## INTERNSHIP PROGRAMME FOR UG DEGREE (SEMESTER-V)

(For the students admitted under New Curriculum and Credit Framework from the academic session 2023-24)



# **Course Title: Application of Personal Computer**

Internship Providing Organization (IPO):	Bankura Sammilani College Computer Centre
<b>Category of Course:</b>	For UG DEGREE (SEM-V)
Duration:	60 Hours
Course Coordinator and Contact Details:	Mr. Sanjoy Sen Mob: 8617495096
Mentors:	Mr. Samiran Banerjee
Intake Capacity:	70 Students
<b>Course Fees:</b>	Rs. 400/- (Students from Host Institution) Rs. 600/- (Students from Other Institution)

#### **SYLLABUS**

### Course Title: Application of Personal Computer [50 Marks/2 Credits/60 Hours]

#### **Learning Outcomes (LO)**

- Gather fundamental knowledges about different programmes of MS Office commonly used for general purposes.
- Develop skill for generating MS word documents, Excel Spreadsheet, Power Point Presentation using different components within each programme.
- Develop basic concepts about Internet, Web Pages, Search Engine, Web Browsers, Email etc.
- Gather basic knowledge about Network Topologies, Network Types, Communication Media and Connectors, Various network devices etc. and develop skill for Crimping, Punching and Cabling.

#### **Fundamental**

THEORY: [6 hours]

- History and Generations of Computer.
  - Advantage and disadvantage of Computer Block Diagram of a Computer.
  - Description of Different parts of a computer.
  - System Software and Application Software.

PRACTICAL: [2 hours]

- Identification of Different parts of a Computer System.
- Turning a computer system on and off

#### Windows & OS

PRACTICAL: [3 hours]

- Identifying different Desktop Icons, My Computer, My Documents
- Changing Desktop Backgrounds, Mouse Pointer, Screen Saver Notepad, WordPad, MS Paint

#### **MSWord**

THEORY: [2 hours]

- Introduction to MSOffice
- Word Processing Software

PRACTICAL: [6 hours]

Document formatting options

- Tables, Bullets and Numbering
- Font, Alignment, Paragraph formatting
- Insert Picture, Clipart, Shapes, WordArt
- Header & Footer, Text Box
- Page Layout, Mail Merge, Spelling & Grammar

#### **MS Excel**

THEORY: [3 hours]

- Introduction to MSOffice
- Electronic Spreadsheet

PRACTICAL: [8 hours]

- Cell Formatting Options
- Formulas and Functions
- Charts
- Sort, Filter, What if Analysis, Grouping Subtotal Pivot Table

#### **MS PowerPoint**

PRACTICAL: [6 hours]

- Creating Slide Show by using Animation Technique. □
- Slide Master, ClipArt, Picture Editing

#### **Internet Email**

#### THEORY:

Internet Basics [3 hours]

• What is Internet? How Internet works? Types of Internet Browsers and Web pages.

Introduction to Web. [4 hours]

• Overview of Internet and WWW. Web Pages, homepage, Web browsers, Search Engines, Web Sites and servers.

PRACTICAL: [5 hours]

#### **Internet Concepts**

• Opening websites and browsing. Writing, Reading and sending mails. Connecting to Internet. Browsing popular sites and using search engines. □

#### **Basic Networking:**

THEORY: [6 hours]

• Introduction to Computer Networks—Advantages of Networking, Peer-to-Peer and Client/Server Network.

- Network Topologies-Star, Ring, Bus, Tree, Mesh, Hybrid.
- Type of Networks Local Area Networks (LAN), Metropolitan Area Networks (MAN), Wide Area Networks (WAN) and Internet, Ethernet, Wi-Fi, Bluetooth, Mobile Networking, Wire and wireless Networking.
- Difference between Intranet and Internet. Communication Media & Connectors –
- Unshielded twisted-pair (UTP), Shielded twisted-pair (STP), Fiber Optics and Coaxial cable: RJ-45, RJ-11, BNC.
- Understanding color codes of CAT5 cable. 568A and 568B convention. Introduction to Data Communication Analog and Digital Signals, Simplex, Half- Duplex and Full-Duplex transmission mode.

### PRACTICAL: [6 hours] Components of the Computer Network, Crimping & Punching and Cabling

- Familiarization with various Network devices, Connectors and Cables.
- Understanding the Layout of network.
- Crimping practice with straight and cross CAT 5cables.
- Punching practice in IO Box and patch panel. Crimping and making cables. Create cabling in a lab with HUB/Switch and IO Boxes and patch panel. Fitting Switch Rack.