousing, Self-Owned Start-Up Businesses and Self Help Groups of Farmers.
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#### Syllabus

Unit	Topics	General/ Skill Component	Theory/ Practical/OJT/ Internship/ Training	No. of daily Hours (Total-15 Hours=1 credit)	No. of skill Hours (Total-60 Hours=2 credit)
I	Post harvest Management: Concept ,objectives and importance of post harvest management, causes of post harvest losses, maturity ripening and biochemical changes after harvesting ,post harvest loss reduction management including aspects of packaging ,storage and transportations.	50%	50%	5	20
II	Introduction of food preservation: introduction and definition of food preservation of food preservation, importance and need of food preservation, aim and goal of food preservation, advantage and scope of food preservation	50%	50%	5	20
III	Food spoilage: Introduction, undesirable change in food due to spoilage, factors affecting food spoilage, classifications of food by ease of spoilage, cause of food spoilage, effects of spoilage on nutritional quality. Selection and purchase of food for preservation: selection and purchase of perishable food (fruits and vegetables), selection and purchase of semi and non perishable food	50%	50%	5	20





**Suggested Readings:**

- J.P. Yadav (1984), a hand book of agriculture.
- Madhway and Broadway (2009), Agri-Business Management.
- Prof. Nagaraja Murthy (2013), Agricultural business management.
- 4. N S Rathore (2012) Post harvest management processing of fruits and vegetables.
- 5. B. Sivasankar (2002) Food processing and preservation

**Suggested Digital platforms/web links for readings-**

**Suggested OJT/Internship/Training/Skill partner**

**Suggested Continuous Evaluation Methods:** In addition theoretical inputs the course will be delivered through assignment, presentation and field visit/ industrial tour.

**Course Pre-requisites:**

- No pre-requisites required ,open to all
- To study this course ,a student must have the subject .....in class 12<sup>th</sup> /certificate/diploma
- If progressive, to study this course a student must have passed previous courses of this series.

**Suggested equivalent online courses:**

**Any remarks/suggestions:**

**Notes:**

- Number of units in Theory/Practical may vary as per need
- Total credits/semester -3(it can be more credits, but student will get only 3 credit/semester or 6 credit /year)
- Credits for Theory=01 (Teaching Hours=15)
- Credits for Internship/OJT/Training/Practical=02 (Training Hours=60)

## Format for syllabus Development of

<b>Title of Course- Post Harvest Management and Food Preservation-II</b>	
Nodal Department of HEI to run course	
Broad Area Sector	Department of Agri-Business Management, VBSPU
Sub Sector	Agri-Business
Nature of Course- Independent/Progressive	Food Preservation
Name of suggestive Sector Skill Council	Progressive
Aliened NSQF level	ICAR, FSSAI
Expected fees of the course- Free/Paid	Yes
Stipend to student expected from industry	Paid
Number of Seats.....	As per industry norms
Course Code.....	10
Max. Marks..... 100.... Minimum Marks..... 36.....	Credits-03 (1 Theory ,2 Practical)
Nature of proposed skill Partner(Please specify , Name of industry, company etc. for Practical/training/internship/OJT	Max marks: 100 Minimum: 36
Job prospects-Expected Fields of Occupation where student will be able to Get job after completing this course in(Please specify name/type of industry, company etc.)	Department of Horticulture and Food Processing, Government of Uttar Pradesh, in collaboration with Agriculture Department, under the guidance of District Agricultural Officer, Jaunpur.
	Food Processing Industries, Central and State Warehousing, Self-Owned Start-Up Businesses and Self Help Groups of Farmers.

### Syllabus

Unit	Topics	General/ Skill Component	Theory/ Practical/O JT/ Internship/ Training	No. of daily Hours (Total-15 Hours=1 credit)	No. of skill Hours (Total-60 Hours=2 credit)
I	Introduction to Agro Processing industry, scope and importance of Agro Processed products: Cereal grain processing, Different grains suitable for agro processing, Primary processing of major cereals, Milling of cereals – org and wet milling	50%	50%	5	20
II	Principles and methods of food preservation: introduction, principles of food preservation, fermentation, use of low temperature, use of high temperature, use of chemical preservative, carbonation and irradiation and combination of methods	50%	50%	5	20
III	food dehydration and drying: introduction, difference between drying , dehydration and concentration, principle of drying/dehydration and concentration, advantages and types of drying, process of drying, spoilage of dried food product, concentration of food, methods of concentration. Preservation by use of heat: introduction, blanching, pasteurization, sterilisation, canning. Preservation by salt and sugar: introduction, principle of preservation by salt methods of pickling, principle of preservation by sugar.	50%	50%	5	20



**Suggested Readings:**

1. J.P. Yadav (1984), a hand book of agriculture.
2. Broadway and Broadway (2009), Agri-Business Management.
3. Prof. Nagaraja Murthy (2013), Agricultural business management.
4. N S Rathore (2012) Post harvest management processing of fruits and vegetables.
5. B. Sivasankar (2002) Food processing and preservation

**Suggested Digital platforms/web links for readings-**

**Suggested OJT/Internship/Training/Skill partner**

**Suggested Continous Evaluation Methods:** In addition theoretical inputs the course will be delivered through assignment, presentation and field visit/ industrial tour.

**Course Pre-requisites:**

- No pre-requisites required ,open to all
- To study this course ,a student must have the subject ..... in class 12<sup>th</sup> /certificate/diploma
- If progressive, to study this course a student must have passed previous courses of this series.

**Suggested equivalent online courses:**

**Any remarks/suggestions:**

**Notes:**

- Number of units in Theory/Practical may vary as per need
- Total credits/semester -3(it can be more credits, but student will get only 3 credit/semester or 6 credit /year)
- Credits for Theory=01 (Teaching Hours=15)
- Credits for Internship/OJT/Training/Practical=02 (Training Hours=60)

### Format for syllabus Development of

<b>Title of Course- Post Harvest Management and Food Preservation-III</b> Nodal Department of HEI to run course	Department of Agri-Business Management, VBSPU
Broad Area Sector	Agri-Business
Sub Sector	Food Preservation
Nature of Course- Independent/Progressive	Progressive
Name of suggestive Sector Skill Council	ICAR, FSSAI
Aliened NSQF level	Yes
Expected fees of the course- Free/Paid	Paid
Stipend to student expected from industry	As per industry norms
Number of Seats.....	10
Course Code.....	Credits-03 (1 Theory ,2 Practical)
Max. Marks.....100.....Minimum Marks.....36.....	Max marks: 100 Minimum: 36
Nature of proposed skill Partner(Please specify , Name of industry, company etc. for Practical/training/internship/OJT	Department of Horticulture and Food Processing, Government of Uttar Pradesh. in collaboration with Agriculture Department, under the guidance of District Agricultural Officer, Jaunpur.
Job prospects-Expected Fields of Occupation where student will be able to Get job after completing this course in(Please specify name/type of industry, company etc.)	Food Processing Industries ,Central and State Warehousing, Self-Owned Start-Up Businesses and Self Help Groups of Farmers.

Synabus					
Unit	Topics	General/ Skill Component	Theory/ Practical/OJT/ Internship/ Training	No. of daily Hours (Total-15 Hours=1 credit)	No. of skill Hours (Total-60 Hours=2 credit)
I	Pulses and legumes processing, Principles of pulse milling, Milling of major legumes, Oil seed processing: Properties and suitability of oil seeds for processing, Methods of oil seeds processing, Terminology in oil processing industry	50%	50%	5	20
II	preservation by chemical preservatives: introduction, preservation principle, definition of food preservatives, benzoic acid and related compounds, propionic acid and related compounds, ethylenediamine tetra acetic acid (EDTA).	50%	50%	5	20
III	Food irradiation: introduction, what is food irradiation, mode of action, radiation in food preservation, terminology for radiation treatment of food, applications of radiation processing in food, nutritional quality of irradiated foods, advantage and disadvantage of irradiated food.	50%	50%	5	20



**Readings:**

1. Dav (1984), a hand book of agriculture.
2. Roadway and Broadway (2009), Agri-Business Management.
3. Prof. Nagaraja Murthy (2013), Agricultural business management.
4. N S Rathore (2012) Post harvest management processing of fruits and vegetables.
5. B. Sivasankar (2002) Food processing and preservation.
6. Muhammad sidqi (2022) Dry beans and pulses production, processing and nutrition.

**Suggested Digital platforms/web links for readings-**

**Suggested OJT/Internship/Training/Skill partner**

**Suggested Continuous Evaluation Methods:** In addition theoretical inputs the course will be delivered through assignment, presentation and field visit/ industrial tour.

**Course Pre-requisites:**

- No pre-requisites required ,open to all
- To study this course ,a student must have the subject .....in class 12<sup>th</sup> /certificate/diploma
- If progressive, to study this course a student must have passed previous courses of this series

**Suggested equivalent online courses:**

**Any remarks/suggestions:**

**Notes:**

- Number of units in Theory/Practical may vary as per need
- Total credits/semester -3(it can be more credits, but student will get only 3 credit/semester or 6 credit /year)
- Credits for Theory=01 (Teaching Hours=15)
- Credits for Internship/OJT/Training/Practical=02 (Training Hours=60)





## Format for syllabus Development of

<b>Title of Course- Post Harvest Management and Food Preservation- IV</b>	
Nodal Department of HEI to run course	Department of Agri-Business Management, VBSPU
Broad Area Sector	Agri-Business
Sub Sector	Food Preservation
Nature of Course- Independent/Progressive	Progressive
Name of suggestive Sector Skill Council	ICAR, FSSAI
Aliened NSQF level	Yes
Expected fees of the course- Free/Paid	Paid
Stipend to student expected from industry	As per industry norms
Number of Seats.....	10
Course Code.....	Credits-03 (1 Theory ,2 Practical)
Max. Marks..... 100....Minimum Marks..... 36.....	Max marks: 100 Minimum: 36
Nature of proposed skill Partner(Please specify , Name of industry, company etc. for Practical/training/internship/OJT	Department of Horticulture and Food Processing, Government of Uttar Pradesh. in collaboration with Agriculture Department, under the guidance of District Agricultural Officer, Jaunpur.
Job prospects-Expected Fields of Occupation where student will be able to Get job after completing this course in(Please specify name/type of industry, company etc.)	Food Processing Industries ,Central and State Warehousing, Self-Owned Start-Up Businesses and Self Help Groups of Farmers.

Syllabus					
Unit	Topics	General/ Skill Component	Theory/ Practical/OJT / Internship/ Training	No. of daily Hours (Total-15 Hours=1 credit)	No. of skill Hours (Total-60 Hours=2 credit)
I	Principle and application of modern Techniques in food processing, Effect of processing on nutrition content, quality, stability and values of foods. Processing of animal food: fruits and vegetables, flowers, spices, dairy products, eggs and meat.	50%	50%	5	20
II	packaging, labelling and costing of food products: definition, importance and function of food packaging, objectives of packaging, properties of package, classification of package, materials used for forming a package; regenerated cellulose cellophane, polyethylene teraphthalate (PET)/polyester(PS), advantage and disadvantage of packaging, packaging law and regulation, labeling of package, pricing and pricing methods.	50%	50%	5	20
III	Storage of food: introduction, classification of food based on perishability, definition and types of storage, essential features of storage area, basic guideline of food storage, maintenance and care of food storage equipmentsprocessing in food, nutritional quality of irradiated foods, advantage and disadvantage of irradiated food.	50%	50%	5	20



Readings

- Yadav (1984), a hand book of agriculture.
- Radway and Broadway (2009), Agri-Business Management.
- Nagaraja Murthy (2013), Agricultural business management.
- S Rathore (2012) Post harvest management processing of fruits and vegetables.
- Sivasankar (2002) Food processing and preservation

Suggested Digital platforms/web links for readings-

Suggested OJT/Internship/Training/Skill partner

Suggested Continuous Evaluation Methods: In addition theoretical inputs the course will be delivered through assignment presentation and field visit/ industrial tour.

Course Pre-requisites:

- No pre-requisites required ,open to all
- To study this course ,a student must have the subject .....in class 12<sup>th</sup> /certificate/diploma
- If progressive, to study this course a student must have passed previous courses of this series

Suggested equivalent online courses:

Any remarks/suggestions:

Notes

- Number of units in Theory/Practical may vary as per need
- Total credits/semester -3(it can be more credits, but student will get only 3 credit/semester or 6 credit /year)
- Credits for Theory=01 (Teaching Hours=15)
- Credits for Internship/OJT/Training/Practical=02 (Training Hours=60)



**INFORMATION TECHNOLOGY**  
**Semester-I**

Title of the Course	Information Technology
Nodal Department of HEI to run course	Computer Science and Engineering
Broad Area/ Sector	Information Technology
Nature of Course- Independent/Progressive	Progressive
Expected Fees of the Course- Free/Paid	NIL
Stipend of student expected from industry	Rs -10000 and more
Number of Seats	30
Course Code	CSESDC-3101
Max Marks	100
Minimum Marks	33
Job Prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry)	Computer Networking, hardware, software industry as well as in public/private sector.

UNIT	Topics	Periods
UNIT 1	<b>1.0 Introduction to Computer &amp; Basic Concepts</b> 1.1 What is Computer? 1.2 Objective of Computer System 1.3 Characteristics of Computer System 1.4 Basic Applications of Computer System 1.5 Components of Computer System 1.6 Generation of Computer	3L-6P
UNIT 2	<b>2.0 Computer Hardware</b> 2.1 Introduction to Computer Hardware 2.2 Getting started with PC hardware support 2.3 Electricity and power systems 2.4 CPUs and motherboards 2.5 Basic I/O System, Memory systems, Bus structures, color combination of network cable, Expansion cards, Ports, connectors, and cables 2.6 Data storage devices, Video and multimedia input/output devices, 2.7 Printers, Portable computers and devices, Connecting computers	3L-6P
UNIT 3	<b>3.0 Computer Software</b> 3.1 Introduction to Computer Software 3.2 Aim and objective of software 3.3 Application Software 3.4 System Software 3.5 Role of Software in Computer System 3.6 Comparison between Application Software and System Software	3L-6P
UNIT 4	<b>4.0 Operating System</b> 4.1 Introduction to Operating System 4.2 Basics of Operating System	

	4.2 Aim and objective of Operating System 4.3 Function of Operating System 4.4. Types of Operating System	+6P
UNIT 5	<b>5.0 Install and setup Operating System and related software in a computer</b>	
	5.1 Identify basic first aid and use them under different circumstances 5.2 Identify basic first aid and use them under different circumstances. 5.3 Install and configure Windows OS 5.4 Install the printer and other peripheral devices 5.6 Install application software 5.7 Troubleshoot the PC 5.8 Execute DOS and LINUX commands 5.9 Customize Windows and LINUX OS settings	3L -6P
	<b>Total (Lecture:1 Hr, Practical:2 Hr)</b>	<b>15L+30 P</b>

References:

- 1.P.K Sinha &P.Sinha, Computer Fundamentals, BPB Publications
- 2.Nelson, MS-Office 2000 , Tata McGraw -Hill



VBS Purvanchal University, Jaunpur (U.P.) -222003  
 Uma Nath Singh Institute of Engineering & Technology  
 Department of Computer Science & Engineering  
 Department of Information Technology

**INFORMATION TECHNOLOGY**  
**Semester-II**

Title of the Course	Information Technology
Nodal Department of HEI to run course	Computer Science and Engineering
Broad Area/ Sector	Information Technology
Nature of Course- Independent/Progressive	Progressive
Expected Fees of the Course- Free/Paid	NIL
Stipend of student expected from industry	Rs.-10000 and more
Number of Seats	30
Course Code	CSESDC-3102
Max Marks	100
Minimum Marks	33
Job Prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry)	Computer Networking, hardware, software industry as well as in public/private sector.

UNIT I	1.0 Word Processing (MS-Word)	Periods
	1.1 Word Processing Basics: Opening Word Processing Package, Menu Bar, Using The Help, Using The Icons Below Menu Bar; 1.2 Opening and closing Documents: Opening Documents, Save and Save as, Page Setup, Print Preview, Printing of Documents; 1.3 Text Creation and manipulation: Document Creation, Editing Text, Text Selection, Cut, Copy and Paste, Spell check, Thesaurus, 1.4 Formatting the Text: Font and Size selection, Alignment of Text, Paragraph Indenting, Bullets and Numbering, Changing case; 1.5 Formatting a document: Set page margin, paragraphs and sections within a document, Adjust indents and hanging indents; 1.6 Table Manipulation: Draw Table, Changing cell width and height, Alignment of Text in cell, Delete / Insertion of row and column Border and shading, Table formulas; 1.7 Inserting Graphic Elements: Insert a clip art picture, insert symbols and special characters, adding a watermark. 1.8 Mail Merge: Using mail merge: printing mailing labels; merging for sending emails.	3L-6P



UNIT 2	<p><b>2.0 Spreadsheet (MS-Excel)</b></p> <p>2.1 Elements of Electronic Spread Sheet Opening of Spread Sheet, Addressing of Cells, Printing of Spread Sheet, Saving Workbooks;</p> <p>2.2 Manipulation of Cells Entering Text, Numbers and Dates, Creating Text, Number and Date Series, Editing Worksheet Data, Inserting and Deleting Rows, Column, Changing Cell Height and Width.</p> <p>2.3 Formulas and Function: Using Formulas, Function, basic mathematical operators, using AutoSum etc., using formulas with multiple cell references, finding the right function, relative and absolute cell references, fixing formula errors;</p> <p>2.4 Charts: learning about charts, creating charts; Working with graphics; Clip Art; Smart Art, Use of Pivot Table and Pivot Chart.</p>	3L-6P
UNIT 3	<p><b>3.0 Presentation (Power Point Presentation)</b></p> <p>3.1 Basic Concepts of presentation: Using PowerPoint, Opening A Power Point Presentation, Saving A Presentation;</p> <p>3.2 Creation of Presentation: Creating a Presentation Using a Template, Creating a Blank Presentation, Entering and Editing Text, Inserting And Deleting Slides in a Presentation;</p> <p>3.3 Preparation of Slides: Inserting Word Table or An Excel Worksheet, Adding Clip Art Pictures, Inserting Other Objects, Resizing and Scaling an Object;</p> <p>4.4 Presentation of Slides: Viewing A Presentation, Choosing a Set Up for Presentation, Printing Slides And Handouts,</p> <p>4.5 Slide Shows: Running a Slide Show, Transition and Slide Timings, Automating a Slide Show.</p>	3L-6P
UNIT 4	<p><b>4.0 MS-Access</b></p> <p>4.1 Overview of database concepts</p> <p>4.2 Exploring the User Interface</p> <p>4.3 Opening an Existing Database</p> <p>4.4 Customizing the Access Environment</p> <p>4.5 Designing a Database</p> <p>4.6 Creating a Relational Database in Access</p> <p>4.7 Managing Data in a Table</p> <p>4.8 Querying a Database</p>	3L-6P
UNIT 5	<p><b>5.0 Paint</b></p> <p>5.1 Introduction to Paint</p> <p>5.2 Title Bar, Menu Bar, Tool Box, Color Box, Status Bar, Scroll Bar, Minimize Button, Maximize Button, Close Button</p> <p>5.3 File Menu</p> <p>5.4 Home Menu</p> <p>5.5 View Menu</p> <p>5.6 Shortcuts Keys</p>	3L-6P
<b>Total (Lecture:1 Hr, Practical:2 Hr)</b>		<b>15L+30P</b>

References:

1. MICROSOFT OFFICE WORD 2007
2. MICROSOFT OFFICE EXCEL 2007
3. MICROSOFT OFFICE POWERPOINT 2007
4. MICROSOFT OFFICE ACCESS 2007
5. MICROSOFT WINDOWS



**VBS Purvanchal University, Jaunpur (U.P.) -222003**  
**Uma Nath Singh Institute of Engineering & Technology**  
**Department of Computer Science & Engineering**  
**Department of Information Technology**

**INFORMATION TECHNOLOGY**  
**Semester-III**

Title of the Course	Information Technology
Nodal Department of HEI to run course	Computer Science and Engineering
Broad Area/ Sector	Information Technology
Nature of Course- Independent/Progressive	Progressive
Expected Fees of the Course- Free/Paid	NIL
Stipend of student expected from industry	Rs.-10000 and more
Number of Seats	30
Course Code	CSESDC-3103
Max Marks	100
Minimum Marks	33
Job Prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry)	Computer Networking, hardware, software industry as well as in public/private sector.

UNIT	Topics	Periods
UNIT 1	<b>1.0 Introduction to Internet</b> 1.1 History of internet -The early years 1.2 The global Internet-A global information infrastructure 1.3 Review of packet switching and its relevance to the internet, topologies 1.4 Routers 1.5 Dial-up access 1.6 IP address 1.7 Transmission Control Protocol (TCP) 1.8 Domain names. 1.9 Flexibility, Reliability and efficiency.	3L+6P
UNIT 2	<b>2.0 World Wide Web (WWW)</b> 2.1 Browsing the World Wide Web (WWW) 2.2 HTML 2.3 Web page design with HTML. 2.4 Features and importance of HTML. 2.5 Advanced WEB technologies	3L+6P
UNIT 3	<b>3.0 HTML.</b> 3.1 General Introduction to Internet and WWW 3.2 Text tags; Graphics, Video and Sound Tags 3.3 Link and Anchor Tags 3.4 Table Tags 3.5 Frame Tags 3.6 Miscellaneous tags (layers, image maps etc) 3.7 CSS 3.8 DHTML-Example Applications 3.9 HTML-Forms and Fields.	3L+6P

UNIT 4	<b>4.0 Javascript</b> 4.1 Introduction to Operating System 4.2 Basic data types 4.3 control structures 4.4 standard functions, arrays and objects 4.5 event driven programming in Javascript: Example Applications	3L-6P
UNIT 6	<b>5.0 Internet Applications /Cyber Security</b> 5.1 Internet, sources of information, browsing, searching email, cloud storage, digital locker. 5.2 <b>Cyber Security:</b> Basic concepts of threats, vulnerabilities, controls; risk; confidentiality, integrity, availability, security policies; security mechanisms 5.3 Data Security and protection: concept, creating strong passwords, how to stay safe when surfing on internet: "In private Browsing", identifying secure website, clear cookies.	3L-6P
<b>Total (Lecture:1 Hr, Practical:2 Hr)</b>		<b>15L-30P</b>

References:

1. Foundations of Computing, P.K. Sinha and P. Sinha, BPB, 2006.
2. Fundamentals of Information Technology, Chetan Srivastva, Kalyani Publishers, 2008.
3. Software Engineering, Roger S.Pressman, Tata Mcgraw Hill, 2007.
4. Software Engineering, Ian Somerville, PHI, 2008.
5. Fundamental of Software Engineering, Rajib Mall, PHI, 2004.



VBS Purvanchal University, Jaunpur (U.P.) -222003  
 Uma Nath Singh Institute of Engineering & Technology  
 Department of Computer Science & Engineering  
 Department of Information Technology

**INFORMATION TECHNOLOGY**  
**Semester-IV**

Title of the Course	Information Technology
Nodal Department of HEI to run course	Computer Science and Engineering
Broad Area/ Sector	Information Technology
Nature of Course- Independent/Progressive	Progressive
Expected Fees of the Course- Free/Paid	NIL
Stipend of student expected from industry	Rs.- 10000 and more
Number of Seats	70
Course Code	CSESDC-3104
Max Marks	100
Minimum Marks	33
Job Prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry)	Computer Networking, hardware, software industry as well as in public/private sector

		Periods
UNIT 1	<b>1.0 ICT in e-governance</b> 1.1 Introduction 1.2 Role of ICT in e-Governance 1.3 Back bone of e-Governance 1.4 e-governance maturity model 1.5 Infrastructure of e-Governance 1.6 Challenges of e-governance in India	3L+6P
UNIT 2	<b>2.0 e-learning</b> 2.1 What is e-learning? 2.2 Benefits and Drawback of online learning 2.3 Future of e-learning 2.4 Learning Management System -What is LMS? 2.5 Types of LMS 2.6 Content Authoring tool 2.7 SCROM and Tincan 2.8 E-learning Trends	3L+6P
UNIT 3	<b>3.0 e-Commerce</b> 3.1 e-Commerce Overview 3.2 Advantages and Disadvantages 3.3 Business Models 3.4 Payment Systems 3.5 Security Systems 3.6 B2B and B2C Model	3L+6P

UNIT 4	<b>4.0 Cyber Law And IT</b> 4.1 Introduction 4.2 Cyber Crime definition 4.3 Classification of cyber Crime 4.4 Other Cyber Crimes 4.5 Cyber law and terrorism 4.6 Cyber Offenders 4.7 Criminal law principles 4.8 Positive aspects of IT Act 2000 4.9 Grey Areas of IT Act 2000 4.10 Major laws on Privacy	3L - 6P
UNIT 5	<b>5.0 Internet of Things</b> 5.1 Definition and characteristics of IOT 5.2 Physical Design of IOT 5.3 Things in IOT 5.4 IOT Protocols 5.5 Logical Design of IOT- IOT functional blocks 5.6 IOT communication model 5.7 IOT communication API 5.8 IOT Enabling Technologies Wireless Sensor Network	3L-6P
<b>Total (Lecture:1 Hr, Practical:2 Hr)</b>		<b>15L+30P</b>

References:

1. E-LEARNING concepts Trends and Applications Epignosis LLC
2. R. M Kamble – Cyber Law and Information Technology
3. Arshdeep Bahga, Vijay Madiseti, "Internet of Things A hands-on approach". Universities Press





**Department of Business Management**  
V.B.S. Purvanchal University  
Jaunpur - 222 003(India)

30.09.2022

To

The Assistant Registrar (Academic)  
VBS Purvanchal University  
Jaunpur-222 003

Subject: Syllabus of Vocational Course  
Reference: Your letter no.1283/shaisnik/2022 dated 29.09.2022

Madam

With reference to your above mentioned letter, kindly find enclosed the syllabus of vocational course of the following:

1. Marketing and Salesmanship
2. Business Communication

Encl: As above.

Thanking you  
Yours faithfully

  
30/9/2022

(Prof. Murad Ali)

Head

Department of Business Management

## Format for syllabus Development of

**Title of Course- Marketing and Salesmanship-I**

Nodal Department of HEI to run course:

Department of Business Management, VBSPU

Broad Area Sector

Business Management

Sub Sector

Marketing and Sales

Nature of Course- Independent/Progressive

Progressive

Name of suggestive Sector Skill Council

AICTE,AIMA

Aligned NSQF level

Yes

Expected fees of the course- Free/Paid

Paid

Stipend to student expected from industry

As per industry norms

Number of Seats.....

20

Course Code.....

Credits-03 (1 Theory ,2 Practical)

Max. Marks..... 100..... Minimum Marks.....

Max marks 100 Minimum.36

Nature of proposed skill Partner(Please specify , Name of industry, company etc. for Practical/training/internship/OJT

Any organisation having marketing/sales function

Job prospects-Expected Fields of Occupation where student will be able to Get job after completing this course in(Please specify name/type of industry, company etc.)

All corporate/public/not for profit organisations

### Syllabus

Unit	Topics	General/ Skill Component	Theory/ Practical/OJT/ Internship/ Training	No. of theory Hours (Total-15 Hours=1 credit)	No. of skill Hours (Total-60 Hours=2 credit)
I	Introduction to Sales Management: Concept, Evolution of sales function, Objectives of sales management positions,	50%	50%	5	20
II	Functions of Sales manager and their relation with other executives, Salesmanship, Theories of personal selling	50%	50%	5	20
III	Types of Sales executives, Qualities of sales executives, Personal selling process, Showroom & exhibition,	50%	50%	5	20

#### Suggested Readings:

1. Cundiff, Still, Govoni, Sales Management
2. Pradhan, Jakate, Mali, Salesmanship & Publicity
3. S.A. Chunawalla, Sales Management

#### Suggested Digital platforms/web links for readings-

#### Suggested OJT/Internship/Training/Skill partner

**Suggested Continous Evaluation Methods:** In addition to the theoretical inputs the course will be delivered through Assignments, Presentation, Group Discussions. This will instill in student a sense of decision making and practical learning

#### Course Pre-requisites:

- No pre-requisites required ,open to all
- To study this course ,a student must have the subject ..... in class 12<sup>th</sup> /certificate/diploma

*Handwritten signature*

If progressive, to study this course a student must have passed previous courses of this series

Accepted equivalent online courses

Remarks/suggestions

As:

- Number of units in Theory/Practical may vary as per need
- Total credits/semester -3(it can be more credits, but student will get only 3 credit/semester or 6 credit /year)
- Credits for Theory=01 (Teaching Hours=15)
- Credits for Internship/OJT/Training/Practical=02 (Training Hours=60)

*[Handwritten signature]*

## Format for syllabus Development of

**Title of Course- Marketing and Salesmanship-II**

Nodal Department of HEI to run course

Broad Area Sector	Department of Business Management, VBSPU
Sub Sector	Business Management
Nature of Course- Independent/Progressive	Marketing and Sales
Name of suggestive Sector Skill Council	Progressive
Aligned NSQF level	AICTE, AIMA
Expected fees of the course- Free/Paid	Yes
Stipend to student expected from industry	Paid
Number of Seats	As per industry norms
Course Code	20
Max. Marks 100 Minimum Marks	Credits-03 (1 Theory ,2 Practical)
Nature of proposed skill Partner(Please specify , Name of industry, company etc. for Practical/training/internship/OJT	Max marks :100 Minimum :36
Job prospects-Expected Fields of Occupation where student will be able to Get job after completing this course in(Please specify name/type of industry, company etc.)	Any organisation having marketing/sales function

Job prospects-Expected Fields of Occupation where student will be able to Get job after completing this course in(Please specify name/type of industry, company etc.)	All corporate/public/not for profit organisations
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Syllabus					
Unit	Topics	General/Skill Component	Theory/ Practical/OJT/ Internship/ Training	No. of theory Hours (Total-15 Hours=1 credit)	No. of skill Hours (Total-60 Hours=2 credit)
I	Sales Organization and Relationship: Purpose of sales organization, Types of sales organization structures, Sales department external relations, Distributive network relations.	50%	50%	5	20
II	Sales Force Management: Recruitment and Selection, Sales Training, Sales Compensation	50%	50%	5	20
III	Distribution Network Management: Types of Marketing Channels, Factors affecting the choice of channel, Types of middleman and their characteristics, Concept of physical distribution system.	50%	50%	5	20

**Suggested Readings:**

1. Cundiff, Still, Govoni, Sales Management
2. Pradhan, Jakate, Mali, Salesmanship & Publicity
3. S.A. Chunawalla, Sales Management

Suggested Digital platforms/web links for readings-

Suggested OJT/Internship/Training/Skill partner

**Suggested Continous Evaluation Methods:** In addition to the theoretical inputs the course will be delivered through Assignments, Presentation, Group Discussions. This will instill in student a sense of decision making and practical learning

*rise*

Pre-requisites:

No pre-requisites required ,open to all

To study this course ,a student must have the subject .....in class 12<sup>th</sup> /certificate/diploma

If progressive,to study this course a student must have passed previous courses of this series

Suggested equivalent online courses:

Any remarks/suggestions:

Notes:

- Number of units in Theory/Practical may vary as per need
- Total credits/semester -3(it can be more credits, but student will get only 3 credit/semester or 6 credit /year)
- Credits for Theory=01 (Teaching Hours=15)
- Credits for Internship/OJT/Training/Practical=02 (Training Hours=60)

*Sub*



## Format for syllabus Development of

<b>Title of Course- Marketing and Salesmanship-III</b> Nodal Department of HEI to run course:					
Broad Area Sector		Department of Business Management, VBSPU			
Sub Sector		Business Management			
Nature of Course- Independent/Progressive		Marketing and Sales			
Name of suggestive Sector Skill Council		Progressive			
Aligned NSQF level		AICTE, AIMA			
Expected fees of the course- Free/Paid		Yes			
Stipend to student expected from industry		Paid			
Number of Seats		As per industry norms			
Course Code		20			
Max. Marks		Credits-03 (1 Theory ,2 Practical)			
Minimum Marks		Max marks :100 Minimum:36			
Nature of proposed skill Partner(Please specify , Name of industry, company etc. for Practical/training/internship/OJT		Any organisation having marketing/sales function			
Job prospects-Expected Fields of Occupation where student will be able to Get job after completing this course in(Please specify name/type of industry, company etc.)		All corporate/public/not for profit organisations			
<b>Syllabus</b>					
Unit	Topics	General/ Skill Component	Theory/ Practical/OJT/ Internship/ Training	No. of theory Hours (Total-15 Hours=1 credit)	No. of skill Hours (Total-60 Hours=2 credit)
I	Introduction to Marketing: Definition, nature, scope & importance of Marketing Management, Core concepts of marketing	50%	50%	5	20
II	selling concept, production concept, modern marketing concept, societal marketing.	50%	50%	5	20
III	Market segmentation, targeting and positioning	50%	50%	5	20
<b>Suggested Readings:</b> 1. Philip Kotler, Marketing Mgt. (PHI) 2. Etzet, Walker, Stanton, Marketing Mgmt 3. Rajan Saxena, Marketing Mgmt					
<b>Suggested Digital platforms/web links for readings-</b>					
<b>Suggested OJT/Internship/Training/Skill partner</b>					
<b>Suggested Continous Evaluation Methods:</b> In addition to the theoretical inputs the course will be delivered through Assignments, Presentation, Group Discussions. This will instill in student a sense of decision making and practical learning					
<b>Course Pre-requisites:</b> <ul style="list-style-type: none"> <li>• No pre-requisites required ,open to all</li> <li>• To study this course ,a student must have the subject .....in class 12<sup>th</sup> /certificate/diploma</li> <li>• If progressive, to study this course a student must have passed previous courses of this series.</li> </ul>					
<b>Suggested equivalent online courses:</b>					

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marks/suggestions:

Number of units in aw4 Theory/Practical may vary as per need

Total credits/semester -3(it can be more credits, but student will get only 3 credit/semester or 6 credit /year)

- Credits for Theory=01 (Teaching Hours=15)
- Credits for Internship/OJT/Training/Practical=02 (Training Hours=60)

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## Format for syllabus Development of

<b>Title of Course- Marketing and Salesmanship-IV</b>	
Nodal Department of HEI to run course	Department of Business Management, VBSPU
Broad Area Sector	Business Management
Sub Sector	Marketing and Sales
Nature of Course- Independent/Progressive	Progressive
Name of suggestive Sector Skill Council	AICTE, AIMA
Aligned NSQF level	Yes
Expected fees of the course- Free/Paid	Paid
Stipend to student expected from industry	As per industry norms
Number of Seats.....	20
Course Code .....	Credits-03 (1 Theory, 2 Practical)
Max. Marks..... 100... Minimum Marks.....	Max marks 100 Minimum 36
Nature of proposed skill Partner(Please specify , Name of industry, company etc. for Practical/training/internship/OJT	Any organisation having marketing/sales function
Job prospects-Expected Fields of Occupation where student will be able to Get job after completing this course in(Please specify name/type of industry, company etc.)	All corporate/public/not for profit organisations

### Syllabus

Unit	Topics	General/ Skill Component	Theory/ Practical/OJT/ Internship/ Training	No. of theory Hours (Total-15 Hours=1 credit)	No. of skill Hours (Total-60 Hours=2 credit)
I	Marketing Mix: Product – Product Mix, New Product development, Product life cycle, Branding and packaging, Distribution, , different types of distribution Channels.	50%	50%	5	20
II	Price – Meaning, objective, factors influencing pricing, methods of pricing	50%	50%	5	20
III	Promotion – Promotional mix, tools	50%	50%	5	20

#### Suggested Readings:

1. Philip Kotler, Marketing Mgt. (PHI)
2. Etzet, Walker, Stanton, Marketing Mgmt
3. Rajan Saxena, Marketing Mgmt

#### Suggested Digital platforms/web links for readings-

#### Suggested OJT/Internship/Training/Skill partner

**Suggested Continuous Evaluation Methods:** In addition to the theoretical inputs the course will be delivered through Assignments, Presentation, Group Discussions. This will instill in student a sense of decision making and practical learning

#### Course Pre-requisites:

- No pre-requisites required ,open to all
- To study this course ,a student must have the subject .....in class 12<sup>th</sup> /certificate/diploma
- If progressive, to study this course a student must have passed previous courses of this series.

#### Suggested equivalent online courses:

#### Any remarks/suggestions:

*JKR*

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Number of units in Theory/Practical may vary as per need

Total credits/semester -3(it can be more credits, but student will get only 3 credit/semester or 6 credit /year)

Credits for Theory=01 (Teaching Hours=15)

Credits for Internship/OJT/Training/Practical=02 (Training Hours=60)

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## Format for syllabus Development of

<b>Name of Course- Business Communication-I</b>	
Local Department of HEI to run course.	Department of E-Commerce, VBSPU
Broad Area Sector	Business Management
Sub Sector	Business Communication
Nature of Course- Independent/Progressive	Independent
Name of suggestive Sector Skill Council	AIMA, British Council
Aligned NSQF level	Yes
Expected fees of the course- Free/Paid	Paid
Stipend to student expected from industry	As per industry norms
Number of Seats	20
Course Code	Credits-03 (1 Theory ,2 Practical)
Max. Marks 100... Minimum Marks	Max marks :100 Minimum 36
Nature of proposed skill Partner(Please specify , Name of industry, company etc. for Practical/training/internship/OJT)	Language development institutions
Job prospects-Expected Fields of Occupation where student will be able to Get job after completing this course in(Please specify name/type of industry, company etc.)	All corporate/public/not for profit organisations

### Syllabus

Unit	Topics	General/ Skill Component	Theory/ Practical/OJT/ Internship/ Training	No. of theory Hours (Total-15 Hours=1 credit)	No. of skill Hours (Total-60 Hours=2 credit)
I	Business communication: communication process, barriers of communication, how to overcome communication barriers	30%	70%	5	20
II	Oral communication: verbal and non verbal, face to face communication	40%	60%	5	20
III	Extempore, presentation, reading Negotiation , communication for selling process	60%	40%	5	20
				5	20

#### Suggested Readings:

1. Business Communication, Keegan S, Clarye International
2. Business Communication, Pardillo, J.C, Society Publication
3. Business Communication: Basic Concepts & Skills, Peter C, ED Tech Press
4. Essentials of Business Communication, Rajendra Pal & J.S. Korlahalli, Sultan Chand & Sons

#### Suggested Digital platforms/web links for readings-

#### Suggested OJT/Internship/Training/Skill partner

**Suggested Continuous Evaluation Methods:** Suggested Continuous Evaluation Methods: In addition to the theoretical inputs the course will be delivered through Assignments, Presentation, Live Practices etc. This will instill in student a sense of decision making and practical learning

#### Course Pre-requisites:

- No pre-requisites required ,open to all
- To study this course ,a student must have the subject ..... in class 12<sup>th</sup> /certificate/diploma

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ogressive, to study this course a student must have passed previous courses of this series

, equivalent online courses

marks/suggestions.

Number of units in Theory/Practical may vary as per need

- Total credits/semester -3(it can be more credits, but student will get only 3 credit/semester or 6 credit /year)
- Credits for Theory=01 (Teaching Hours=15)
- Credits for Internship/OJT/Training/Practical=02 (Training Hours=60)



**Course- Business Communication-II**

Department of HEI to run course

Lead Area Sector	Department of E-Commerce, VBSPU
Job Sector	Business Management
Nature of Course- Independent/Progressive	Business Communication
Name of suggestive Sector Skill Council	Independent
Aligned NSQF level	AIMA, British Council
Expected fees of the course- Free/Paid	Yes
Stipend to student expected from industry	Paid
Number of Seats	As per industry norms
Course Code	20
Max. Marks... 100... Minimum Marks	Credits-03 (1 Theory, 2 Practical)
Nature of proposed skill Partner(Please specify, Name of industry, company etc. for Practical/training/internship/O.IT	Max marks :100 Minimum 36
Job prospects-Expected Fields of Occupation where student will be able to Get job after completing this course in(Please specify name/type of industry, company etc.)	Language development institutions
	All corporate/public/not for profit organisations

**Synabus**

Unit	Topics	General/Skill Component	Theory/ Practical/OJT/ Internship/ Training	No. of theory Hours (Total-15 Hours=1 credit)	No. of skill Hours (Total-60 Hours=2 credit)
I	Written communication: Formal and informal letters, Application letters,	70%	30%	5	20
II	Memos, office correspondences, complaints, adjustment	70%	30%	5	20
III	Sales letter, bank & insurance correspondences, Report writing, Agenda and minutes writing	70%	30%	5	20

**Suggested Readings:**

1. Business Communication, Keegan S, Clarye International
2. Business Communication, Pardillo, J.C, Society Publication
3. Business Communication: Basic Concepts & Skills, Peter C, ED Tech Press
4. Essentials of Business Communication, Rajendra Pal & J.S. Korlahalli, Sultan Chand & Sons

**Suggested Digital platforms/web links for readings-**

**Suggested OJT/Internship/Training/Skill partner**

**Suggested Continuous Evaluation Methods:** Suggested Continuous Evaluation Methods: In addition to the theoretical inputs the course will be delivered through Assignments, Presentation, Live Practices etc. This will instill in student a sense of decision making and practical learning

**Course Pre-requisites:**

- No pre-requisites required, open to all
- To study this course, a student must have the subject ..... in class 12<sup>th</sup> /certificate/diploma
- If progressive, to study this course a student must have passed previous courses of this series.

**Suggested equivalent online courses**

**Any remarks/suggestions**

**Notes**

## Format for syllabus Development of

<b>Course- Business Communication-III</b> al Department of HEI to run course	
Head Area Sector	Department of E-Commerce VBSPU
Sub Sector	Business Management
Nature of Course- Independent/Progressive	Business Communication
Name of suggestive Sector Skill Council	Independent
Aligned NSQF level	NCCE, ICCE
Expected fees of the course- Free/Paid	Yes
Stipend to student expected from industry	Paid
Number of Seats	As per industry norms
Course Code	20
Max. Marks 100... Minimum Marks	Credits-03 (1 Theory, 2 Practical)
Nature of proposed skill Partner(Please specify Name of industry, company etc. for Practical/training/internship/OJT)	Max marks 100 Minimum 36
Job prospects-Expected Fields of Occupation where student will be able to Get job after completing this course in(Please specify name/type of industry, company etc.)	Computer Training Institutions
	All corporate/public/not for profit organisations

Syllabus					
Unit	Topics	General/ Skill Component	Theory/ Practical/OJT/ Internship/ Training	No. of theory Hours (Total-15 Hours=1 credit)	No. of skill Hours (Total-60 Hours=2 credit)
I	MS Word-Creating, editing, saving, print documents, Inserting tables, arts, page breaks, working with images, spelling check and grammar, using list and styles, mail merge	70%	30%	5	20
II	MS Excel-spreadsheet concept, creating, editing, saving, printing spreadsheets, functions and formulas, modifying worksheets with colours and autoformats, charts and graphs, speeding data entry & using data forms, Analysing data: data menu, sub total, filtering data, formatting work sheets, securing and protecting spread sheets	70%	30%	5	20
III	MS Excel- charts and graphs, speeding data entry & using data forms, Analysing data: data menu, sub total, filtering data, formatting work sheets, securing and protecting spread sheets	70%	30%	5	20

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**Readings**

Building a Foundation with Microsoft Office 2019 & 365, Alec Fehl, et al  
Microsoft Office Step by Step, John Lambert, Curtis Frye  
Office 2016, Elaine Marmel

Additional Digital platforms/web links for readings-

Suggested OJT/Internship/Training/Skill partner

Suggested Continuous Evaluation Methods. In addition to the theoretical inputs the course will be delivered through Assignments, Presentation, Live Practices etc. This will instill in student a sense of decision making and practical learning

Course Pre-requisites:

- No pre-requisites required, open to all
- To study this course, a student must have the subject ..... in class 12<sup>th</sup> /certificate/diploma
- If progressive, to study this course a student must have passed previous courses of this series

Suggested equivalent online courses:

Any remarks/suggestions:

Notes:

- Number of units in Theory/Practical may vary as per need
- Total credits/semester -3(it can be more credits, but student will get only 3 credit/semester or 6 credit /year)
- Credits for Theory=01 (Teaching Hours=15)
- Credits for Internship/OJT/Training/Practical=02 (Training Hours=60)

## Format for syllabus Development of

Title of Course	<b>Business Communication-IV</b>
Nodal Department of HEI to run course	Department of E-Commerce, VBSPU
Broad Area Sector	Business Management
Sub Sector	Business Communication
Nature of Course- Independent/Progressive	Independent
Name of suggestive Sector Skill Council	NCCE, ICCE
Aligned NSQF level	Yes
Expected fees of the course- Free/Paid	Paid
Stipend to student expected from industry	As per industry norms
Number of Seats.....	20
Course Code.....	Credits-03 (1 Theory ,2 Practical)
Max. Marks..... 100.... Minimum Marks.....	Max marks :100 Minimum:36
Nature of proposed skill Partner(Please specify , Name of industry, company etc. for Practical/training/internship/OJT)	Computer Training Institutions
Job prospects-Expected Fields of Occupation where student will be able to Get job after completing this course in(Please specify name/type of industry, company etc.)	All corporate/public/not for profit organisations

### Syllabus

Unit	Topics	General/ Skill Component	Theory/ Practical/OJT/ Internship/ Training	No. of theory Hours (Total-15 Hours=1 credit)	No. of skill Hours (Total-60 Hours=2 credit)
I	MS Powerpoint: opening ,viewing, creating ,printing slide, applying auto layouts, adding custom animation, slide transitions, graphical representation including charts and graphs, preparing slides for professional presentation	70%	30%	5	20
II	Internet: search engines, book marking and going to specific websites, copying and pasting internet content /links to word files, Excel spreadsheets, emails etc, social media and their applications in business	70%	30%	5	20
III	Online voice calls and video calls or business communication: basics, principles, etiquettes	70%	30%	5	20
				5	20

### Suggested Readings:

1. Building a Foundation with Microsoft Office 2019 & 365, Alec Fehl,etal
2. Microsoft Office Step by Step, John Lambert, Curtis Frye



Office 2016, Elaine Marmel

and Digital platforms/web links for readings-

and OJT/Internship/Training/Skill partner

**Suggested Continuous Evaluation Methods:** Suggested Continuous Evaluation Methods: In addition to the theoretical inputs the course will be delivered through Assignments, Presentation, Live Practices etc. This will instill in student a sense of decision making and practical learning

**Course Pre-requisites:**

- No pre-requisites required, open to all
- To study this course, a student must have the subject \_\_\_\_\_ in class 12<sup>th</sup> /certificate/diploma
- If progressive, to study this course a student must have passed previous courses of this series

**Suggested equivalent online courses:**

**Any remarks/suggestions:**

**Notes:**

- Number of units in Theory/Practical may vary as per need
- Total credits/semester -3(it can be more credits, but student will get only 3 credit/semester or 6 credit /year)
- Credits for Theory=01 (Teaching Hours=15)
- Credits for Internship/OJT/Training/Practical=02 (Training Hours=60)



**VEER BAHADUR SINGH PURVANCHAL UNIVERSITY, JAUNPUR**  
**Department of Financial Studies**  
**Semester – I**


**Title of course- Basics of Financial Management**

Nodal Department or FET to run course	Department of Financial Studies
Broad Area/Sector-	Finance
Sub Sector-	Financial Management
Name of course – Independent/Progressive	Progressive
Name of suggestive Sector Skill Council	Banking & Financial Services Insurance [BFSI]
Aliened NSQF level	Level 6
Expected fees of the course – Free/Paid	Free
Stipend to student expected from industry	₹15000.00
Number of Seats-	20
Course Code- F070102P	Credits- 03 (1 Theory, 2 Practical)
Max Marks ...100... Minimum Marks.....	Max. Marks – 100; Min. Marks – 50
Name of proposed skill Partner (Please specify, Name of industry, company, etc. for Practical/training/internship/OJT)	Self
Job prospects- Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company etc.)	Banker, Insurance Planner, Investment Banker, Financial Advisor, Financial Analyst.

**Syllabus**

Unit	Topics	General/Skill component	Theory/ Practical/ OJT/ Internship/ Training	No of theory hours (Total – 15 Hours=1 credit)	No of skill Hours (Total – 60 Hours=2 credit)
Unit I	<b>Financial Management – An Overview</b> Finance and Related Disciplines; Scope of Financial Management; Objectives of Financial Management; Primary Objective of Corporate Management; Agency Problem; Organization of Finance Function; and Emerging role of Finance Managers in India.	During the course, the participants will gain knowledge of principles and concepts used in financial decision Making and learn about finance functions and role of finance managers in India	Theory + Practical + Training	05	20
Unit II	<b>Time Value of Money :</b> Rationale; Techniques; Practical Applications of Compounding; and Present Value Techniques	Participants will gain knowledge of principles and concepts used in financial decision And learn to practical applications of compounding and present value techniques.	Theory + Practical + Training	05	20
Unit III	<b>Risk and Return :</b> Conceptual Framework of Risk and Return:	Learner will gain conceptual knowledge of risk			

	Type of Risks; Risk and Return of a Single Asset; Risk and Return of Portfolio (only two asset portfolio); Portfolio Selection, and Capital Asset Pricing Model (CAPM)	and return and will be able to find out various risk associated with financial assets and how to value them	Theory + Practical + Training	05	20
<p>Suggested Readings:</p> <ol style="list-style-type: none"> <li>1. Khan, M.Y &amp; Jain, P K.: Financial Management; Tata McGraw Hill, New Delhi, 2008.</li> <li>2. Pandey, I. M.: Financial Management; Vikas Publishing House, New Delhi, 2005.</li> <li>3. Chandra, Prasana: Financial Management; Tata McGraw Hill, New Delhi, 2008.</li> <li>4. Kishore Ravi, M: Financial Management; Taxman, 2006.</li> </ol>					
<p>Suggested Digital platforms/web links for reading-</p> <ol style="list-style-type: none"> <li>1. <a href="https://mdu.ac.in/UpFiles/UpPdfFiles/2020/Jan/FinancialManagement.pdf">https://mdu.ac.in/UpFiles/UpPdfFiles/2020/Jan/FinancialManagement.pdf</a></li> <li>2. <a href="https://www.icsi.edu/media/webmodules/Financial%20and%20Strategic%20Management.pdf">https://www.icsi.edu/media/webmodules/Financial%20and%20Strategic%20Management.pdf</a></li> </ol>					
<p>Suggested OJT/Internship/Training/Skill partner</p> <ul style="list-style-type: none"> <li>• Indian Institute of Banking and Finance</li> <li>• Arun Jaitley National Institute of Financial Management</li> <li>• Indian Institute of Finance</li> </ul>					
<p>Suggested Continuous Evaluation Methods: The learners will be evaluated on the basis of quiz and regular assessment through presentation and hands on practice.</p>					
<p>Course Pre-requisites:</p> <ul style="list-style-type: none"> <li>• No pre-requisite required, open to all</li> <li>• To study this course, a student must have the subject <b>science/commerce/arts</b> in class 12<sup>th</sup>/ certificate/diploma</li> <li>• If progressive, to study this course a student must have passed previous courses of this series.</li> </ul>					
<p><b>Suggested equivalent online courses: Financial Management [SWAYAM]</b></p>					
<p>Any remarks/suggestions: Learners will be acquainted with practices of finance functions by visiting the reputed banking and finance institutes.</p>					
<p>Notes:</p> <ul style="list-style-type: none"> <li>• Number of units in Theory/Practical may vary as per need</li> <li>• Total credits/semester-3 (it can be more credits, but student will get only 3credit/semester or 6credits/ year)</li> <li>• Credits for Theory =01 (Teaching Hours = 15)</li> <li>• Credits for Internship/OJT/Practical = 02 (Training Hours = 60)</li> </ul>					

  
 01/10/22



**VEER BAHADUR SINGH PURVANCHAL UNIVERSITY, JAUNPUR**  
**Department of Financial Studies**  
**Semester – II**

**Title of course- Capital Budgeting Techniques**

Nodal Department of HEI to run course	Department of Financial Studies
Broad Area/Sector-	Finance
Sub Sector-	Financial Management
Name of course – Independent/Progressive	Progressive
Name of suggestive Sector Skill Council	Banking & Financial Services Insurance [BFSI]
Aliened NSQF level	Level 6
Expected fees of the course – Free/Paid	Free
Stipend to student expected from industry	₹15000.00
Number of Seats-	20
Course Code-F070202P	Credits- 03 (1 Theory, 2 Practical)
Max Marks... 100 .... Minimum Marks.....	Max. Marks – 100; Min. Marks – 50
Name of proposed skill Partner (Please specify, Name of industry, company, etc. for	Self


Practical/training/internship/OJT)	
Job prospects- Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company etc.)	Banker, Insurance Planner, Investment Banker, Financial Advisor, Financial Analyst.

**Syllabus**

Unit	Topics	General/Skill component	Theory/ Practical/ OJT/ Internship/ Training	No of theory hours (Total – 15 Hours=1 credit)	No of skill Hours (Total – 60 Hours=2 credit)
Unit I	<b>Capital Budgeting – Principles and Techniques:</b> Nature of Capital Budgeting; Requirement; identifying Relevant Cash Flows; Evaluation Techniques; and Capital Budgeting Practices in India	Learner will gain fundamental knowledge about capital budgeting and will gain practical knowledge about evaluation techniques and capital budgeting practices in India	Theory + Practical + Training	05	20
Unit II	<b>Capital Budgeting – Additional Aspects:</b> Net Return Value; Internal Rate of Return; Profitability Index Methods – A Comparison; Project Selection Under Capital Rationing; and Inflation and Capital Budgeting.	Learner will be able to compare various project and selection of best project and also capital budgeting interpretation	Theory + Practical + Training	05	20
Unit III	<b>Analysis of Risk and Uncertainty in Capital Budgeting:</b> Description and Measurement of Risk; and Risk Evaluation Approaches.	Learner will be able to understand risk associated with various financial assets and measure,		05	20

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21/10/22

	evaluation			
Suggested Readings				
<ol style="list-style-type: none"> <li>1. Gitman, L. J: Principles of Managerial Finance; Addison Wasley, 2009.</li> <li>2. Pandey, I. M.: Financial Management, Vikas Publishing House, New Delhi, 2005.</li> <li>3. Chandra, Prasana. Financial Management; Tata McGraw Hill, New Delhi, 2008.</li> <li>4. Kishore Ravi, M. Financial Management; Taxman, 2006</li> </ol>				
Suggested Digital platforms/web links for reading-				
<ol style="list-style-type: none"> <li>1. <a href="https://mdu.ac.in/UpFiles/UpPdfFiles/2020/Jan/FinancialManagement.pdf">https://mdu.ac.in/UpFiles/UpPdfFiles/2020/Jan/FinancialManagement.pdf</a></li> <li>2. <a href="https://www.icsi.edu/media/webmodules/Financial%20and%20Strategic%20Management.pdf">https://www.icsi.edu/media/webmodules/Financial%20and%20Strategic%20Management.pdf</a></li> </ol>				
Suggested OJT/Internship/Training/Skill partner				
<ul style="list-style-type: none"> <li>• Indian Institute of Banking and Finance</li> <li>• Arun Jaitley National Institute of Financial Management</li> <li>• Indian Institute of Finance</li> </ul>				
Suggested Continuous Evaluation Methods. The learners will be evaluated on the basis of quiz and regular assessment through presentation and hands on practice				
Course Pre-requisites:				
<ul style="list-style-type: none"> <li>• No pre-requisite required, open to all</li> <li>• To study this course, a student must have the subject <b>science/commerce/arts</b> in class 12<sup>th</sup>/ certificate/diploma</li> <li>• If progressive, to study this course a student must have passed previous courses of this series.</li> </ul>				
Suggested equivalent online courses: Financial Management for Managers [NPTEL]				
Any remarks/suggestions: Learners will be acquainted with practices finance functions by visiting the reputed banking, Insurance and finance institutes.				
Notes:				
<ul style="list-style-type: none"> <li>• Number of units in Theory/Practical may vary as per need</li> <li>• Total credits/semester-3 (it can be more credits, but student will get only 3credit/semester or 6credits/ year</li> <li>• Credits for Theory =01 (Teaching Hours = 15)</li> <li>• Credits for Internship/OJT/Practical = 02 (Training Hours = 60)</li> </ul>				

  
 01/10/22





**VEER BAHADUR SINGH PURVANCHAL UNIVERSITY, JAUNPUR**  
**Department of Financial Studies**  
**Semester – III**

**Title of course- Cost of Capital and Capital Structuring**

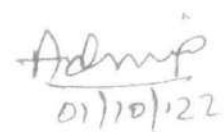
Nodal Department of AICTE to run course	Department of Financial Studies
Broad Area/Sector-	Finance
Sub Sector-	Financial Management
Name of course – Independent/Progressive	Progressive
Name of suggestive Sector Skill Council	Banking & Financial Services Insurance [BFSI]
Aliened NSQF level	Level 6
Expected fees of the course – Free/Paid	Free
Stipend to student expected from industry	₹15000.00
Number of Seats-	20
Course Code-F070302P	Credits- 03 (1 Theory, 2 Practical)
Max Marks ... 100 ... Minimum Marks .....	Max. Marks – 100, Min. Marks – 50
Name of proposed skill Partner (Please specify, Name of industry, company, etc. for Practical/training/internship/OJT)	Self
Job prospects- Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company etc.)	Banker, Insurance Planner, Investment Banker, Financial Advisor, Financial Analyst.

**Syllabus**

Unit	Topics	General/Skill component	Theory/ Practical/ OJT/ Internship/ Training	No of theory hours (Total – 15 Hours=1 credit)	No of skill Hours (Total – 60 Hours=2 credit)
Unit I	<b>Concept and Measurement of Cost of Capital :</b> Importance and concept; Measurement of Specific Costs; Computation of Overall Cost of Capital; and Cost of Capital Practices in India.	Learner will be able to understand the Concept of Cost of capital, how to measure coat of capital and cost of capital practices in India.	Theory + Practical + Training	05	20
Unit II	<b>Operating, Financial and Combined Leverage</b> Operating Leverage; Financial Leverage; and Combined Leverage	Learner will be able to understand the basics of Financial Leverage, Operating Leverage and there use in Capital Structure	Theory + Practical + Training	05	20
Unit III	<b>Capital Structure Cost of Capital and Valuation :</b> Capital Structure Theories; Net Income Approach; Net Operating Income (NOI) Approach;	Learner will be able to understand the Capital Structure , various theories of capital structure and their practical use in	Theory + Practical + Training	05	20

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	Modigliani-Miller (MM) Approach and Traditional Approach	deciding capital structure			
<p>Suggested Readings:</p> <ol style="list-style-type: none"> <li>1. Gitman, L.J. Principles of Managerial Finance; Addison Wasley, 2009.</li> <li>2. Keown, Martin, Petty and Scott (Jr). Financial Management: Principles and Applications. Prentice Hall of India, New Delhi, 2002</li> <li>3. Chandra, Prasana. Financial Management; Tata McGraw Hill, New Delhi, 2008.</li> <li>4. Kishore Ravi, M: Financial Management; Taxman, 2006.</li> </ol>					
<p>Suggested Digital platforms/web links for reading-</p> <ol style="list-style-type: none"> <li>1. <a href="https://mdu.ac.in/UpFiles/UpPdfFiles/2020/Jan/FinancialManagement.pdf">https://mdu.ac.in/UpFiles/UpPdfFiles/2020/Jan/FinancialManagement.pdf</a></li> <li>2. <a href="https://www.icsi.edu/media/webmodules/Financial%20and%20Strategic%20Management.pdf">https://www.icsi.edu/media/webmodules/Financial%20and%20Strategic%20Management.pdf</a></li> <li>3. <a href="https://drive.google.com/file/d/1pe51YUZdVDK1mw7cMHAclli6QJz8jubY/view">https://drive.google.com/file/d/1pe51YUZdVDK1mw7cMHAclli6QJz8jubY/view</a></li> </ol>					
<p>Suggested OJT/Internship/Training/Skill partner</p> <ul style="list-style-type: none"> <li>• Indian Institute of Banking and Finance</li> <li>• Arun Jaitley National Institute of Financial Management</li> <li>• Indian Institute of Finance</li> </ul>					
<p>Suggested Continuous Evaluation Methods: The learners will be evaluated on the basis of quiz and regular assessment through presentation and hands on practice.</p>					
<p>Course Pre-requisites:</p> <ul style="list-style-type: none"> <li>• No pre-requisite required, open to all</li> <li>• To study this course, a student must have the subject <b>science/commerce/arts</b> in class 12<sup>th</sup>/ certificate/diploma</li> <li>• If progressive, to study this course a student must have passed previous courses of this series.</li> </ul>					
<p><b>Suggested equivalent online courses: Corporate Finance [NPTEL]</b></p>					
<p>Any remarks/suggestions: Learners will be acquainted with practices of banking and finance functions by visiting the reputed banking and finance institutes and companies.</p>					
<p>Notes</p> <ul style="list-style-type: none"> <li>• Number of units in Theory/Practical may vary as per need</li> <li>• Total credits/semester-3 (it can be more credits, but student will get only 3credit/semester or 6credits/ year)</li> <li>• Credits for Theory =01 (Teaching Hours = 15)</li> <li>• Credits for Internship/OJT/Practical = 02 (Training Hours = 60)</li> </ul>					

  
 01/10/22



**VEER BAHADUR SINGH PURVANCHAL UNIVERSITY, JAUNPUR**  
**Department of Financial Studies**  
**Semester – IV**

**Title of course- Designing Capital Structure and Dividend Decisions**

Nodal Department or NER to run course	Department of Financial Studies
Broad Area/Sector-	Finance
Sub Sector-	Financial Management
Name of course – Independent/Progressive	Progressive
Name of suggestive Sector Skill Council	Banking & Financial Services Insurance [BFSI]
Aliened NSQF level	Level 6
Expected fees of the course – Free/Paid	Free
Stipend to student expected from industry	₹15000.00
Number of Seats-	20
Course Code-F070402P	Credits- 03 (1 Theory, 2 Practical)
Max Marks... 100..... Minimum Marks.....	Max. Marks – 100; Min. Marks – 50
Name of proposed skill Partner (Please specify, Name of industry, company, etc for Practical/training/Internship/OJT)	Self

Job prospects- Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company etc.)	Banker, Corporate Financial Advisor, Investment Banker, Financial Advisor, Financial Analyst
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**Synabus**

Unit	Topics	General/Skill component	Theory/ Practical/ OJT/ Internship/ Training	No of theory hours (Total – 15 Hours=1 credit)	No of skill Hours (Total – 60 Hours=2 credit)
Unit I	<b>Designing Capital Structure :</b> Profitability Aspect; Liquidity Aspect; Control; Leverage Ratios for other Firms in the Industry; Nature of Industry; Consultation and Investment Bankers and Lenders; Maintaining Maneuverability for Commercial Strategy; Timing of Issue; Characteristics of Company; Tax Planning; and Capital Structure Practices in India.	Learner will be able to design optimum capital structure and also will be learn about Tax Planning; and Capital Structure Practices in India.	Theory + Practical + Training	05	20
Unit II	<b>Dividend and Valuation :</b> Meaning, Models, Walter Model, Gordon Model, MM Model and Linter's Model	Learner will be able to understand the meaning, models of dividends and practical aspects of these models	Theory + Practical + Training	05	20
Unit III	<b>Determinants of Dividends Policy :</b>	Learner will be able to			

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Factors; Dividend Policy in India, Bonus Shares (Stock dividend) and Stock (Share) Splits; Legal, Procedural, and Tax Aspects associated with Dividend Decision.	understand the factors which decide dividends and also legal procedure and tax aspects linked with dividend decisions	Theory + Practical + Training	05	20
<p>Suggested Readings</p> <ol style="list-style-type: none"> <li>1. Khan, M.Y &amp; Jain, P.K. Financial Management; Tata McGraw Hill, New Delhi, 2008.</li> <li>2. Pandey, I. M. Financial Management; Vikas Publishing House, New Delhi, 2005.</li> <li>3. Chandra, Prasanna: Financial Management; Tata McGraw Hill, New Delhi, 2008</li> <li>4. Brealey and Meyers. Principles of Corporate Finance: Tata McGraw Hill, New Delhi, 2008</li> </ol>				
<p>Suggested Digital platforms/web links for reading-</p> <ol style="list-style-type: none"> <li>1. <a href="https://mdu.ac.in/UpFiles/UpPdfFiles/2020/Jan/FinancialManagement.pdf">https://mdu.ac.in/UpFiles/UpPdfFiles/2020/Jan/FinancialManagement.pdf</a></li> <li>2. <a href="https://www.icsi.edu/media/webmodules/Financial%20and%20Strategic%20Management.pdf">https://www.icsi.edu/media/webmodules/Financial%20and%20Strategic%20Management.pdf</a></li> <li>3. <a href="https://drive.google.com/file/d/1pe51YUZdVdK1mw7cMHAclli6QJz8jubY/view">https://drive.google.com/file/d/1pe51YUZdVdK1mw7cMHAclli6QJz8jubY/view</a></li> </ol>				
<p>Suggested OJT/Internship/Training/Skill partner</p> <ul style="list-style-type: none"> <li>• Indian Institute of Banking and Finance</li> <li>• Arun Jaitley National Institute of Financial Management</li> <li>• Indian Institute of Finance</li> </ul>				
<p>Suggested Continuous Evaluation Methods: The learners will be evaluated on the basis of quiz and regular assessment through presentation and hands on practice.</p>				
<p>Course Pre-requisites:</p> <ul style="list-style-type: none"> <li>• No pre-requisite required, open to all</li> <li>• To study this course, a student must have the subject <b>science/commerce/arts</b> in class 12<sup>th</sup>/ certificate/diploma</li> <li>• If progressive, to study this course a student must have passed previous courses of this series.</li> </ul>				
<p>Suggested equivalent online courses: Corporate Finance [NPTEL]</p>				
<p>Any remarks/suggestions: Learners will be acquainted with practices of banking and finance functions by visiting the reputed banking, finance institute and companies.</p>				
<p>Notes</p> <ul style="list-style-type: none"> <li>• Number of units in Theory/Practical may vary as per need</li> <li>• Total credits/semester-3 (it can be more credits, but student will get only 3credit/semester or 6credits/ year</li> <li>• Credits for Theory =01 (Teaching Hours = 15)</li> <li>• Credits for Internship/OJT/Practical = 02 (Training Hours = 60)</li> </ul>				

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Title of course	Carpentry-1
Nodal Department of HEI to run course	Mechanical Engineering Department
Broad Area/Sector	Production
Sub Sector	Wood working
Nature of course - Independent / Progressive	Independent
Name of suggestive Sector Skill Council	
Aliened NSQF level	2
Expected fees of the course –Free/Paid	Paid (INR 1000)
Stipend to student expected from industry	INR 2000 per month
Number of Seats	30
Course Code-..... Credits- 03 (1 Theory, 2 Practical)	
Max Marks...100..... Minimum Marks.....50...	Theory 40% and Practical 60%
Name of proposed skill Partner (Please specify, Name of industry, company, etc. for Practical /training/ internship/OJT	Zuari Furniture
Job prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company, etc.)	Furniture Industry, Interior Designers

### Syllabus

Unit	Topic	General/ Skill component	Theory/ Practical/ OJT/ Internship/ Training	No of theory hours (Total-15 Hours=1 credit)	No of skill Hours (Total-60 hours=2credits)
1	<b>Introduction to Carpentry</b>	Need for the Work, Training, Relationship between timber, Tools and Carpentry.	Theory and Practical	1 Hours	3 Hours
2	<b>Timber</b>	Origin Structure of Timber, Types of wood conversion of timber,	Theory and Practical	3Hours	6 Hours



		Types of sawing, Timber sections, Defects in wood: Seasoning of timber, Preservation, Types of preservatives, Other types of timber.			
3	<b>Carpentry Tools</b>	Classification of Tools, Measuring and Marking, Holding, Cutting, Grooving, Planing, Striking, Boring and Miscellaneous Tools, Care and maintenance of Tools, Precautions to be taken while using carpentry tools, Sharpening tools, Wood working machines, Wood working lathe, Wood sawing machine, etc.	Theory and Practical	3 Hours	6 Hours
4	<b>Basic Drawing and Calculations</b>	Drawing Instruments for drawing, Preliminary practice, Different methods, Orthographic drawing, Isometric drawing, Oblique drawing, Perspective drawing, Freehand drawing or sketching. o Calculations Need, Units of measurement, How to measure and calculate, Examples on Calculations.	Theory and Practical	4 Hours	15 Hours
5	<b>Types of Work and Working Procedure</b>	Marking, Sawing, Planning, Chiselling, Boring, Striking, Checking, Sharpening.	Theory and Practical	2 Hours	15Hours
6	<b>Joints in Carpentry work</b>	Classification, Some associated terms, Lengthening/Widening Joints, Corner Joints, Framing Joints, Preparation of timber and making joint, Precautions in making a joint.	Theory and Practical	2 Hours	15Hours

Suggested Readings:1. Swarn Singh , Workshop practice

2. G.S. Sethi , Asian Carpenter Trade Theory (A Textbook for Semester 1 & 2)

Suggested Digital platforms/ web links for reading:

1. <https://www.alison.com/>
2. <https://nios.ac.in/departmentsunits/vocational-education/>
3. <https://hepoindia.com/carpenter-training>

Suggested OJT/ Internship/ Training/ Skill partner  
<http://www.zuari-furniture.com/>

Suggested Continuous Evaluation Methods:

Course Pre-requisites:

No pre-requisite required, open to all

To study this course, a student must have the subject ...English.. in class/12th/  
Certificate/diploma

If progressive, to study this course a student must have passed previous courses of this series.  
Any remarks/ suggestions:  
Notes:

Number of units in Theory/Practical may vary as per need  
Total credits/semester-3 (it can be more credits, but students will get only 3 credit/ semester or  
credits/ year

Credits for Theory =01 (Teaching Hours = 15)

Credits for Internship/OJT/Training/Practical = 02 (Training Hours = 60)

Title of course	Automobile-1
Nodal Department of HEI to run course	Mechanical Engineering Department
Broad Area/Sector	Automobile
Sub Sector	
Nature of course - Independent / Progressive	Independent
Name of suggestive Sector Skill Council	
Aliened NSQF level	
Expected fees of the course –Free/Paid	Paid (INR 1000)
Stipend to student expected from industry	INR 2000 per month
Number of Seats	30
Course Code-..... Credits- 03 (1 Theory, 2 Practical)	
Max Marks...100..... Minimum Marks.....	Theory 40% and Practical 60%
Name of proposed skill Partner (Please specify, Name of industry, company, etc. for Practical /training/ internship/OJT	
Job prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company, etc.)	
Syllabus	

Unit	Topic	General/ Skill component	Theory/ Practical/ OJT/ Internship/ Training	No of theory hours (Total-15 Hours=1 credit)	No of skill Hours (Total-60 hours=2credits)
1	<b>Introduction to Automobile</b>	History and Evolution of Automobiles,	Theory and Practical	1 Hours	3 Hours
2	<b>Automobile and its components</b>	Tools, Major Systems & Components of an Automobile, Innovation and Development	Theory and Practical	3Hours	6 Hours
3	<b>Clutch</b>	role - positive and gradually engaged types - types of clutches, single plate clutch, coil spring type and diaphragm spring type, multiple plate clutch, centrifugal clutch, calculation of torque transmission, over running clutch.	Theory and Practical	3 Hours	6 Hours
4	<b>Gear Box</b>	Need for a gearbox, types of gear boxes, sliding mesh, constant mesh and synchromesh gear boxes, calculation of gear ratios, epicyclical gearboxes, overdrives, transfer case - auxiliary gearbox, gear shifting mechanisms.	Theory and Practical	4 Hours	15 Hours
5	<b>Maintenance</b>	Regular Maintenance of an Engine, Regular Maintenance of Transmission System, Regular Maintenance of Transmission System, Regular Maintenance of	Theory and Practical	2 Hours	15Hours

		Gear			
6	<b>Brakes</b>	Types of brakes, Regular Maintenance of Brakes	Theory and Practical	2 Hours	15Hours

Suggested Readings:

Suggested Digital platforms/ web links for reading:

Suggested OJT/ Internship/ Training/ Skill partner

Suggested Continuous Evaluation Methods:

Course Pre-requisites:

- No pre-requisite required, open to all
- To study this course, a student must have the subject ...English.. in class/12th/ certificate/diploma
- If progressive, to study this course a student must have passed previous courses of this series.

Any remarks/ suggestions:

Notes:

- Number of units in Theory/Practical may vary as per need
- Total credits/semester-3 (it can be more credits, but students will get only 3credit/ semester or 6credits/ year
- Credits for Theory =01 (Teaching Hours = 15)
- Credits for Internship/OJT/Training/Practical = 02 (Training Hours = 60)



Format for syllabus development of

Title of course	<b>Multipurpose Health Worker M.P.H.W.(Female)</b>
Nodal Department of HEI to run course	Pharmacy
Broad Area/Sector	Medical
Sub Sector	Para medical
Nature of course- Independent/Progressive	progressive
Expected fees of the course- free/paid	Rs.10000/-
Stipend of student expected from industry	Rs. 5000-10000/-
Number of seats	20
Course code	MPHW0015
Max Marks	100
Minimum Marks	50
Name of proposed skill partner( please specify name of industry, company etc for practical/training/internship/OJT)	Medical college , Hospital,PHC,CHC
Job prospects-expected fields of occupation where student will be able to get job after completing this course in (please specify name/type of industry)	Midwives, primary health care servicer, patient adviser, patient counseling, Aganwadi worker, community health volunteers Guide/Train birth attendants, and others

**Syllabus – First Semester – subject - Community Health Nursing**

Unit s	Topics	General/skill component	Theory/Practical/OJT/Internship/Training	No. of theory hours( total 15 hours = 1 credit s)	No. of skill hours(to tal -60 hours=2 credits)
I	Concept of health, community health practice, health problem & policies, health organization/agencies			2 hours	10 hours
II	Roll of health team, structure & dynamics of community, communication, counseling, community based rehabilitation			3 hours	30 hours
III	communicable disease, community health problem,	Various diseases for communicable and problem and care of health problems.		3 hours	10
IV	Immunization, vaccination chart in	Growth and development of a child at different		2 hours	10


  
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	child and pregnant women	ages, nutritional need, common illness health programme, educate mother and family members as per need of their child and vaccination programme.			
V	Mental disease	Physical Health & Mental Illness.		3 hours	
VI	Environmental, sanitation nutrition required in medical health for patient.			2 hours	

**Syllabus – Second Semester subject- Midwifery**

Unit s	Topics	General/skill component	Theory/Practical/OJT/Internship/Training	No. of theory hours( total 15 hours = 1credits)	No of skill hours(to tal -60 hours=2 credits)
I	Female reproductive system, ogenesis & normal & abnormal,			3 hours	10
II	Pregnancy normal, abnormal, preeclampsia, eclipse, Labor, abortion and fertility			3 hours	10
III	first Aid and Emergency Drug			2 hours	20
IV	Infertility female, care of new born, Fetus & placenta			2 hours	
V	Drugs use for obstetrics, female pelvis & fetus skull			3 hours	
VI	National and state level programme for health.	HIV, AIDS, TB, IDSP, leprosy, mental health, deafness, immunization, blindness, Pulse polio, Malaria, National health intervention programme for mother and child.		2 hours	20

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Syllabus – Third Semester subject – Health Centre Management

Unit s	Topics	General/skill component	Theory/Practical/ OJT/Internship/Tr aining	No of theory hours/ total 15 hours = 1 credit s)	No of skill hours/(to tal -60 hours=2 credits, )
I	National health program for roll of MPHW female. sub center.			3 hours	20 hours
II	PHC,CHC district hospital, coordination			2 hours	
III	Communication skills	Introduction. When and When Not to Use Written Communication - Complexity of the Topic, Amount of Discussion' Required, Shades of Meaning, Formal Communication Improving writing & speaking in local language & English and prepared resume		3 hours	10 hours
IV	Legal medical act	MTP 1971 act, PCPNDT Act, 1994, Bio-medical waste rules 1998, the prohibition of sexual harassment of women at workplace bill 2010		2 hours	
V	Reading and instruction of Medical prescription	Reading for symbol, term and denoted Medical and pharma prescription writing		2 hours	20 hours
VI	Computer application in medical	Pharmacy Drug database, Diagnostic System, Lab- diagnostic System, Patient Monitoring System, Pharma Information System, MS Office, Word, Excel, and power presentation.		3 hours	10 hours

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Syllabus – Fourth Semester Training/Internship					
Unit s	Topics	General/skill component	Theory/Practical/ OJT/Internship/Tr aining	No of theory hours( total 15 hours = 1credit s)	No of skill hours(to tal -60 hours=2 credits)
I	Training/Internship	PHC.CHC. District hospital. medical college and others	90 hours		
II					
III					
IV					
V					
VI					
Suggested Readings: Text book of health worker and ANM writer name J.Clement published by jaypee brothers medical publishers new Delhi.					
Suggested Digital platform/web link for reading- <a href="http://www.unicef.com">www.unicef.com</a> , <a href="http://www.mohfw.gov.in">www.mohfw.gov.in</a> , <a href="http://www.jaypeedigital.com">www.jaypeedigital.com</a> , <a href="http://www.ncbi.nlm.nih.gov">www.ncbi.nlm.nih.gov</a>					
Suggested OJT/Internship/Training/Skill partner-					
Suggested Continuous Evaluation methods: Sessional Exam/presentation/semester Exam/viva-voice/health organizational chart/field visit/demonstration/lecture discussion.					
Course pre requisites:					
<ul style="list-style-type: none"> <li>• No pre requisites required, open to all</li> <li>• To study this course a student must have the subject all in class /12<sup>th</sup>/certificate/diploma.</li> <li>• If progressive to study must have passed previous course of this series</li> </ul>					
Suggested equivalent online course: Diploma in A.N.M.and certificate course in healthcare professional.					
Any remarks/suggestion: MoU is requires in hospitals and medical colleges.					

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**Tourism and Hospitality- 1 Semester 1**

Title of course-	Department Of Business & Commerce Tourism Sector
Nodal Department of the course-	Tourism Sector
Broad Area Sector-	
Sub Sector-	
Nature of course - Independent / Progressive	Independent
Name of suggestive Sector Skill Council	
Aligned NSQF Level	
Expected fees of the course - Free/Paid	Free
Stipend to student expected from industry	
Number of Seats-	30
Course Code-	Credit: 96% Theory 7 Practical
Max Marks - 100 / / Minimum Marks - / /	Theory 40% and Practical 60%
Name of proposed skill Partner (Please specify Name of industry, company, etc. for Practical training, internship, OI)	Not Available
Job prospects- Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company, etc.)	Student completing this course will acquire skills to work in the tourism sector in the field of event management, tour planner, guide etc.

**Syllabus**

Unit	Topics	General Skill component	Theory Practical Internship/ Training	Total theory Hours + Total Practical Hours + Credits	Total Skill Hours + Total Hours + Credits
<b>I</b>	Nature, characteristics, Historical Development of Tourism; Significance of Tourism; Definitions and Concepts: Tourism Systems, Visitor, Traveller, and Excursionist. Definition and differentiation; Growth of tourism through different periods. Emergence of sustainable Tourism alternative.		<b>Theory and Practical</b>	<b>5 Hours</b>	<b>20 Hours</b>
<b>II</b>	Tourism vs Mass tourism, Tourism Paradigms, Interdisciplinary approaches to study Tourism, Categorization of tourists according to their motive of travel, Stanley Plog's psychographic model.		<b>Theory and Practical</b>	<b>5 Hours</b>	<b>20 Hours</b>
<b>III</b>	Tourism legalization its need and status in India Types and forms of Tourism, Domestic, international, regional, inbound, outbound, Components of tourism.		<b>Theory and Practical</b>	<b>5 Hours</b>	<b>20 Hours</b>



Suggested Readings:

1. A.K. Bhatta – Tourism Development Principles and Practices Sterling Publishers, New Delhi.
2. Anand M.M. – Tourism and Hotel Industry in India : Sterling Publishers, New Delhi.
3. Kaur R. H. – Dynamics of Tourism – A Terilogy, Sterling Publishers, New Delhi.

Suggested Digital platforms/ web links for reading:

<https://egyankosh.ac.in/handle/123456789/42317>

Suggested OJT/ Internship/ Training/ Skill partner

Suggested Continuous Evaluation Methods:

Course Pre-requisites:

- No pre-requisite required, open to all (OPEN TO ALL)
- To study this course, a student must have the subject (U.G. in any Stream)
- If progressive, to study this course a student must have passed previous courses of this series (N/A)

Suggested equivalent online courses: [https://onlinecourses.swayam2.ac.in/ccc2b\\_je19/preview](https://onlinecourses.swayam2.ac.in/ccc2b_je19/preview)

Any remarks/ suggestions:

Notes:

- Number of units in Theory/Practical may vary as per need
- Total credits/semester-3 (it can be more credits, but students will get only 3credits/ semester or 6credits/ year)
- Credits for Theory =01 (Teaching Hours = 15)
- Credits for Internship/OJT/Training/Practical =02 (Training Hours = 60)

## Tourism and Hospitality- 2 Semester 2

Title of course	Department of Business, Economics & Tourism Sector
Nodal Department	Department of Business, Economics & Tourism Sector
Broad Area Sector-	Tourism Sector
Sub Sector-	
Nature of course - Independent / Progressive	Independent
Name of suggestive Sector Skill Council	
Alienated NSQF level	
Expected fees of the course - Free / Paid	Free
Stipend to student expected from industry	
Number of Seats	30
Course Code	Credits- 03 (1 Theory, 2 Practical)
Max Marks / 100 / Minimum Marks	Theory 40% and Practical 60%
Name of proposed skill Partner (Please specify Name of industry, company, etc. for Practical training/ internship/OJT)	Not Available
Job prospects- Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company, etc.)	Students completing this course will acquire skills to work in the tourism sector in the field of tourism logistics, hotels and tour travel agents.

### Syllabus

Unit	Topics	General Skill component	Theory / Practical / OJT / Internship / Training	Theory hours / Practical hours / Total-15 Hours / Credits	No. of Skill hours / Total-60 hours / 2 credit
<b>I</b>	Transport as a component of tourism, different types of transportation, Travel and Tourism in 21 <sup>st</sup> century. Study of Tourism Organisations:- Origin, location, institutional set up and functions of WTO, IATA, PATA, ASTA, UFTAA, IATO, TAAI and ICAO.		<b>Theory and Practical</b>	<b>5 Hours</b>	<b>20 Hours</b>
<b>II</b>	Marketing of Tourism Related Services : Marketing of Airlines, Hotels, Resorts. Case study of Hospitality sector in India.		<b>Theory and Practical</b>	<b>5 Hours</b>	<b>20 Hours</b>
<b>III</b>	History & growth of travel Agency, Types of travel agency and tour operation. Basic concept of Travel agents, Tour Operators & Excursion Agents. Tips and steps for itinerary planning.		<b>Theory and Practical</b>	<b>5 Hours</b>	<b>20 Hours</b>

Suggested Readings.

1. Aggarwal Surinder Travel Agency Management, Communication India
2. Acharya Ram Tourism & Culture Heritage of India Rosa Publication Jaipur

Suggested Digital platforms- web links for reading

<https://egyankosh.ac.in/handle/123456789/14868>

Suggested OJT/ Internship/ Training/ Skill partner

Suggested Continuous Evaluation Methods:

Course Pre-requisites:

- No pre-requisite required, open to all (OPEN TO ALL)
- To study this course, a student must have the subject (U.G in any Stream)
- If progressive, to study this course a student must have passed previous courses of this series.(NLL)

Suggested equivalent online courses: [https://onlinecourses.swyam2.ac.in/cec20\\_je19\\_preview](https://onlinecourses.swyam2.ac.in/cec20_je19_preview)

Any remarks/ suggestions:

Notes

- Number of units in Theory/Practical may vary as per need
- Total credits/semester-3 (it can be more credits, but students will get only 3credits/semester or 6credits/ year)
- Credits for Theory =01 (Teaching Hours = 15)
- Credits for Internship/OJT/ Training/Practical = 02 (Training Hours = 60)

**Tourism and Hospitality- 3 Semester 3**

Level of course -	Department of Business Economics
Modal Department of the course	Tourism Sector
Broad Area Sector	
Sub Sector	
Nature of course - Independent Progressive	Independent
Name of suggestive Sector Skill Council	
Aliened NSQF level	
Expected fees of the course - Free Paid	Free
Stipend to student expected from industry	
Number of Seats-	30
Course Code-	Credits- 03 (1 Theory, 2 Practical)
Max Marks - 100 Minimum Marks	Theory 40% and Practical 60%
Name of proposed skill Partner (Please specify, Name of industry, company, etc.)	Not Available
Job prospects- Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company, etc.)	Students completing this course will acquire skills to work in the tourism sector in the field of tourism logistics, front desk staff, food and beverages unit

Unit	Topics	General Skill component	Theory Practical (01) Internship Training	No. of theory hour (Total-15 Hours, 1 credit)	No. of Skill Hour (Total-60) Hour- 2 credit
I	Hospitality types and concept, typologies of tourism, Tourism Products & Attraction: Elements and characteristics of tourism products, Tourism product, Tourism Product Life Cycle, classifications, natural, cultural, religious, adventure, events, rural and eco tourism, Special interest tourism.		<b>Theory and Practical</b>	<b>5 Hours</b>	<b>20 Hours</b>
II	Front Office Organization & Hierarchy: Different sections & layouts of front office and their importance; coordination of FO with other departments; front office organization and hierarchy; duties and responsibilities of principal staff and their job description – FO Manager- Duty Manager- Lounge Manager- FO Agent- Cashier-		<b>Theory and Practical</b>	<b>5 Hours</b>	<b>20 Hours</b>
III	Introduction to Food Beverage Operations: Catering Establishment, Objective of Food Beverage operation, Organizational, Chart of F & B Department, Types of outlet in F & B department, Professionalism & personal hygiene of F & B Staff, Communication, Upselling techniques.		<b>Theory and Practical</b>	<b>5 Hours</b>	<b>20 Hours</b>

Suggested Readings:

1. Tourism development Principles and practices AR Bhatia
2. Tourism in India V.K. Goswami
3. Almanza B.A, Kolshevar, J.H & Terren, Food service layout, design & equipment

Suggested Digital platforms/ web links for reading:

<https://egyankosh.ac.in/handle/123456789/14868>

Suggested OJT/ Internship/ Training/ Skill partner

Suggested Continuous Evaluation Methods:

Course Pre-requisites:

- No pre-requisite required, open to all (OPEN TO ALL)
- To study this course, a student must have the subject (U.G in any Stream)
- If progressive, to study this course a student must have passed previous courses of this series. (Nil)

Suggested equivalent online courses: [https://onlinecourses.swayam2.ac.in/cec20\\_ge19/preview](https://onlinecourses.swayam2.ac.in/cec20_ge19/preview)

Any remarks/ suggestions:

Notes:

- Number of units in Theory/Practical may vary as per need
- Total credits/semester-3 (it can be more credits, but students will get only 3credit/ semester or 6credits/ year)
- Credits for Theory =01 (Teaching Hours = 15)
- Credits for Internship/OJT/Training/Practical =02 (Training Hours = 60)



Title of course	<b>Tourism and Hospitality- 4 Semester 4</b>
Nodal Department	Department Of Business, Economics, Tourism Sector
Broad Area Sector-	Tourism Sector
Sub Sector-	
Nature of course - Independent / Progressive	Independent
Name of suggestive Sector Skill Council	
Aliened NSQF level	
Expected fees of the course - Free/Paid	Free
Stipend to student expected from industry	
Number of Seats-	30
Course Code	Credits: 05 (1 Theory, 2 Practical)
Max Marks: 100 Minimum Marks:	Theory 40% and Practical 60%
Name of proposed skill Partner (Please specify Name of industry, company etc. for practical training, internship OJT)	Not Available
Job prospects- Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company etc.)	Students completing this course will acquire skill to work in the tourism sector in the field of tour, (e) analytics, tourism research, CRM etc.
<b>Syllabus</b>	

Unit	Topics	General Skill component	Theory/ Practical/ OJT/ Internship/ Training	No. of theoretical hours/ (Total-15 Hours- 1 credit)	No. of skill Hour/ (Total-60 Hours- 2 credits)
I	Concept of Demand and Supply in Tourism and Hospitality, Factors affecting Demand and Supply in Tourism, Indian Tourism and Hospitality - trends and statistics, Stakeholders in Tourism and Hospitality.		Theory and Practical	5 Hours	20 Hours
II	Cost Benefit Analysis of Tourism, Economy impact of Tourism and Hospitality sector, Multiplier Effects of Tourism, Serial Cultural and Environmental Impact of Tourism.		Theory and Practical	5 Hours	20 Hours
III	CRM Implementation - Defining success factors - Preparing a business plan requirements, justification and processes. - Choosing CRM tools - Defining functionalities - Homegrown versus outsourced approaches - Managing customer relationships - conflict, complacency.		Theory and Practical	5 Hours	20 Hours

Suggested Readings:

1. Braden, P.V. and Wiener, L. - Tourism Marketing and Management Issues, George Washington University
2. Holloway, J.C. and Plant R.V. - Marketing for tourism, Pitman Publishing
3. Travel Marketing, Tourism Economics and the Airline Product An Introduction to Theory and Practice, Springer

Suggested Digital platforms/ web links for reading.  
<https://egyankosh.ac.in/handle/123456789/16359>

Suggested OJT/ Internship/ Training/ Skill partner

Suggested Continuous Evaluation Methods:

Course Pre-requisites:

- No pre-requisite required, open to all (OPEN TO ALL)
- To study this course, a student must have the subject (UG in any Stream)
- If progressive, to study this course a student must have passed previous courses of this series.(N/A)

Suggested equivalent online courses: [https://onlinecourses.upitel.ac.in/noc21\\_img52/preview](https://onlinecourses.upitel.ac.in/noc21_img52/preview)

[https://onlinecourses.swayam2.ac.in/nou21\\_ge16/preview](https://onlinecourses.swayam2.ac.in/nou21_ge16/preview)

Any remarks/ suggestions:

Notes:

- Number of units in Theory/Practical may vary as per need
- Total credits/semester-3 (it can be more credits, but students will get only 3credit/ semester or 6credits/ year)
- Credits for Theory =01 (Teaching Hours = 15)
- Credits for Internship/OJT/Training/Practical = 02 (Training Hours = 60)

Department of Microbiology  
 Veer Bahadur Singh Purvanchal University, Jaunpur-222003  
 Syllabus for Vocational Course in Clinical Microbiology  
 Theory Semester I

Programme/Class: Vocational | Year: First | Semester: First

Subject: Clinical Microbiology

Course Code: | Course Title: Clinical Microbiology I

**Course Outcomes:**

The student at the completion of the course will be able to:

- To learn and understand the microbial diversity in the living world.
- To understand the working of various microscopes and their applications.
- To gain knowledge of various (physical and chemical) methods of control of microorganisms and safety measures to be followed while handling microbes.
- To demonstrate and understanding of bacterial, fungal, cyanobacterial, algal, viral and rickettsial classification, culturing, reproduction and significance
- To learn different methods of staining of microbes.
- To understand, learn and gain skill of isolation, culturing and maintenance of pure culture.
- To enable the students to get sufficient knowledge in principles and applications of bio-instruments.
- To help students gain knowledge about antibiotics and other chemotherapeutic agents.

Max. Marks: 25

Core: Compulsory

Min. Passing marks: as per rules

Unit	Topics	Total No. of Lectures/ Hours ( )
I	<b>Bacterial morphology</b> Ultrastructure of bacterial cell, cell wall, plasma membrane, capsule, flagella, nucleoid, and reserve material. Differences between archaeobacterial and eubacterial cell. General features of <i>Rickettsia</i> , <i>Chlamydia</i> , Mollicutes, Actinomycetes and Cynobacteria.	
II	<b>The viruses</b> General properties and structure of animal viruses: Influenza, HIV; plant viruses: TMV; bacterial viruses: Lambda Phage and T4 bacteriophage; general features of Prions and Viroids.	
III	<b>Fungi</b> General characteristics, classification & reproduction of <i>Saccharomyces</i> , <i>Aspergillus</i> . <b>Protozoa</b> Geeral characteristics, classification & reproduction of <i>Giardia</i> , <i>Entamoeba</i>	
IV	<b>Sterilization techniques and control of microorganisms</b> Definitions of terms- sterilization and disinfection;	
V	<b>Isolation and cultivation of microorganisms</b> Culture media and its types; Methods for enumeration & isolation of microorganisms using pour plate, spread plate technique, and streak plate; Isolation of anaerobic microorganisms;	
VI	<b>Preservation of microorganisms</b> Maintenance and preservation of pure culture	
VII	<b>Stains and staining techniques</b> Staining techniques, principles, procedures and applications of Simple staining, negative staining; Differential staining- Gram's staining, acid fast staining, Leishman's staining, Giemsa's staining, Ziehl Neelsen staining; Structural staining- cell wall, capsule, endospore and flagella staining.	

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Department of Microbiology  
 Veer Bahadur Singh Purvanchal University, Jaunpur-222003  
 Syllabus for Vocational Course in Clinical Microbiology  
 Practical Semester I

Programme/Class: Vocational	Year: First	Semester: First
Subject: Clinical Microbiology		
Course Code:	Course Title: Clinical microbiology Lab I	

**Course Outcomes:**

The student at the completion of the course will be able to:

- To understand the instruments, microbial techniques and good lab practices for working in a microbiology laboratory.
- Practical skills in the laboratory experiments in microbiology.
- Develop skills for identifying microbes and using them for industrial, agricultural and environmental purpose.
- To prepare slides and stain to see the microbial cell.

Credits: 3

Max. Marks: 75

Core: Compulsory

Min. Passing marks: as per rules

S. No.	Objectives	Total No. of Lectures/ Hours ( )
1.	<ul style="list-style-type: none"> <li>• Good laboratory practice in Microbiology and safety measures.</li> <li>• Cleaning and sterilization of glassware and equipments.</li> <li>• Study of aseptic technique- preparation of cotton plug, wrapping of glassware, transfer of media and Inoculum.</li> </ul>	
2.	<ul style="list-style-type: none"> <li>• Applications of autoclave, hot air oven, laminar air flow, inoculation loop and needle, incubator, B.O.D incubator, centrifuge machine, pH meter, colony counter, seitz filter, membrane filter, colourimeter, spectro photometer.</li> </ul>	
3.	<ul style="list-style-type: none"> <li>• Principles of microscopy, construction and application of-</li> <li>• Compound Microscope (monocular and binocular), Bright field Microscopy, Dark field Microscopy, Phase Contrast Microscopy, Fluorescence Microscopy,</li> <li>• Electron Microscopy- TEM and SEM</li> </ul>	
4.	<ul style="list-style-type: none"> <li>• Sterilization by Physical methods- Use of moist heat- heat under pressure, autoclave, boiling, pasteurization, fractional sterilization, tyndallization; Use of dry heat- hot air oven, incineration; Filtration- Seitz filter, membrane filter, HEPA filter; Radiation- Ionizing and non- ionizing;</li> <li>• Chemical methods- Alcohols, aldehydes, phenols, halogens, metallic salts, ethylene oxide.</li> </ul>	
5.	<ul style="list-style-type: none"> <li>• Preparation of different culture media- nutrient agar/nutrient broth for bacterial culture. PDA for fungal culture.</li> <li>• Enumeration of bacteria using spread plate and pour plate techniques.</li> <li>• Isolation of bacteria by pour plate, spread plate and streak plate method.</li> </ul>	

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6.	<ul style="list-style-type: none"> <li>• Staining of bacteria-             <ol style="list-style-type: none"> <li>1. Simple staining- methylene blue</li> <li>2. Gram's staining</li> <li>3. Acid fast staining</li> <li>4. Ziehl Neelsen staining</li> <li>5. Giemsa staining</li> <li>6. Structural staining- capsule, endospore.</li> <li>7. Staining of fungi using lactophenol and cotton blue.</li> </ol> </li> </ul>	
7.	<p>Study of permanent slide and life materials</p> <ul style="list-style-type: none"> <li>• Bacteria- Staphylococci, Streptococci, Bacillus sp., Vibrio, Azospirillum</li> <li>• Protozoans- <i>Amoeba</i>, <i>Paramecium</i>, <i>Trypanosoma</i>, <i>Plasmodium</i>, <i>Entamoeba histolytica</i>.</li> <li>• Helminths- <i>Fasciola</i>, <i>Taeniasolium</i>, <i>Ascaris</i>.</li> <li>• Fungi- <i>Mucor</i>, <i>Rhizopus</i>, <i>Penicillium</i>, <i>Aspergillus</i>, <i>Alternaria</i>.</li> <li>• Cyanobacteria- <i>Chlorella</i>, <i>Spirulina</i>, <i>Nostoc</i>, <i>Anabaena</i>.</li> </ul>	19

**Suggested Readings:**

1. Microbiology: A laboratory manual by J. Cappucino and C.T. Welsh. 11<sup>th</sup> edition, Pearson education, USA 2016
2. Aneja K.R., Experiments in Microbiology, plant pathology, Tissue culture and Mushroom Cultivation. New Age International, New Delhi.
3. Dubey R.C., and Maheshwari D.K., Textbook of practical microbiology, S Chand Publications.
4. Stanier RY, Ingraham JL, Wheelis ML and Painter PR. (2005). General Microbiology, 5<sup>th</sup> edition. McMillan.
5. Lab Virtual links-
  - <https://www.classcentral.com/course/basic-concepts-in-microbiology-and-clinical-pharm-32196>
  - <https://www.labster.com/microbiology-virtual-labs/>
  - <https://www.futurelearn.com/courses/basic-concepts-in-microbiology-and-clinical-pharmacology-of-antimicrobials>
  - <https://www.classcentral.com/tag/microbiology>
  - <https://cmp.berkeley.edu/bacteria/bacteria.html>
  - <https://www.livescience.com/53272-what-is-a-virus.html>

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Department of Microbiology  
 Veer Bahadur Singh Purvanchal University, Jaunpur-222003  
 Syllabus for Vocational Course in Clinical Microbiology  
 Theory Semester II

<b>Programme / Class:</b> Vocational		<b>Year:</b> First	<b>Semester:</b> Second
<b>Subject:</b> Clinical Microbiology			
<b>Course Code:</b>		<b>Course Title:</b> Clinical Microbiology II	
<b>Course outcomes:</b> Upon completion the students will learn <ul style="list-style-type: none"> <li>• The historical development of immunology</li> <li>• The components of immune system, Immune responses, features of antigen and antibody, hypersensitivity responses</li> <li>• Applications of antibody in diagnosis and therapy, and antigen-antibody reactions</li> </ul>			
<b>Credits:</b> 1		<b>Core:</b> Compulsory	
<b>Max. Marks:</b> 25		<b>Min. Passing Marks:</b> as per rule	
Unit	Topics	Total No. of Lectures/ Hours ( )	
I	<b>Overview of Immunology</b> History of immunology, Physical and physiological barriers. Innate and Acquired immunity, Organs and Cells of Immune system. Complement System Proteins, Complement System Activation by Classical, Alternate and Lectin Pathway		
II	<b>Immunity</b> Humoral and Cell Mediated Immunity, Active And Passive Immunity Antigen Characteristics, Types of Antigens, Adjuvants, Immunogenicity and Antigenicity, Cytokines,		
III	<b>Immunoglobulins and MHC and their role</b> Classes of immunoglobulin, structure and function, Major Histocompatibility Complex: Types, Antigen Presentation through MHC class I and class II molecules		
IV	<b>Hypersensitivity</b> Types of Hypersensitivity, Mechanism of hypersensitivities with examples		
V	<b>Immune Response</b> Antibody Dependent Cell mediated Cytotoxicity, Phagocytosis, Inflammation and Inflammatory response mechanism		
VI	<b>Applications of Immunoglobulins</b> Applications of antibody in diagnosis and therapy; <i>In vitro</i> serological test methods: Antigen-Antibody Reactions: Agglutination and immunodiffusion; ELISA and RIA.		

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**Suggested Readings:**

1. Kindt, Goldsby and Osborne. Kuby's Immunology. WH Freeman & Company.
2. Roitt I, Brostoff, J and Male D. Immunology, 6th edition, 2001, Mosby, London
3. Ramesh SR, Immunology. Mc Graw Hill Publications.
4. Madhavee LP, A Textbook of Immunology. S Chand Publisher.
5. Reddy R, Textbook of Immunology, 3rd edition, AITBS Publisher.
6. Digital links
  - <https://www.mcgill.ca/microimm/undergraduate-programs/courses>
  - <https://online.creighton.edu/program/medical-microbiology-and-immunology.mcg>

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Department of Microbiology  
 Veer Bahadur Singh Purvanchal University, Jaunpur-222003  
 Syllabus for Vocational Course in Clinical Microbiology  
 Practical Semester II

<b>Programme / Class:</b>	<b>Year: First</b>	<b>Semester: Second</b>
<b>Subject:</b> Clinical Microbiology		
<b>Course Code:</b>	<b>Course Title:</b> Clinical Microbiology Lab II	

**Course outcomes:**

Upon completion of the practical course in medical microbiology and immunology the students will learn about

- The preparation of culture media, microorganisms associated with human body, characterization of microorganisms associated with disease.
- Antigen- antibody interaction
- Learning of the application of antibodies for diagnostic purposes, antibiotic sensitivity test and resistance transfer

<b>Credits: 3</b>		<b>Core: Compulsory</b>
<b>Max. Marks: 75</b>		<b>Min. Passing Marks: as per rules</b>
<b>S. No.</b>	<b>Objectives</b>	<b>Total No. of Lectures/ Hours ( )</b>
1	Manual blood cultures <ul style="list-style-type: none"> <li>• SEPTI CHEK</li> <li>• Oxoid Signal</li> <li>• Isolator</li> </ul> Automated blood culture systems <ul style="list-style-type: none"> <li>• BacT/Alert</li> <li>• BACTEC 9000 series</li> <li>• VersaTREK blood culture syste</li> </ul> Molecular and other methods Blood Typing and Rh factor determination by agglutination tests	
2	Demonstration of <ul style="list-style-type: none"> <li>• Pregnancy test,</li> <li>• WIDAL</li> <li>• VDRL</li> </ul>	
3	Demonstration of Immunological Diagnostic Techniques <ul style="list-style-type: none"> <li>• Quantification of antigen and antibody by using ELISA</li> <li>• Enzyme-Linked Immunosorbent Assay (ELISA)</li> </ul>	
4	<ul style="list-style-type: none"> <li>• Western Blotting Analysis</li> </ul>	
5	<ul style="list-style-type: none"> <li>• Immunofluorescence Assay</li> <li>• Hemagglutination Inhibition (HI) Assay</li> </ul>	
6	Immunodiagnosis of Bacterial Pathogens	
7	Detection and Identification of Viruses, by using Rapid Antigen Devices and Instruments	

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**Suggested Readings:**

1. Hudson L. and Hay FC, Practical Immunology. 3rd edition, Wiley.
2. Noel R. Rose, Herman Friedman, John L. Fahey., Manual of Clinical Laboratory Immunology, 3rd edition, ASM. Ed.3; 1986.
3. Talwar GP and Gupta SK, A Handbook of Practical and Clinical Immunology, Vol.I-II; CBS Publishers and Distributors. Delhi
4. Aneja KR, Experiments in Microbiology, Plant Pathology and Biotechnology, 1st edition. New Age International Publisher
5. Randhawa VS, Practicals and Viva in Medical Microbiology, Harcourt India Pvt. Ltd.
6. Digital Links
  - <http://www.vlab.co.in>
  - <http://www.vlab.iitb.ac.in>
  - <http://www.onlinelabs.in>
  - <http://www.vlab.amrita.edu>
  - <http://asm.org/articles/2020/december/virtual-resources-to-teach-microbiology-techniques>



Department of Microbiology  
 Veer Bahadur Singh Purvanchal University, Jaunpur-222003  
 Syllabus for Vocational Course in Clinical Microbiology  
 Theory Semester III

<b>Programme / Class:</b> Vocational	<b>Year:</b> Second	<b>Semester:</b> Third
<b>Subject:</b> Clinical Microbiology		
<b>Course Code:</b>	<b>Course Title:</b> Clinical Microbiology III	

**Course outcomes:**

Upon completion the students will learn:

- The historical development of medical microbiology
- The importance of microorganisms in life.
- The microorganisms associated with various infectious diseases.
- The treatment strategies followed for the infectious diseases.
- Antibiotic resistance
- Processes of sample collection and processing

<b>Credits:</b> 1	<b>Core :</b> Compulsory	
<b>Max. Marks:</b> 25	<b>Min. Passing Marks:</b> as per rules	
Unit	Topics	Total No. of Lectures/ Hours (30)
I	<b>Bacterial diseases</b> Diseases caused by certain bacterial pathogens <i>Staphylococcus aureus</i> , <i>Streptococcus pneumoniae</i> , <i>Mycobacterium tuberculosis</i> , <i>Salmonella typhi</i> , <i>Vibrio cholera</i>	
II	<b>Viral diseases</b> Diseases caused by certain viruses Human Immunodeficiency Virus, Hepatitis Virus, Influenza virus, Herpes virus	
III	<b>Parasitic diseases</b> Diseases caused by protozoa <i>Giardia</i> sp., <i>Plasmodium</i> sp., <i>Leshmania</i> sp., and <i>Entamoeba</i> sp.	
IV	<b>Pathogenic fungal disease I</b> Dermatophytes- <i>Trichophyton</i> , <i>Microsporum</i> Filamentous fungi causing subcutaneous infection by <i>Mucor</i> , <i>Rhizopus</i> and <i>Aspergillus</i> . Systemic mycoses caused by <i>Blastomyces</i> , <i>Histoplasma</i> and Yeast like fungi: <i>Candida</i> and <i>Cryptococci</i>	
V	Specimen processing and nucleic acid extraction platforms Isolation/ extraction techniques Amplification methods <ul style="list-style-type: none"> <li>• Target amplification methods</li> <li>• Probe amplification methods</li> </ul> Signal amplification methods	
VI	Amplicon detection and identification platforms	

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- Fluorescence *in situ* hybridization
- Microarray
- Mass spectrometry Sequencing.

**Suggested Readings:**

1. Annadurai, A. A textbook of Immunology and Immunotechnology. S. Chnd
2. Ananthanarayanan R and Panicker C K. Textbook of Microbiology. Orient Longman
3. Baveja, CP. Text book of Microbiology. Arya publications.
4. Ken S. Rosenthal, Patrick R. Murray, and Michael A. Pfaller. Medical Microbiology 7<sup>th</sup> Edition. Elsevier
5. Karen C. Carroll, Geo. Brooks, Stephen Morse, and Janet Butel. Jawetz, Melnick, & Adelberg's Medical Microbiology, Lang
6. Suggestive digital platforms web links-  
<https://www.futurelearn.com/courses/basic-concepts-in-microbiology-and-clinical-pharmacology-of-antimicrobials>  
<https://vlab.amrita.edu/?sub=3&rch=73>  
<https://www.mooc-list.co/tags/pathology>  
<https://online.creighton.ed/program/medical-microbiogy-and-immunology-ms>

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Department of Microbiology  
 Veer Bahadur Singh Purvanchal University, Jaunpur-222003  
 Syllabus for Vocational Course in Clinical Microbiology  
 Practical Semester III

Programme / Class: Bachelors of Science	Year: Second	Semester: Third
Subject: Clinical Microbiology		
Course Code:	Course Title: Clinical Microbiology Lab III	

**Course outcomes:**

Upon completion of the practical course in medical microbiology and immunology the students will learn about

- The preparation of culture media, microorganisms associated with human body, characterization of microorganisms associated with disease.
- Antigen- antibody interaction
- Learning of the application of antibodies for diagnostic purposes, antibiotic sensitivity test and resistancetransfer.

Credits: 3		Core: Compulsory
Max. Marks: 75		Min. Passing Marks: as per rules
S. No.	Objectives	Total No. of Lecture s/ Hours (60)
1	• Preparation of blood agar, chocolate agar, and other media required for medically important microorganisms	
2	• Isolation and characterization of skin normal microflora. Isolation of bacteria from teeth crevices. Demonstration of $\alpha$ and $\beta$ haemolysis on blood agar medium.	
3	• Demonstration of pathogenic fungi in mycoses lesion	
4	• Media based and biochemical identification of pathogens	
5	• Molecular Tests for the Identification of Viruses	

**Suggested Readings:**

7. Hudson L, and Hay FC, Practical Immunology, 3rd edition, Wiley.
8. Noel R. Rose, Herman Friedman, John L. Fahey., Manual of Clinical Laboratory Immunology, 3rd edition, ASM. Ed.3; 1986.
9. Talwar GP and Gupta SK, A Handbook of Practical and Clinical Immunology, Vol.I-II; CBS Publishers and Distributors. Delhi
10. Aneja KR, Experiments in Microbiology, Plant Pathology and Biotechnology, 1st edition, New Age International Publisher
11. Randhawa VS, Practicals and Viva in Medical Microbiology, Harcourt India Pvt. Ltd.
12. Digital Links
  - <http://www.vlab.co.in>
  - <http://www.vlab.iitb.ac.in>
  - <http://www.onlinelabs.in>
  - <http://www.vlab.amrita.edu>
  - <http://asm.org/articles/2020/december/virtual-resources-to-teach-microiologly-techniques>

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Department of Microbiology  
 Veer Bahadur Singh Purvanchal University, Jaunpur-222003  
 Syllabus for Vocational Course in Clinical Microbiology  
 Theory Semester IV

<b>Programme / Class:</b> Vocational	<b>Year:</b> Second	<b>Semester:</b> Fourth
<b>Subject:</b> Clinical Microbiology		
<b>Course Code:</b>	<b>Course Title:</b> Clinical Microbiology IV	

**Course outcomes:**

Upon completion the students will learn:

- The historical development of medical microbiology
- The importance of microorganisms in life.
- The microorganisms associated with various infectious diseases.
- The treatment strategies followed for the infectious diseases.
- Antibiotic resistance
- Processes of sample collection and processing

<b>Credits:</b> 1		<b>Core :</b> Compulsory
<b>Max. Marks:</b> 25		<b>Min. Passing Marks:</b> as per rules
<b>Unit</b>	<b>Topics</b>	<b>Total No. of Lectures/ Hours (30)</b>
I	Introduction to Diagnostic Medical Parasitology <ul style="list-style-type: none"> <li>• Diagnostic parasitology testing</li> <li>• Diagnostic medical parasitology</li> <li>• Solicitation of product</li> </ul>	
II	Collection and transportation of clinical samples <ul style="list-style-type: none"> <li>• Selection of diagnostic laboratories and tests</li> <li>• Specimen collection systems</li> <li>• Fresh stool specimen collection</li> <li>• Collection of specimens from other body sites</li> <li>• Blood collection</li> </ul>	
III	<ul style="list-style-type: none"> <li>• Preservation of stool specimens</li> <li>• Intestinal tract specimens(stool)</li> <li>• Biosafety levels</li> </ul>	
IV	Methods for safe disposal of biomedical wastes	
V	<b>Antibiotics and Antibiotic resistance</b> Historical development of chemotherapeutic and antibiotic substances, Major antimicrobial agents, Mode of action of chemotherapeutic and antibiotic substances	
VI	Drug resistance, Mechanism of antibiotic resistance, Antibiotic susceptibility assay.	

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### Suggested Readings:

7. Annadurai, A. A textbook of Immunology and Immunotechnology. S. Chnd
8. Ananthanarayanan R and Panicker C K. Textbook of Microbiology. Orient Longman
9. Baveja, CP. Text book of Microbiology. Arya publications.
10. Ken S. Rosenthal, Patrick R. Murray, and Michael A. Pfaller. Medical Microbiology 7<sup>th</sup> Edition. Elsevier
11. Karen C. Carroll, Geo. Brooks, Stephen Morse, and Janet Butel. Jawetz, Melnick, & Adelberg's Medical Microbiology, Lang
12. Suggestive digital platforms web links-  
<https://www.futurelearn.com/courses/basic-concepts-in-microbiology-and-clinical-pharmacology-of-antimicrobials>  
<https://vlab.amrita.edu/?sub=3&rch=73>  
<https://www.mooc-list.co/tags/pathology>  
<https://online.creighton.edu/program/medical-microbiology-and-immunology-ms>

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Department of Microbiology  
 Veer Bahadur Singh Purvanchal University, Jaunpur-222003  
 Syllabus for Vocational Course in Clinical Microbiology  
 Practical Semester IV

<b>Programme / Class:</b> Clinical Microbiology	<b>Year:</b> Second	<b>Semester:</b> Fourth
<b>Subject:</b> Clinical Microbiology		
<b>Course Code:</b>	<b>Course Title:</b> Clinical Microbiology Lab IV	

**Course outcomes:**  
 Upon completion of the practical course in medical microbiology and immunology the students will learn about

- Collection and transportation of clinical samples
- Antibiotic resistance
- Processes of sample collection and processing

The importance of microorganisms in life.

<b>Credits:</b> 3		<b>Core:</b> Compulsory
<b>Max. Marks:</b> 75		<b>Min. Passing Marks:</b> as per rules
S. No.	Objectives	Total No. of Lectures/ Hours ( )
1	Hands on training for Collection and transportation of clinical samples of <ul style="list-style-type: none"> <li>• Blood</li> <li>• Urine</li> <li>• Stool</li> </ul>	
2	<ul style="list-style-type: none"> <li>• Antibiotic sensitivity test , Kirby-Bauer Disk Diffusion Susceptibility Test and MIC determination</li> </ul>	
3	<ul style="list-style-type: none"> <li>• Susceptibility tests for bacterial pathogens</li> </ul>	
4	<ul style="list-style-type: none"> <li>• Demonstration of antibiotic resistance transfer from resistant to sensitive microorganism</li> </ul>	
5	<ul style="list-style-type: none"> <li>• PCR Based Identification of Bacterial and Viral Pathogens</li> </ul>	

**Suggested Readings:**

13. Hudson L, and Hay FC, Practical Immunology, 3rd edition, Wiley.
14. Noel R. Rose, Herman Friedman, John L. Fahey., Manual of Clinical Laboratory Immunology, 3rd edition, ASM. Ed.3: 1986.
15. Talwar GP and Gupta SK, A Handbook of Practical and Clinical Immunology, Vol.I-II; CBS Publishers and Distributors. Delhi
16. Aneja KR, Experiments in Microbiology, Plant Pathology and Biotechnology, 1st edition, New Age International Publisher
17. Randhawa VS, Practicals and Viva in Medical Microbiology, Harcourt India Pvt. Ltd.
18. Digital Links
  - <http://www.vlab.co.in>
  - <http://www.vlab.iitb.ac.in>
  - <http://www.onlinelabs.in>
  - <http://www.vlab.amrita.edu>
  - <http://asm.org/articles/2020/december/virtual-resources-to-teach-microiology-techniques>

*[Handwritten Signature]*





**VBS Purvanchal University, Jaunpur (U.P.) -222003**  
**Uma Nath Singh Institute of Engineering & Technology**  
**Department of Electrical Engineering**

**Electrician**

Title of the Course	Electrician
Nodal Department of HEI to run course	Electrical Engineering
Broad Area/ Sector	Electrical
Nature of Course- Independent/Progressive	Progressive
Expected Fees of the Course- Free/Paid	
Stipend of student expected from industry	
Number of Seats	30
Course Code	EESDC-0303
Max Marks	100
Minimum Marks	36
Job Prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry)	Power Generation, transmission & Distribution Sectors (NTPC, BHEL, NSPCL, Power Grid Corporation of India Ltd)

**Semester-I**  
**Basic Electricity-I**

Content (Name of Topic)	
<b>Unit 1</b>	
1.1	Various safety measures involved in the Industry.
1.2	Elementary first Aid.
1.3	Concept of Standard
1.4	Fundamental of electricity.
1.5	Electron theory- free electron.
1.6	Fundamental terms, definitions, units & effects of electric current
<b>Unit 2</b>	
2.1	Solders, flux and soldering technique.
2.2	Resistors types of resistors & properties of resistors.
2.3	Explanation, Definition and properties of conductors, insulators and semi-conductors.
2.4	Common Electrical Accessories, their specifications-Explanation of switches lamp holders, plugs and sockets.
2.5	Developments of domestic circuits, Alarm & switches lamp, fan with individual switches,
2.6	Two way switch.
<b>Unit 3</b>	
3.1	Ohm's Law - Simple electrical circuits and problems.
3.2	Resistors -Law of Resistance.Series and parallel circuits.
3.3	Kirchoff's Laws and applications
3.4	Rechargeable dry cell, description advantages and disadvantages.
3.5	Care and maintenance of cells
3.6	Grouping of cells of specified voltage & current,
<b>Unit 4</b>	
4.1	Maintenance free Batteries, Solar cell
4.2	Lead Acid cell, general defects & remedies.
4.3	Nickel Alkali Cell-description charging.
4.4	Power & capacity of cells.
4.5	Efficiency of cells

Unit 5	
5.1	Magnetism - classification of magnets, methods of magnetising, magnetic materials. Properties, care & maintenance,
5.2	Para & Diamagnetism and Ferro magnetic materials. Principle of electro-magnetism,
5.3	Maxwell's corkscrew rule, Fleming's left & right hand rules,
5.4	Magnetic field of current carrying conductors, loop & solenoid.
5.5	MMF, Flux density, reluctance, B.H. curve, Hysteresis, Eddy current.
5.6	Principle of electromagnetic Induction, Faraday's Law, Lenz's Law.
<b>Total (Lecture:1 Hr, Practical:2 Hr)</b>	

**Semester-II**  
Basic Electricity-II

**Content (Name of Topic)**

Unit 1	
1.1	Techniques, procedures of Layout of conduit wiring as per I.S-732- 1963.
1.2	Use of flame proof and explosion proof,
1.3	Installation of P.V.C. conduct switches.
1.4	Fuse / cut out / kit Kat – function, characteristics, and materials.
1.5	H.R.C Fuses – application.
Unit 2	
2.1	Electrical measuring Instruments - -types
2.2	Deflecting torque, Controlling torque & Damping torque ,
2.3	Moving coil permanent magnet
2.4	Moving iron Range extension
2.5	Multimeter –Analog and Digital Wattmeter- P.F. meter
Unit 3	
3.1	Intergrading type, Digital Energy meter
3.2	Megger.
3.3	Energy meter
3.4	Frequency meter
3.5	Tri vector meter, Max Demand meter, Phase Sequence indicator
3.6	C.R.O,
Unit 4	
4.1	Electric wirings, importance,
4.2	I.E.E. rules.
4.3	Types of wirings both domestic & industrial
4.4	Specifications for wiring , Grading of cables and current ratings.
4.5	Principle of laying out in domestic wiring-testing by meggar
Unit 5	
5.1	Wiring system - Using casing capping, P.V.C., concealed system.
5.2	Maintenance & Repairing data sheet preparation..
5.3	Specifications, standards for conduits & accessories
5.4	Earthing - Principle of different methods of earthing.
5.5	Importance of Earthing. -Earth Leak
<b>Total (Lecture:1 Hr, Practical:2 Hr)</b>	

**Semester-III**  
**Electrical Machines-I**

**Content (Name of Topic)**

**Unit 1**

- 6 D.C. Machines - General concept of Electrical Machines.
- 7 Principle of D.C. generator.
- 8 Use of Armature, Field Coil, Yoke, and Commutator, slip ring Brushes, Laminated core.
- 9 Explanation of D.C. Generator types parts E.M.F. equation-self excitation and separately excited Generators-Practical uses.
- 10 Brief description of series, shunt and compound generators.

**Unit 2**

- 6 Explanation Of Armature reaction,
- 7 Interpoles and their uses, connection of interpoles.
- 8 Commutation
- 9 Connection of shunts Generators, Measurement of voltages-Demonstration on field excitation.
- 10 Connection of compound Generator Voltage measurement-cumulative and differential

**Unit 3**

- 7 No Load & Load characteristics of Series, Shunt & Compound Generator
- Controlling and protecting DC Generator.
- 9 Terms used in D.C. motor
- 10 Torque, speed, Back-e.m.f. their relations practical application.
- 1 Related problems.

**Unit 4**

- Demonstration and practice on identification of parts and terminals.
- Study of the characteristics of DC motors.
- Types, characteristics of D.C. motors.
- Practical application of D.C. motors.
- 10 Special precaution to be taken in DC Series motors.

**Unit 5**

- Starters used in D.C. motors
- Types of speed control of DC motors in industry
- Word-Leonard control,
- Thyristor/electronic controls.
- 7 Routine maintenance.

**Total (Lecture:1 Hr, Practical:2 Hr)**

**Semester-IV**  
**Electrical Machines-II**

<b>Content (Name of Topic)</b>	
<b>Unit 1</b>	
1.1	TRANSFORMERS Working principle of Transformer, classification
1.2	C.T, P.T. Instrument and Auto Transformer/Variae Construction,
1.3	Single phase and Poly phase Transformer
1.4	E.M.F. equation,
1.5	Parallel operation of transformer, their connections.
<b>Unit 2</b>	
2.1	Regulation and efficiency,
2.2	Cooling of transformer,
2.3	protective devices.
2.4	Specifications, simple problems on e.m.f. Equation, turn ratio, regulations and efficiency
2.5	Special transformers
<b>Unit 3</b>	
3.1	ALTERNATOR Explanation of alternator, prime mover, types,
3.2	Regulations,
3.3	Phase sequence,
3.4	Specification of alternators and brushless alternator.
3.5	Automatic Voltage Regulator.
<b>Unit 4</b>	
4.1	Induction motor – Working principle,
4.2	Squirrel Cage Induction motor .
4.3	Slip-ring induction motor
4.4	Construction and characteristics, starting and speed control.
4.5	D.O.L Starter, Star /Delta starter, Autotransformer starter.
<b>Unit 5</b>	
5.1	Single phase induction motor Working principle,
5.2	Different method of starting and running
5.3	Capacitor start/capacitor run,
5.4	Shaded pole technique.
5.5	FHP motors.
<b>Total (Lecture:1 Hr, Practical:2 Hr)</b>	



Title of course- <b>Photography and videography</b>	Semester -I
Nodal Department of HEI to run course	Department Of Mass Communication
Broad Area Sector-	Media and Production Houses
Sub Sector-	Photo and Video sector
Nature of course - Independent / Progressive	Independent
Name of suggestive Sector Skill Council	
Aliened NSQF level	
Expected fees of the course -Free Paid	Free
Stipend to student expected from industry	
Number of Seats- .....	30
Course Code-.....	Credits- 03 (1 Theory, 2 Practical)
Max Marks...100..... Minimum Marks.....	Theory 40% and Practical 60%
Name of proposed skill Partner (Please specify, Name of industry, company, etc. for Practical training, Internship, OJT)	Not Available
Job prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company, etc.)	News Paper, News Magazine, Websites, Photo Studio, Production Houses, Advertising Agency

**Syllabus**

Unit	Topics	General Skill component	Theory Practical OJT Internship Training	No of theory hours (Total:15 Hours)	No of skill Hours (Total:60 Hours)
I	<b>History and Evolution of Photography</b>		<b>Theory and Practical</b>	<b>2 Hours</b>	
II	<b>Camera and Accessories (SLR, Compact, Digital and DSLR)</b>		<b>Theory and Practical</b>	<b>2 Hours</b>	<b>10 Hours</b>
III	<b>Basic information regarding digital camera</b>		<b>Theory and Practical</b>	<b>3 Hours</b>	<b>12 Hours</b>
IV	<b>The exposure triangle-Aperture-Shutter Speed-ISO</b>		<b>Theory and Practical</b>	<b>4 Hours</b>	<b>14 Hours</b>
V	<b>Concept of light and lens. Supplementary lenses</b>		<b>Theory and Practical</b>	<b>2 Hours</b>	<b>12 Hours</b>
VI	<b>Depth of field, depth of focus and perspective effect</b>		<b>Theory and Practical</b>	<b>2 Hours</b>	<b>12 Hours</b>



Suggested Readings

1. Sharma Shashi Prabha. Photo Prakarita ke mool. Tatva. kamishk Publishers and distributors, Delhi
2. Singh Shamsher. Photography sampurn jankari. National Book Trust, Delhi
3. Sharma Shashuprabha. Photopatrakarita ke mool tatra. kamishka publishers, Delhi
4. Jaiswal Naval. Photo patrakarita. samaik Prakashan, New Delhi.

Suggested Digital platforms/ web links for reading:

1. <https://www.youtube.com/c/gmatstudios>
2. <https://www.youtube.com/watch?v=...>
3. <https://youtube.com/camera/lens/ke/prakar/hoat/>

Suggested OJT/ Internship/ Training/ Skill partner

Suggested Continuous Evaluation Methods:

Course Pre-requisites:

- No pre-requisite required, open to all
- If progressive, to study this course a student must have passed previous courses of this series.

Suggested equivalent online courses:

Any remarks/ suggestions:

Notes:

- Number of units in Theory/Practical may vary as per need
- Total credits/semester-3 (it can be more credits, but students will get only 3credit/ semester or 6credits/ year)
- Credits for Theory =01 (Teaching Hours = 15)
- Credits for Internship/OJT/Training/Practical = 02 (Training Hours = 60)



Title of course - <b>Photography and Videography</b>	Semester -2
Nodal Department of HEI to run course	Department of Mass Communication
Broad Area/Sector-	Media and Production Houses
Sub Sector-	Photo and Video sector
Nature of course - Independent / Progressive	Independent
Name of suggestive Sector Skill Council	
Aliened NSQF level	
Expected fees of the course - Free/Paid	Free
Stipend to student expected from industry	
Number of Seats-	30
Course Code-	
Max Marks ..100..... Minimum Marks.....	Credits- 03 (1 Theory, 2 Practical)
Name of proposed skill Partner (Please specify, Name of industry, company, etc. for Practical training/ Internship/ OJT)	Theory 40% and Practical 60%
	Not Available

Job prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company, etc.)  
 News Paper, News Magazine, Website, Photo Studio, Production Houses, Advertising Agency

**Syllabus**

Unit	Topics	General Skill component	Theory Practical OJT Internship Training	No. of theory hours (Total-15 Hours=1 credit)	No. of skill hours (Total-60 Hours= 2 credits)
I	<b>Theory of Composition.</b>		<b>Theory and Practical</b>	<b>2 Hours</b>	<b>6 Hours</b>
II	<b>Types of Shots (EWS,VWS,WS,MS,MCU,CU,E CU and other)</b>		<b>Theory and Practical</b>	<b>2 Hours</b>	<b>12 Hours</b>
III	<b>Daylight and artificial light, Light Meter, lighting Technique</b>		<b>Theory and Practical</b>	<b>3 Hours</b>	<b>06 Hours</b>
IV	<b>Landscapes, Wedding, Portraits, News photography</b>		<b>Theory and Practical</b>	<b>4 Hours</b>	<b>12 Hours</b>
V	<b>Mobile Photography &amp; Apps</b>		<b>Theory and Practical</b>	<b>2 Hours</b>	<b>12 Hours</b>
VI	<b>Photo journalism, Basics of post processing</b>		<b>Theory and Practical</b>	<b>2 Hours</b>	<b>12 Hours</b>

#### Suggested Readings

1. A H Hazni, Modern Photography Course, Manoj Publications, Delhi
2. Rayaz Hassan, Digital Photography, Book Enclave Jaipur, Rajasthan
3. Jaiswal Naval, Photo patrakarita, samaik Prakashan, New Delhi
4. Singh Shamsher, Photography sampurn jankari, National Book Trust, Delhi

#### Suggested Digital platforms web links for reading:

1. <https://www.mediacollege.com/video/shots>
2. <https://www.youtube.com/watch?v=km6l9kkj-ak>
3. <https://www.youtube.com/watch?v=wlamu34QAbg>
4. <https://www.youtube.com/watch?v=dkNzyPooiqm>
5. [https://www.youtube.com/watch?v=8L\\_HlzhWVNI](https://www.youtube.com/watch?v=8L_HlzhWVNI)

#### Suggested OJT/ Internship/ Training/ Skill partner

#### Suggested Continuous Evaluation Methods:

#### Course Pre-requisites:

- No pre-requisite required, open to all
- If progressive, to study this course a student must have passed previous courses of this series.

#### Suggested equivalent online courses:

#### Any remarks/ suggestions:

#### Notes:

- Number of units in Theory/Practical may vary as per need
- Total credits/semester-3 (it can be more credits, but students will get only 3 credit/ semester or 6 credits/ year)
- Credits for Theory = 01 (Teaching Hours = 15)
- Credits for Internship/OJT/Training/Practical = 02 (Training Hours = 60)

Title of course	<b>Photography and Videography</b>	Semester -3
Nodal Department of IIT to run course		Department Of Mass Communication
Broad Area/Sector-		Media and Production Houses
Sub Sector-		Photo and Video sector
Nature of course - Independent / Progressive		Independent
Name of suggestive Sector Skill Council		
Aliened NSQF level		
Expected fees of the course -Free/Paid		Free
Stipend to student expected from industry		
Number of Seats- .....		30
Course Code- .....		Credits- 03 (1 Theory, 2 Practical)
Max Marks- 100..... Minimum Marks.....		Theory 40% and Practical 60%
Name of proposed skill Partner (Please specify, Name of industry, company, etc. for Practical/training/ internship/OJ)		Not Available
Job prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company, etc.)		News Paper, News Magazine, Websites, Photo Studio, Production Houses, Advertising Agency,

Unit	Topics	General/ Skill component	Theory Practical (T/P) Internship Training	No of theory hours (Total-15 Hours =1 credit)	No of skill Hours (Total-60 Hours=2 credits)
I	Visual Communication: Meaning, Elements and Significance of visual Communication		Theory and Practical	2 Hours	6 Hours
II	<b>Visual Grammar:</b> •Concept •Principal •Visual aesthetics		Theory and Practical	2 Hours	06 Hours
III	<b>Videography and Light:</b> •Role of light •Lighting techniques •Three point lighting		Theory and Practical	3 Hours	12 Hours
IV	<b>Camera Movement:</b> •Basic Grammar of shots •Types of Camera Movements •Usage and need of track and trolley		Theory and Practical	2 Hours	12 Hours
V	<b>Digital video recording:</b> •Recording formats NTSC,PAL		Theory and Practical	2 Hours	06 Hours
VI	<b>Video Camera:</b> •Components of Camera •Camera filter •White and black Balance		Theory and Practical	2 Hours	10 Hours

<b>Video Production Equipment's:</b> • Tripod • Mic kit, Camera Light • AV Switcher	Theory and Practical 2 Hours 08 Hours
<b>Suggested Readings:</b> The Filmmaker's Handbook: A Comprehensive Guide for the Digital Age, Fifth Edition, Penguin Publishing Group. Video Production Techniques: Theory and Practice from Concept to Screen, Routledge, 2009 Corporate Video Production: Beyond the Board Room (And OLT of the Board Room), Taylor & Francis, 2011	
<b>Suggested Digital platforms web links for reading:</b> 1. <a href="https://study.com/academy/lesson/video-production-101.html">https://study.com/academy/lesson/video-production-101.html</a> 2. <a href="https://www.youtube.com/watch?v=6Wd0AJLAVLg">https://www.youtube.com/watch?v=6Wd0AJLAVLg</a> 3. <a href="https://www.youtube.com/watch?v=1Hm0PwSg0t0">https://www.youtube.com/watch?v=1Hm0PwSg0t0</a>	
<b>Suggested OJT/ Internship/ Training/ Skill partner</b> <b>Suggested Continuous Evaluation Methods:</b> urse Pre-requisites: <ul style="list-style-type: none"> <li>• No pre-requisite required, open to all</li> <li>• If progressive, to study this course a student must have passed previous courses of this series</li> </ul>	
<b>Suggested equivalent online courses:</b> <b>remarks/ suggestions:</b> es: <ul style="list-style-type: none"> <li>• Number of units in Theory/Practical may vary as per need</li> <li>• Total credits/semester-3 (it can be more credits, but students will get only 3 credit/ semester for 6 credits/ year</li> <li>• Credits for Theory =01 (Teaching Hours = 15)</li> <li>• Credits for Internship/OJT/Training/Practical = 02 (Training Hours = 60)</li> </ul>	



Title of course - <b>Photography and Videography</b>	Semester -4
Nodal Department of HEI to run course	Department Of Mass Communication
Broad Area/Sector-	Media and Production Houses
Sub Sector-	Photo and Video sector
Nature of course - Independent / Progressive	Independent
Name of suggestive Sector Skill Council	
Aliened NSQF level	
Expected fees of the course - Free/Paid	Free
Stipend to student expected from industry	
Number of Seats- ...	30
Course Code	Credits- 03 (1 Theory, 2 Practical)
Max Marks 100 ... Minimum Marks	Theory 40% and Practical 60%
Name of proposed skill Partner (Please specify Name of industry, company, etc. for Practical training including SME)	Not Available
Job prospects-Expected Fields of Occupation where student will be able to get job after completing this course in (Please specify name/type of industry, company, etc.)	News Paper, News Magazine, Websites, Photo Studio, Production Houses, Advertising Agency

### Syllabus

Unit	Topics	General Skill component	Theory Practical 001 Internship training	Novel theory hours (Total-15 Hours=1 credit)	Novel skill Hours (Total-60 Hours=2 credits)
I	Direction: <ul style="list-style-type: none"> <li>Director Role and Responsibilities</li> <li>Skills of Director</li> <li>Direction for different mediums</li> </ul>		<b>Theory and Practical</b>	<b>2 Hours</b>	<b>6 Hours</b>
II	Script writing: <ul style="list-style-type: none"> <li>Script writing for visual medium</li> <li>Story board</li> <li>Shooting Script</li> </ul>		<b>Theory and Practical</b>	<b>2 Hours</b>	<b>08 Hours</b>
III	Sound: <ul style="list-style-type: none"> <li>Types of microphone</li> <li>Mono and Stereo sound</li> </ul>		<b>Theory and Practical</b>	<b>2 Hours</b>	<b>06 Hours</b>
IV	video production steps: <ul style="list-style-type: none"> <li>Pre Production.</li> <li>Production.</li> <li>Post Production</li> </ul>		<b>Theory and Practical</b>	<b>3 Hours</b>	<b>10 Hours</b>
V	<b>Video Editing:</b> <ul style="list-style-type: none"> <li><b>Concept and principal of Editing</b></li> <li><b>Video editing tools</b></li> <li><b>Background Music</b></li> </ul>		<b>Theory and Practical</b>	<b>2 Hours</b>	<b>10 Hours</b>
VI	<b>Practical of TV commercial:</b> <b>Scriptwriting, Story board Editing</b>		<b>Theory and Practical</b>	<b>2 Hours</b>	<b>10 Hours</b>

Practical of TV news Script writing Story board Editing		Theory and Practical	2 Hours	10 Hours
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**Suggested Readings:**

1. Video Production, Oxford University Press, 2007.
2. Gould Aaron, The Video Editing Handbook, Color Edition, Independently published
3. पटकथा लेखन, मनोहर श्याम जोशी, वाणी प्रकाशन,
4. पटकथा लेखन, व्यावहारिक निर्देशिका, राजकमल प्रकाशन, दिल्ली,
5. फिल्म स्क्रिप्ट राइटिंग, लवकुश सिंह.

**Suggested Digital platforms/ web links for reading:**

1. <https://www.adorama.com/alc/13-videography-tips-for-more-professional-looking-videos>
2. <https://www.techshole.com/microphone-kya-hai-hindi/>
3. <https://www.flexiprep.com/NIOS-Notes/Senior-Secondary/Mass-Communication/NIOS-Class-12-Mass-Communication-Ch-16-Television-Programme-Production.html>

**Suggested OJT/ Internship/ Training/ Skill partner**

**Suggested Continuous Evaluation Methods:**

**Course Pre-requisites:**

- No pre-requisite required, open to all
- If progressive, to study this course a student must have passed previous courses of this series.

**Suggested equivalent online courses:**

**Any remarks/ suggestions:**

**Notes:**

- Number of units in Theory/Practical may vary as per need
- Total credits/semester-3 (it can be more credits, but students will get only 3credit/ semester or 6credits/ year
- Credits for Theory =01 (Teaching Hours = 15)
- Credits for Internship/OJT/Training/Practical = 02 ( Training Hours = 60)

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30/9/2022  
**Head**  
Dept. of Mass Communication  
V.B.S. Purvanchal University  
Jaunpur (U.P.)

**Veer Bahadur Singh Purvanchal University  
Jaunpur**



**Syllabus for  
Vocational Course in Clinical Biochemistry  
(Two-year (Four semesters) Vocational program)**

**Department of Biochemistry  
Faculty of Science  
Veer Bahadur Singh Purvanchal University Jaunpur**

## DEPARTMENT OF BIOCHEMISTRY

Veer Bahadur Singh Purvanchal University, Jaunpur-222003

Syllabus for Vocational Course in Clinical Biochemistry

### Semester I

#### CLINICAL BIOCHEMISTRY – I

Title of course	CLINICAL BIOCHEMISTRY – I
Name of department or HEI to run course	DEPARTMENT OF BIOCHEMISTRY
Broad area/Sector	Health and Industries
Sub sector	Medical and Drugs
Nature of course (independent or progressive)	Progressive
Name of suggestive sector (skill course)	Pathology, Research, Community Centre
Aligned NSQF level	
Expected Fee of the course (Free/Paid)	
Stipend to students expected from the industry	6000/-
Number of Seats	20
Course code	Credit – 03 (1-Theory, 2-Practical)
Name of proposed skilled partner (Please Specify name of industry, company etc. for practical training/ internship/OTI)	
Job Prospects: Expected field of occupation where student will be able to get job after completing this course in (Please specify name/ Type of industry, company etc.)	1- Pathology 2- In vitro fertilization (IVF) center 3- Community Centre 4- Research Laboratories

#### SYLLABUS

Unit	Topics	General /skill Component	Theory/ practical/ training/ internship/OTI	No. of Theory Hours (Total 15 Hours = 1 Credit)	No. of Skill Hours (Total 60 Hours = 2 Credit)
1	Carbohydrates: Classification, structure, general properties and functions of mono-, oligo-, (Disaccharides), and polysaccharides. Lipids: Definition, classification, structure, properties and function of fatty acids, essential fatty acids, phospholipids, sphingolipids. Proteins: Amino acids; classification and general properties, peptide synthesis, chemical/synthesis Peptide sequencing, Primary (peptide conformation, N and C terminal, peptide cleavage), secondary (helix, sheet, random coil, Ramachandran plot), tertiary and quaternary structures of proteins, Nucleic Acids: Historical perspectives; nucleic acids as genetic information carriers, experimental evidences, e.g., genetic transformation, Hershey-Chase experiments. Structure and function of nucleotides. Denaturation of DNA		Theory	15	
2	Qualitative test of carbohydrates: 1. Molisch Test, 2. Fehling's Test 3. Barfoed's Test 4. Selwanoff's Test 5. Bial's Test 6. Starch iodine test		Practical/ Training		30
3	1. Quantitative estimation of proteins by Lowry et al., 1951 method 2. Saponification, 3. Acid value 4. Iodine no of fats, 5. MDA estimation in fats by Esterbauer and Cheeseman (1990), 6. Estimation of DNA by diphenylamine method and RNA by Orcinol method. Food adulteration test.		Practical/ Training		30

#### Suggested Reading

1. Principles of Biochemistry (7th Edition) – Lehninger, Nelson and Cox. Pub: Macmillan
2. Harper's Illustrated Biochemistry, (31th Edition) – R.K. Murray, D.K. Garner,
3. P.A. Mayers and V.W. Rockwell, Pub: McGraw Hill International Edition

Biochemistry (3rd Edition) – G. Zubay. Pub: Wm. C. Brown Pub  
Biochemistry (6th Edition) – Lubert Stryer. Pub: W.H. Freeman and Com., NY.  
Biochemistry – (4th edition) D. Voet and J.G. Voet Pub: John Willy and Son  
Practical Biochemistry (3rd Edition) – David Plummer. Pub. Tata McGraw Hill

8. 7. Practical Biochemistry (7th Edition) – K. Wilson and J. Walker. Pub: Cambridge Univ. Press, (U.K.)

Suggested digital Platform/Web Link for reading:

<https://www.ncbi.nlm.nih.gov/>

<https://biocontent.upsdc.gov.in/Home.asp>

<https://www.youtube.com/>

Suggested QIT/ internship /training/skill partner:

Suggested continuation Evaluation Methods

Course Pre-Requisites

No. of pre-requisite required:

To study this subject, a student must have the subject LIFE SCIENCE in class/12<sup>th</sup> / certificate / Diploma

if progressive, to study this course a student must have passed previous courses of this series. 10+2 in Life Science

Suggested equivalent online course

Any Remark or suggestion

Syllabus for Vocational Course in Clinical Biochemistry

Semester II

CLINICAL BIOCHEMISTRY – II

Title of course	CLINICAL BIOCHEMISTRY – II
Name of department or HEI to run course	DEPARTMENT OF BIOCHEMISTRY
Broad area/Sector	Health and Industries
Sub sector	Medical and Drugs
Nature of course- independent or progressive	Progressive
Name of suggestive sector skill course	Pathology, Research, Community Centre
Aligned NSQF level	
Expected Fee of the course – Free/Paid	
Stipend to students expected from the industry	
Number of Seats	6000/
Course code	20
Name of proposed skilled partner (Please Specify name of industry, company etc. for practical/training/internship/OI)	Credit – 03 (1-Theory, 2-Practical)
Job Prospects: Expected field of occupation where student will be able to get job after completing this course in. (Please specify name/ Type of industry, company etc.)	1 Pathology 2 In vitro fertilization (IVF) center 3 Community Centre 4 Research Laboratories

Unit	Topics	General /skill Component	Theory/ practical/ training/ internship/OI	No of Theory Hours (Total 15 Hours = 1 Credit)	No of Skill Hours (Total 60 Hours = 2 Credit)
1	Electrochemistry – pH and buffers, Microscopy: Principles and types: Light, phase contrast, Chromatography, HPLC, Biosensors, basic technique, Electrophoresis: Principles, PAGE, agarose gel electrophoresis, Polymerase Chain reaction (PCR), RT-PCR, blotting techniques: Southern, Western and Northern blotting, Photometry, Theory, Beer's Lambert's law, mass spectroscopy, X-ray diffraction, Geiger–Muller Counter, Liquid scintillation counter Cherenkov counting, autoradiography		Theory	15	
2	1. Preparation of buffers and titration curve of glycine 2. Determination of absorption maxima of BSA protein 3. Paper chromatography – Separation of amino acids and carbohydrates in a mixture 4. Thin layer chromatography of fatty acids 5. Horizontal and vertical gel electrophoresis 6. SDS PAGE for protein		Practical/ Training		40
3	1. Isolation of casein from milk and its quantification 2. Fractionation of egg proteins and its quantification 3. Detection of amino acids by 2D paper chromatography. 4. Purification of proteins by dialysis. 5. Estimation of cholesterol. 6. Estimation of bile pigments. 7. Antioxidant potential measurement by DPPH and ABTS methods		Practical/ Training		20

Suggested Reading:

- 1 Physical Biochemistry D. Friefelder (2nd Edition) Pub: W.H. Freeman & Com
- 2 Practical Biochemistry – K. Wilson and J. Walker (7th Edition). Pub: Cambridge Univ. Press
- 3 Molecular Cloning: a laboratory manual. Sambrook and Russel (Vol. I, II, III)
- 4 Principles of Animal Physiology: Christopher D, II Eds
5. Biochemistry – Harper 28th
6. Textbook of Medical Physiology: Gyton and Hall 12th Eds

Suggested digital Platform/Web Link for reading

<https://www.ncbi.nlm.nih.gov/>



Methodology/any form www.pearsoned.com
Suggested OJT/ internship /training/skill partner.
Suggested continuation Evaluation Methods:
Course Pre-Requisites:
No of pre-requisite required: To study this subject, a student must have the subject LIFE SCIENCE in class/12 <sup>th</sup> / certificate / Diploma If progressive, to study this course a student must have passed previous courses of this series. 10+2 in Life Science
Suggested equivalent online course
Any Remark or suggestion

Title of course	CLINICAL BIOCHEMISTRY - III
Name of department or HEI for the course	DEPARTMENT OF BIOCHEMISTRY
Broad area/Sector	Health and Industries
Sub sector	Medical and Drugs
Nature of course: independent or progressive	Progressive
Name of suggestive sector skill course	Pathology, Research, Community Centre
aligned NSQF level	
Expected fee of the course - Free/Paid	
Stipend to students expected from the industry	6000/-
Number of Seats	20
Course code	
Name of proposed skilled partner (Please Specify name of industry, company etc. for practical training/ internship/OTI)	Credit - 03 (1-Theory, 2-Practical)

job Prospects: Expected field of occupation where student will be able to get job after completing this course in (Please specify name/ Type of industry, company etc.)	1. Pathology 2. In vitro fertilization unit, Centre 3. Community Centre 4. Research Laboratories
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Unit	Topics	General /skill Component	Theory/ practical/ training/ internship/OTI	No. of Theory Hours	No. of Practical Hours
1	Blood – Composition and functions of plasma, erythrocytes including Hb, leucocytes and thrombocytes, plasma proteins, Blood coagulation mechanism and regulation, transfer of blood, Disturbances in blood clotting mechanism – Hemorrhagic disorders – hemophilia, acquired prothrombin complex disorders. Endocrinology: Mechanism of hormone action, signaling pathways, G proteins, second messengers, lipids as signaling molecules. Chemistry, functions, deficiency conditions and feedback controls of hormones produced by: Pituitary, Thyroid, Parathyroid, Pancreas, Gonads: Ovary, Testis, Pineal gland. Other hormone producing structures, Autocrine and paracrine compounds, Digestive system, Vitamins, Muscle Biochemistry, Nervous System, Respiratory system. Enzymes as diagnostic tools – Enzymes in health and diseases. Serum Enzymes, Biochemical diagnosis of diseases by enzyme assays – SGOT, SGPT, aldolase, amylase, CPK, cholinesterase, LDH. Clinical aspects of gastric secretion analysis, tests of gastric, biomolecular markers		Theory	25	
2.	1. Collection storage and transportation of biological samples 2. Collection of blood and preparation of serum, plasma and erythrocytes 3. Osmotic fragility of Erythrocytes 4. Determination of Malondialdehyde in plasma and RBCs membrane 5. Estimation of antioxidant potential of plasma.		Practical/ Training		30
3	1. Estimation of micronutrients viz iron, iodine and vitamin A 2. Estimation of SGPT, SGOT, Alkaline phosphatase, total cholesterol, triglycerides in serum 3. Determination of Hb, cell count, ESR blood samples 4. Measurement of antioxidant potential of food 5. Estimation of bile pigments.		Practical/ Training		30

Suggested Reading

1. Textbook of Biochemistry with Clinical Correlations (2011) Devlin, T.M. John Wiley & Sons, Inc. (New York)
2. Nutrition for health, fitness and sport (2013), Williams, M.H, Anderson, D.E, Rawson, E.S. McGraw Hill international edition

eresa Attwood, Parry-Smith David J. Introduction to Bioinformatics. Publisher: Pearson Education (Singapore) Pte Ltd.  
Gibas Cynthia, Jambeck Per. Developing Bioinformatics Computer Skills. Publisher: Shroff Publishers and distributors O'Pally  
Media, Inc. Latest Edition  
Biostatistics – Garret

- 6. Intermediary Metabolism. Otto Hoffmann Ostenh
- 7. Principles of Biochemistry – A.L. Lehninger. 6th
- 8. Textbook of Medical Physiology Gyton and Hall 12thEds
- 9. Principles of Animal Physiology. Christopher D. II Eds
- 10. Biochemistry – Harper 28t
- 11. Textbook of Medical Physiology Gyton and Hall 12thEds

Suggested digital Platform/Web Link for reading:

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2706282/>  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2706282/>  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2706282/>

Suggested OJT/ internship /training/skill partner:

Suggested continuation Evaluation Methods:

Course Pre-Requisites:

No of pre-requisite required :

To study this subject, a student must have the subject LIFE SCIENCE in class/12<sup>th</sup> / certificate / Diploma

If progressive, to study this course a student must have passed previous courses of this series: 10+2 in Life Science

Suggested equivalent online course:

Any Remark or suggestion:

# DEPARTMENT OF BIOCHEMISTRY

Veer Bahadur Singh Purvanchal University, Lucknow, India

## Syllabus for Vocational Course in Clinical Biochemistry

### Semester IV

#### CLINICAL BIOCHEMISTRY - IV

Title of course	CLINICAL BIOCHEMISTRY - IV
Name of department or HEI to run course	DEPARTMENT OF BIOCHEMISTRY
Broad area/Sector	Health and Industries
Sub sector	Medical and Drug
Nature of course: independent or progressive	Progressive
Name of suggestive sector skill course	Pathology, Research, Community Centre
Aligned NSQF level	
Expected fee of the course - Free/Paid	
Stipend to students expected from the industry	
Number of Seats	6000/
Course code	20
Name of proposed skilled partner (Please Specify name of industry, company etc. for	Credit - 03 (1-Theory, 2-Practical)

Job Prospects: Expected field of occupation where student will be able to get job after completing this course in (Please specify name/ Type of industry, company etc.)	<ol style="list-style-type: none"> <li>1. Pathology</li> <li>2. In vitro fertilization (IVF) center</li> <li>3. Community Centre</li> <li>4. Research Laboratories</li> </ol>
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Unit	Topics	General /skill Component	Theory/ practical/ training/ internship/OI T	No of Theory Hours (Total IS Hours = 1 Credit)	No of Skill Hours (Total Hours = 2 Credit)
1	Types of Samples, Sample Processing, composition and types of blood specimens, sample collection, venipuncture, preservation, influence of nutrition, drugs, posture, etc., use of anticoagulants; Care of the specimens, identification, transport, storage, influence of temperature, freezing/thawing; Laboratory safety and regulations - Safety awareness, safety equipment, Diagnostic efficiency, Method evaluation, Quality Control and quality management, concepts of Good Laboratory Practices (GLP). Disorders of lipids: plasma lipoproteins, cholesterol, triglycerides and phospholipids in health and disease, hyperlipidemia, hyperlipoproteinemia, Gaucher's disease, ketone bodies, Obesity, Ketosis. Inborn Errors of metabolism - Phenylketonuria, alkaptonuria, albinism, tyrosinosis, maple syrup urine disease, sickle cell anemia. Health and Nutrition: Basic concepts of Health and Nutrition: Dietary requirement of carbohydrates, lipids and proteins, Biological value of proteins. Malnutrition - Prevention of malnutrition, improvement of diets, roles of vitamins. Recommended dietary allowances. Protein: calorie malnutrition under different physiological conditions. Basal metabolic rate: factors affecting BMR, measurement and calculation of BMR. Body mass index (BMI), Calorific value and biological value of biomolecules in foods. Specific Dynamic action (SDA).		Theory	15	
2	<ol style="list-style-type: none"> <li>1. Collection storage and transportation of biological samples,</li> <li>2. Determination of sugar in fasting, PP, random blood samples,</li> <li>3. Estimation of antioxidant potential, SOD, catalase, GPx, GR in blood samples.</li> <li>4. Estimation of cholesterol in biological sample</li> <li>5. Estimation of markers of liver function test</li> <li>6. Estimation of markers of kidney function test</li> <li>7. Analysis of Electrocardiogram (ECG)</li> <li>8. Estimation of markers of heart diseases</li> </ol>		Practical/ Training		20

	Determination of specific activity of enzyme (Amylase/Protease/Lipertase)		
1	Microscopic examination of infectious microbes		Practical Training
2	Handling of biological infectious agents		
3	Guidelines to control infectious diseases		
4	Demonstration of various biosafety level (BSL) or pathogen/protection level laboratory		
5	Demonstration of PCR and analysis of abnormalities		
6	Demonstration of Karyotyping of abnormal individual		
7	Food adulteration test		
8	Saponification no., acid value and iodine no fatty acids		
9	Estimation the nutritional value in the food		
10	Practices of food sampling and analysis parameters		
11	The designing and use of the Bioethics Consultation Form		
12	Handling of biological safety cabinets, primary containment for biohazards		
13	Filing of Patents(Demo)		
14	Group Activity: Ideas, discussion about national/ international patenting-requirement, procedures		
15	Case Studies of patents, trademarks, copyright		
Suggested Reading:			
1	Harrison's Principles of Internal Medicine, Twenty-First Edition (Vol.1 & Vol.2)		
2	Textbook of Biochemistry With Clinical Correlations: Thomas M. Devlin, 7th Eds		
3	Marks' Basic Medical Biochemistry: A Clinical Approach, L. Williams and Wilkins, III Eds		
4	A Laboratory Manual for human blood analysis, by M K Bhasin and S M S Chahal,		
5	Bioethics and Biosafety, 1st edition (2008), M. K Sateesh, I K International Pvt Ltd,		
6	Foundation of Bioethics, 2nd edition (1996), E. H. Frisram, Oxford University Press		
7	Ray B and Bhunia A. 2008. Fundamental Food Microbiology, 4th Ed., CRC press.		
8	Enzyme Kinetics – I.H. Segal (Wiley and Sons), III Eds		
9	Enzymatic reaction mechanism – C.S. Wash (Freeman), 2nd Eds		
Suggested digital Platform/Web Link for reading-			
<a href="https://www.ncbi.nlm.nih.gov/">https://www.ncbi.nlm.nih.gov/</a>			
<a href="https://freecontent.upskd.gov.in/home.aspx">https://freecontent.upskd.gov.in/home.aspx</a>			
<a href="https://www.khanacademy">https://www.khanacademy</a>			
Suggested OJT/ internship /training/skill partner-			
Suggested continuation Evaluation Methods:			
Course Pre-Requisites:			
No of pre-requisite required			
To study this subject, a student must have the subject <b>LIFE SCIENCE</b> in class/12 <sup>th</sup> / certificate / Diploma			
if progressive, to study this course a student must have passed previous courses of this series. 10+2 in Life Science			
Suggested equivalent online course			
Any Remark or suggestion:			



Veer Bahadur Singh Purvanchal University, Jaunpur, UP.  
**COURSE STRUCTURE**  
2-Year Vocational Course in Photography and Videography

**Semester -1**

- History and Evolution of Photography
- Camera and accessories
- Basic information regarding digital camera
- The exposure triangle-Aperture-Shutter Speed-ISO
- Concept of light and lens. Supplementary lenses
- Depth of field, depth of focus and perspective effect

**Semester -2**


- Theory of Composition.
- Types of shots
- Daylight and artificial light
- Nature and Wedding photography
- Mobile Photography & Apps.
- Photo journalism
- Basics of post processing

**Semester -3**

- Video camera: Introduction
- features of the camera
- Videography
- Identify different parts, controls and accessories of a video camera
- Use and store cameras, accessories and equipments
- basic lighting set-up.

**Semester -4**

- Framing and balancing the frame
- Take Wide-shot, medium shot, Close shot, Cut-in, Cut-away shots.
- Shoot videos for different events -indoors and outdoors
- Video Program Production Steps  
Marriage function, Office function, Public function, Dance function, Public rally and demonstration, Birthday Party, School function, Sports event
- Video Editing software

  
**Head**  
Deptt. of Mass Communication  
V.B.S. Purvanchal University  
Jaunpur (U.P.)





Veer Bahadur Singh Purvanchal University, Jaunpur. UP.  
**COURSE STRUCTURE**

**2-Year Vocational Course in Photography and Videography**

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- Video Editing software

**Head**  
Deptt. of Mass Communication  
V.B.S. Purvanchal University  
Jaunpur (U.P.)