

General Elective Course- 5.9 (GE-5.9): Computer Applications in Business

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
Computer Applications in Business GE- 5.9	4	1	0	3	Pass in Class XII	NIL

Learning Objectives

This paper aims to impart computer knowledge that will enable them with the ability to handle and analyse data for decision making and presenting it to the person concerned in the form of presentations and/or reports in the fast-moving business world.

Learning Outcomes

After completion of the course, learners will be able to:

1. Describe the various concepts and terminologies used in computing, computer networks and the internet.
2. Examine document creation for report making and communication.
3. Create innovative and creative presentations.
4. Analyse various computations using various functions in the area of accounting and finance and represent the business data using suitable charts. S/he should also be able to manipulate and analyse the business data for better understanding of the business environment and decision making.
5. Examine the spreadsheet knowledge acquired through this paper in solving real life problems that help in decision making.

SYLLABUS OF GE-5.9

Unit1: Introduction (4 hours)

Computing: Concept of computing, Data and information; Computing Interfaces Graphical User Interface (GUI), Command Line Interface (CLI), Touch Interface, Natural Language Interface(NLI); data processing; applications of computers in business.

Computer Networks: Meaning of computer network; objectives/ needs for networking; Applications of networking; Basic Network Terminology; Types of Networks; Network

Topologies; Distributed Computing: Client Server Computing, Peer- to- peer Computing; Wireless Networking; Securing Networks: firewall.

Basic Internet Terminology: I.P. Address, Modem, Bandwidth, Routers, Gateways, Internet Service Provider (ISP), World Wide Web (www), Browsers, Search Engines, Proxy Server, Intranet and Extranet; Basic Internet Services; Internet Protocols: TCP/IP, FTP, HTTP(s), Uses of Internet to Society; Cyber Security: Cryptography, digital signature.

Unit 2: Word Processing (3 hours)

Introduction to word Processing, Word processing concepts, Use of Templates and styles, Working with word document: Editing text, Find and replace text, Formatting, spell check, Autocorrect, Auto-text; Bullets and numbering, Tabs, Paragraph Formatting, Indent, Page Formatting, Header and footer, page break, table of contents, Tables:Inserting, filling and formatting a table; Inserting Pictures and Video; Mail Merge (including linking with spreadsheet files as data source); Printing documents; Citations, references and Footnotes.

Unit 3: Preparing Presentations (2 hours)

Basics of presentations: Slides, Fonts, Drawing, Editing; Inserting: Tables, Images, texts, Symbols, hyperlinking, Media; Design; Transition; Animation; and Slideshow, exporting presentations as pdf handouts and videos.

Unit 4: Spreadsheet basics (3 hours)

Spreadsheet concepts, Managing worksheets; Formatting, conditional formatting, Entering data, Editing, and Printing and Protecting worksheets; Handling operators in formula, Project involving multiple spreadsheets, Organizing Charts and graphs; Flash-fill; Working with Multiple worksheets; controlling worksheet views, naming cells and cell ranges.

Spreadsheet functions: Mathematical, Statistical, Financial, Logical, Date and Time, Lookup and reference, Text functions and Error functions

Working with Data: Sort and filter; Consolidate; Tables; Pivot tables; What-if-analysis: Goal seek, Data tables and Scenario manager.

Unit 5: Spreadsheet projects (3 hours)

Creating business spreadsheet: Loan repayment scheduling; forecasting: stock prices, costs & revenues; Payroll statements; handling annuities and unequal cash flows; Frequency distribution and its statistical parameters and break-even analysis.

Note:The General Purpose Software referred in this course will be notified by the University Departments every three years. If the specific features, referred in the detailed course above, is not available in that software, to that extent it will be deemed to have been modified.

Practical Exercises:

The learners are required to:

1. Analyze and compare the different mobile payment apps (at least 5) on the basis of their pros and cons and prepare a report on the same in word document using table of contents, bullets, numbering, citations, etc. Also prepare a presentation for the same.
2. Using mail merge utility of word processing for either sending letters or for creating any other document like salary slip/ utility bills to be delivered to multiple recipients using data from a business organization or of the peer students.
3. Identify a topic related to any business operation and prepare a PowerPoint Presentation with all the above functions therein.
4. Prepare a Spreadsheet document with any hypothesized data and perform all the above functions therein.
5. Take secondary data from a company's income statement and balance sheet for five to ten years. All learners are required to conduct the Ratio Analysis and forecast values for different items of these statements for the next five to ten years.
6. Use logical, mathematical and statistical functions of spreadsheets. The learners should be able to analyse the results of the class test using hypothesized data to determine the students who passed or failed, assigning them ranks like first, second, third, etc., finding out number of absentees, counting no. of students scoring marks with distinction, etc.
7. Prepare repayment schedule of the loans that they borrow, prepare a payroll statement using spreadsheet functions listed above and analyse different investment opportunities using financial functions.
8. Take live data from the website of the Government of India, use Spreadsheet for preparing frequency distribution, graphs, and calculate statistical measures like mean, median, mode, standard deviation, Correlation etc.

Suggestive Readings

- Jain, H. C., & Tiwari, H. N. (2021). *Computer Applications in Business*. Delhi, India: Taxmann.
- Joseph, P. T., S. J. (2019). *E-Commerce: An Indian Perspective*. (6th ed.). Delhi, India: PHI Learning
- Madan, S. (2020). *Computer Applications in Business*. Delhi, India: Scholar Tech Press.
- Mathur, S., & Jain, P. (2016). *Computer Applications in Business*. Noida, India: Galgotia Publishing Company.
- Sharma, S. K., & Bansal, M. (2017). *Computer Applications in Business*. Delhi, India: Taxmann.
- Thareja, R. (2019). *Fundamentals of Computers*. Delhi, India: Oxford University Press.
- Thareja, R. (2018). *IT & Its Business Application*. Delhi, India: Oxford University Press
- Walkenbach, J. (2016). *MS Excel 2016, Bible*. United States: John Wiley & Sons.
- Winston, W. L. (2013). *MS Excel 2013, Data Analysis & Business Modeling*. Redmond, United States: Microsoft Press.

· **Additional Readings**

- Benninga, S. (2022). Financial Modelling. Massachusetts, United States: The MIT Press.

Note: Suggested readings will be updated by the Department of Commerce and uploaded on the Department's website.