B.A.-I (PAPER CODE: BA114)/B.Sc-Med (Paper Code: BM104)/ B.Sc(Non-Med)(Paper Code: BNM104)
Part-I Sem-I (Minor)
Fundamentals of Information Technology

Total Marks: 70
External Marks: 50
Internal Assessment: 20
Minimum Pass Marks: 35%
Credit: 3
Lectures to be delivered: 45-55Hrs

Course Objectives	Course Outcomes
Gain knowledge of basic IT concepts, components, and applications	Students will gain knowledge of IT concepts, components, and applications
Understand computer hardware, software, and operating systems	Students will understand computer hardware, software, and operating systems
Learn fundamentals of computer networks, internet, and communication technologies	Students will learn fundamentals of computer networks, internet, and communication technologies
Explore IT applications in business, education, and society	Students will explore IT applications in business, education, and society

A) Instructions for paper-setter

The question paper will consist of three sections. Section A and B will have four questions each from respective units and candidates are required to attempt two questions each from section A and B. Each question in section A and B shall carry 7.5 marks. Section C will consist of 10 short answer type questions covering entire syllabus. Each question in section C will carry 2 marks.

B) Instructions for candidates

1. Candidates are required to attempt two questions each from sections A & B of the question paper and the entire section C.

SECTION A

Computer Fundamentals: Block diagram of a computer, characteristics of computers and generations of computers. Categories of Computers - Supercomputer, mainframe computer, network server, Workstation, Desktop computers, notebook computer, Tablet PC, handheld PC, smart phone.

Input Devices: Keyboard, Mouse, Joy tick, Track, Bali, Touch Screen, Light Pen, Digitizer, Scanners, Speech Recognition Devices, Optical Recognition Devices-OMR, OBR, OCR

Output Devices: Monitors, Impact Printers-Dot matrix, Character and Line printer, Non Impact Printers-DeskJet and Laser printers, Plotter.

Memories: Memory Hierarchy, Primary Memory-RAM, ROM, Cache memory, Secondary Storage
Devices-Hard Disk, Compact Disk, DVD, Flash memory

Software: Types of Software- System Software, Application Software, Firmware, Type of System:
Operating Systems, Language Translators, Utility Programs, Communications Software

Commonly Used Application Software: Word Processor, Spreadsheet, Database, Education, Entertainment Software.

Computer Languages: Machine language, assembly language, High level language, 4GL.

SECTION B

Number System: Non-positional and positional number systems, Base conversion, Concept of Bit and Byte, binary, decimal, hexadecimal, and octal systems, conversion from one

system to the other. Binary Authentic Addition, subtraction and multiplication, I's complement, 2's complement, subtraction. Using I's complement and 2's complement.

Computer Codes: weighted and non-weighted code, BCD, EBCDIC, ASCII, Unicode

Computer Network: Network types, network topologies.

Internet Related Concepts: Internet: World Wide Web, Hypertext, Uniform Resource Locator, Web Browsers, IP Address, Domain Name, Internet Services Providers, Internet Security, Web Search Engine, Net Surfing, web portal, Wiki, Blog

Advanced Trends in IT: Mobile Internet, GPS, 3G, 4G, Wi-Fi, Bluetooth, Cloud Technology, Virtual LAN Technology, Firewall, E-Commerce, M-Commerce, Nanotechnology, Virtual Reality, BPO and KPO, Online shopping, Social Media YouTube, FaceBook, Linkedin, Twitter, Instagram.

Applications of IT: IT in Business and Industry, IT in Education & training, IT in Science and Technology, IT and Entertainment, Current Trends in IT Application - Al, Virtual Reports, voice recognition, Robots, Multimedia Technology.

B.A.-I (PAPER CODE: BA114P)/B.Sc-Med (Paper Code: BM104P)/ B.Sc(Non-Med)(Paper Code: BNM104P)

Practical based on Fundamentals of Information Technology

Total Marks: 30	Maximum Times: 2 Hrs.
Practical External Marks: 20	Credit: 1
Practical Internal Assessment: 10	Minimum Pass Marks: 35%

The laboratory course will comprise of Activities related to out based operating system and exercise it's what is learnt under Paper such as

Internet

Activity 1: Connecting through Wi-Fi, Blue tooth and Hot Spot.

Activity 2: Web Surfing, searching contents through Search Engines

Activity 3: Creating and maintaining Web Blogs and Web portals

Social Media

Activity 1: Creating account, linking accounts, betting profiles and preference.

Activity 2: Posting messages, replying forwarding, Search Engines.

Activity 3: Online shopping, comparing prices etc

Activity 4: Creating and maintaining social profiles at Linkedin, FaceBook, Twiner etc.

The breakup of marks for the Examination will be as under:

Lab Record	:	05 Marks
Viva Voce	:	10 Mark
Program Development And Execution	:	05 Marks

B.A.-I (PAPER CODE: BA214)/B.Sc-Med (Paper Code: BM204)/ B.Sc(Non-Med)(Paper Code: BNM204)
Windows Operating System and Office Automation

Total Marks: 70
External Marks: 50
Internal Assessment: 20

Minimum Pass Marks: 35%
Credit: 3
Lectures to be delivered: 45-55Hrs

Course Objectives	Course Outcomes
Gain knowledge of Windows operating system basics and features	Students will gain knowledge of Windows OS concepts and functions
Learn file, folder, and system management skills	Students will manage files, folders, and system settings effectively
Understand and use MS Office tools (Word, Excel, PowerPoint, Access)	Students will create documents, spreadsheets, presentations, and databases using MS Office
Apply office automation techniques to improve productivity	

A) Instructions for paper-setter

The question paper will consist of three sections. Section A and B will have four questions each from respective units and candidates are required to attempt two questions each from section A and B. Each question in section A and B shall carry 7.5 marks. Section C will consist of 10 short answer type questions covering entire syllabus. Each question in section C will carry 2 marks.

B) Instructions for candidates

Candidates are required to attempt two questions each from sections A & B of the question paper and the entire section C.

Section A

Windows Operating System: features, history, hardware requirements and its installation SystemGraphics interface: Benefits, Screen attributes: icons and bars. Mouse vs. keyboard input, Features and accessories of the Windows program. Objects and their properties.

Folder and file management: Working with files, Naming files, Navigate to Folders with Windows Explorer, Copying and moving files, Deleting files, Managing folders, Creating,Viewing, Expanding and collapsing, Backing up and restoring files. Components of Windows: format of a window, moving windows, resizing windows, minimizing and maximizing windows.

Control panel: Customizing screens, Screen colors, Patterns, Spacing icons, selecting time/date, setting the Sound, Concept of menu Using Help, Creating Short cuts, Basics of Window Setup, Notepad, Window Accessories, System restore.Customizing printing, changing the print queue, configuring the printer, Adding printers. Working with fonts: changing, removing, adding, customizing mouse and keyboard use.

Section B

Introduction to MS Word, MS Word Documents: Creating a File, Saving and File Formats, File views. Font/Character Formatting: Styles and Character/Font Formatting, Character Formatting.Paragraph Formatting: Styles and Paragraph Formatting, Structural Formatting,

Paragraph Decoration. Styles: Styles Group, Styles Task Pane.Page Setup and Sections: Page Borders, Header and Footer Layer, Header and Footer Navigation and Design, Adding Header and Footer Material. Tables and picture insertion.

Introduction to MS PowerPoint, creating and editing slides, Inserting Content from External Sources, Using Content Placeholders, Creating Text Boxes Manually, Working with Text Boxes, understanding layouts and Themes, Applying a Theme, Working with Preset Placeholders, Customizing and Creating Layouts, Managing Slide Masters, Managing Themes, PrintingSlides.Building Animation Effects, Transitions, and Support Materials: Understanding Animation and Transitions, Assigning Transitions to Slides, Using an Animation Preset.

B.A.-I (PAPER CODE: BA214P)/B.Sc-Med (Paper Code: BM204P)/ B.Sc(Non-Med) (Paper Code: BNM204P)
Practical based on Windows Operating System and Office Automation

Total Marks: 30	Maximum Times: 2 Hrs.
Practical External Marks: 20	Credit: 1
Practical Internal Assessment: 10	Minimum Pass Marks: 35%

The laboratory course will comprise of Activities related to out based operating system and exercise it's what is learnt under Paper such as

Operating System

Activity 1:

i. Installation and Software & Drivers installation
ii. Basic components of Window-Desktop, Icons, Taskbar, Status Bar, Wallpapers, Screen Saver
iii. Start Menu: Accessories-Notepad, Calculator, Clock, Date and Time, Disk Defragmentation, Working with Control Panel
iv. Taskbar properties Maximize Minimize, Restore, and Close
v. Creating Film, Folders, Shortcuts, Moving folders

Word Processing

Activity 1:

i. Create, open, save and close a document.
ii. Typing, copying, moving and deleting date in word document.
iii. Perform Save and Save as, Cut and Copy, Paste and Paste Special.
iv. Text formatting (font size, font style, font color, subscript, upper/lower caste etc.)
v. Bullets and Numbering
vi. Text Alignment and character spacing
vii. Indention and line spacing
viii. Border and shading
ix. Find and replace and data sorting in a document.

Activity 2:

i. Create Table and formatting of table
ii. Create Shape, Smart Art, Charts
iii. Add Header, footers and page
iv. Set a size, margins, orientation of page. Hyphenation, Columns and Line Numbers in Word.
v. Set Page Color, Page Border, Themes, and Watermarks in Word
vi. Showing Ruler, Gridlines, Documents Map, Thumbnails, Inserting Word Art, Drop Cap. Hyperlink, Equation etc. in word document

Activity 3:

i. Arranging splitting windows in word
ii. Perform Mail-merge in word
iii. Create and run Macros in Word
iv. Set the print properties of 's word document

PowerPoint

Activity 1:

i. Create, open, save and close a Presentation
ii. Typing, copying, moving and deleting data is presentation.
iii. New Slide, understanding Slide Layout, adding and deleting slides.

Activity 2:

i. Text formatting (font size, font style, font color, subscript, superscript, upper/lower case etc.)
ii. Text Alignment and character spacing
iii. Indention and line spacing
iv. Border and shading
v. Bullets and Numbering

Activity 3:

i. Set a size, margin, orientation of slides in PowerPoint.
ii. Adding Tables, header/footers, pictures, page numbers and special symbols, Text Box etc in your presentation

Activity 4:

i. Adding Animation and Transition Effects in Slides, Understanding Slide Show
ii. Presentation Views, Understanding Formatting commands in PowerPoint

Activity 5:

i. Create and run Macros in PowerPoint
ii. Arranging, splitting windows in PowerPoint.

The breakup of marks for the Examination will be as under:

Lab Record	:	05 Marks
Viva Voce	:	10 Mark
Practical Work	:	5 Marks