

FACULTY OF COMPUTER SCIENCE & IT

SYLLABUS

of

Bachelor of Arts /Bachelor of Science (Economics)

COMPUTER APPLICATIONS (VOCATIONAL)

(Semester V- VI)

(Under Continuous Evaluation System)

(12+3 System of Education)

Session: 2025-26

Batch: 2022-25



The Heritage Institution

**KANYA MAHA VIDYALAYA
JALANDHAR
(Autonomous)**

Kanya Maha Vidyalaya, Jalandhar (Autonomous)

SCHEME AND CURRICULUM OF EXAMINATIONS OF THREE YEAR DEGREE PROGRAMME

Bachelor of Arts / Bachelor of Science (Economics)

COMPUTER APPLICATIONS (VOCATIONAL)

Session 2025-26

Bachelor of Arts Honours / Bachelor of Science (Economics) Hons. Semester V											
Program Name	Course Code	Course Title	Course Type	Hours per week	Credit		Marks			Examination Time (in Hours)	
				L-T-P	L-T-P	Total	Total	Ext.			C A
								L	P		
Bachelor of Arts Sem- I	BARM-5124	Computer Applications (Vocational)	DSC	3-0-2	3-0-1	4	100	50	30	20	3+3
Bachelor of Science (Economics)- Sem I	BECEM-5124	(Internet and Web Designing)	DSC								

Bachelor of Arts Honours/ Bachelor of Science (Economics) Hons. Semester VI											
Program Name	Course Code	Course Title	Course Type	Hours per week	Credit		Marks			Examination Time (in Hours)	
				L-T-P	L-T-P	Total	Total	Ext.			CA
								L	P		
Bachelor of Arts Sem- II	BARM-6124	Computer Applications (Vocational)	DSC	3-0-2	3-0-1	4	100	50	30	20	3+3
Bachelor of Science (Economics)- Sem II	BECEM-6124	(Business Data Processing)	DSC								

Bachelor of Arts / Bachelor of Science(Economics) Semester V

Session 2025-26

COURSE CODE: BARM-5124

BECM-5124

**COMPUTER APPLICATIONS (VOCATIONAL)
(INTERNET AND WEB DESIGNING)**

Course Outcomes:

After passing course the student will be able to:

CO1: Comprehend basics of internet and email along with their effective use.

CO2: Apply HTML for development of static webpages.

CO3: Implement styling in webpages through the use of CSS.

CO4: Apply JavaScript code for interaction with content of webpages.

Bachelor of Arts / Bachelor of Science(Economics) Semester V

Session 2025-26

COURSE CODE: BARM-5124

BECM-5124

**COMPUTER APPLICATIONS (VOCATIONAL)
(INTERNET AND WEB DESIGNING)
(THEORY)**

Examination Time: 3 Hrs.

Max. Marks: 100

L-T-P: 3-0-1

Theory: 50

Credits: 4

Practical: 30

CA: 20

Instructions for the Paper Setters: –

Eight questions of equal marks (10 marks each) are to be set, two in each of the four sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be divided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section.

UNIT – I

Internet: Introduction, its evolution, working, IP Address, DNS and its classification, working of DNS, Advantages, Disadvantages and Uses of Internet.

E-Mail: Introduction, its working, E-mail protocols: SMTP, POP, IMAP, Structure of E-mail.

HTTP: HTTP Protocol and its structure. **WWW:** Introduction and its working, **TCP/IP,** Browser Architecture. **FTP:** Introduction and its working.

UNIT – II

HTML: Introduction, Features, Advantages and Limitations, Program Structure, Headings, Paragraph, Styling, Formatting, Hyperlink, Image, Table, List, Frame, Entities, Form, Form elements.

UNIT-III

CSS: Introduction, Advantages and Limitations, types, selector, colors, background, box model, text, font, display, position, z-index, float, clear, rounded corners.

UNIT-IV

JavaScript: Basics, Features, Advantages, Limitations, Types, Basics, Functions, Control Statement, Arrays, JavaScript objects, Host objects.

DOM: Introduction, Methods, Accessing HTML and CSS, Events, Event Listener, Nodes and Collection.

BOM: Window, Screen, History, Navigation.

References / Textbooks:

1. Anshuman Sharma, Fundamentals of Internet Applications, Lakhanpal Publications, 2016.
2. Ikvinderpal Singh, Internet Applications, Khanna Book Publishing Company, 1st Edition, 2011
3. P. Rizwan Ahmed, Internet & its Applications, Margham Publications, 2013.
4. Douglas E. Comer, Computer Networks and Internet with Internet Applications, Pearson, 4th Edition, 2008.
5. Satish Jain/Vineeta Pillai, Wireless Communication & Networking made Simple, BPB Publishers, 2007.
6. Laura Lerney, Rafe Colburn, Jennifer Kyrnin, Mastering HTML, CSS & Javascript Web Publishing, BPB Publishers, 1st Edition, 2016.

Note: The latest editions of the books should be followed.

Bachelor of Arts / Bachelor of Science(Economics) Semester V

Session 2025-26

**COURSE CODE: BARM-5124
BECM-5124**

**COMPUTER APPLICATIONS (VOCATIONAL)
(INTERNET AND WEB DESIGNING)
(PRACTICAL)**

Examination Time: 3 Hrs.

Max. Marks: 100

L-T-P: 3-0-1

Theory: 50

Credits: 4

Practical: 30

CA: 20

Practical on Internet and Web Designing.

Bachelor of Arts / Bachelor of Science(Economics) Semester VI

(Session 2025-26)

COURSE CODE: BARM-6124

BECM-6124

**COMPUTER APPLICATIONS (VOCATIONAL)
(BUSINESS DATA PROCESSING)**

Course Outcomes:

After passing course the student will be able to:

CO1: Identify the impact of data and information on working of various organizations.

CO2: Comprehend different types of Data Processing Methods and File Processing techniques.

CO3: Create, edit, save, format and print spreadsheets.

CO4: Apply function and formulas in spreadsheets for data processing.

Bachelor of Arts / Bachelor of Science(Economics) Semester VI

(Session 2025-26)

**COURSE CODE: BARM-6124
BECM-6124**

**COMPUTER APPLICATIONS (VOCATIONAL)
(BUSINESS DATA PROCESSING)**

Examination Time: 3 Hrs.

Max. Marks: 100

L-T-P: 3-0-1

Theory: 50

Credits: 4

Practical: 30

CA: 20

Instructions for the Paper Setters:–

Eight questions of equal marks (10 marks each) are to be set, two in each of the four sections (A-D). Questions of Sections A-D should be set from Units I-IV of the syllabus respectively. Questions may be divided into parts (not exceeding four). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section.

UNIT–I

Introduction to Data Processing, Need of Computers in Business.
Characteristics of Business Organization and Use of computers in various work areas of business like: Payroll System, Inventory Control, Online Reservation, Computer in Banks and Computer Application in Educational Institutions.

UNIT–II

Data Processing Methods: Batch Processing, Online Systems, Time Sharing, Real Time Systems and Distributed Processing.

File Organization: Types of Files (Master, Transaction, Work, Backup, Audit Files), File Organization (Serial, Sequential, Indexed Sequential, Direct Access Files).

UNIT–III

Spreadsheets : Introduction, Worksheet, Data Entry, Editing, Cell Addressing Range, Copying and Moving Cell Content, Inserting and Deleting Rows and Column, Column Formats, Printing, Creating, displaying charts, Create, manage, and format pivot tables and pivot charts. Printing the Worksheet.

UNIT–IV

Working with functions - Date and time function, Statistical function, Mathematical and Trigonometric functions, Text function, Logical functions, other computations, using data analytics tools and what if analysis- data sort, fill, query, filter etc.

References / Textbooks:

1. *Murdick& Ross, Introduction to Management Information Systems, Prentice Hall (1977).*
2. *Muneesh Kumar, Business Information Systems, Vikas Publishing (1998), 1st edition.*
3. *Silberschatz, Korth&Sudarshan, Database Systems Concepts, McGraw-Hill Inc.(2020), 7th edition.*
4. *Anshuman Sharma, Fundamentals of DBMS, Lakhanpal Publishers (2016), 4th edition.*
5. *Rachhpal Singh, Gurvinder Singh, Windows based computer courses, Kalyani Publishers (2011).*
6. *Peter Norton, Introduction to Computers, McGraw Hill Education (2017), 7th edition.*

Bachelor of Arts / Bachelor of Science(Economics) Semester VI

Session 2025-26

**COURSE CODE: BARM-6124
BECM-6124**

**COMPUTER APPLICATIONS (VOCATIONAL)
(BUSINESS DATA PROCESSING)**

Examination Time: 3 Hrs.

**L-T-P: 3-0-1
Credits: 4**

Max. Marks: 100

Theory: 50

Practical: 30

CA: 20

Practical on business data processing.