## IBM – Advanced Diploma on IT, Networking and Cloud Computing Core Module – 01 (PRACTICAL)

- 30 \_\_1. How do you safely disassemble a PC and identify the key components such as the motherboard, RAM, and power supply?
- 212 2. What are the steps to correctly reassemble a PC and ensure all components are properly connected?
  - 3 How do you install a CPU into the motherboard and attach a cooling fan using thermal paste?
  - 4. What is the correct procedure for installing and removing RAM from a motherboard?
  - (5. How do you install a SATA hard drive into a desktop computer, and what precautions should you take with power and data connections?
  - 6. What are the steps for installing a PCIe expansion card, such as a graphics card or network card, in a desktop PC?
  - -7. How do you connect and test USB peripherals such as a keyboard, mouse, and USB drive on a PC?
  - %. What tools and steps are required to clean the internal components of a PC, especially the motherboard and fans?
  - 9. What steps do you follow to troubleshoot and resolve hardware-related issues, such as a PC not powering on or failing to boot?
  - -10. How do you create a boo<mark>table USB dri</mark>ve and use it to install Windows 10 on a desktop or laptop?
  - -II. What is the process for installing Ubuntu Linux from a bootable USB drive, and how do you partition the hard drive during installation?
  - 12. How do you set up a dual-boot system with both Windows and Linux on the same hard drive?
  - 13. What steps are involved in downloading and installing device drivers after a fresh OS installation?
  - 14. How do you access and configure BIOS settings to prepare a PC for an operating system installation, such as changing the boot order?
  - 15. Create a pay slip using functions and formulae in a spreadsheet.
  - 16 Create a script that asks the user for a number and determines if the number is odd or even in Linux.
  - 17. Create a script that prompts the user for their age and prints a message based on the input:
    - A. If the age is less than 18, print "You are a minor."
    - B. If the age is between 18 and 60, print "You are an adult."
    - C. If the age is over 60, print "You are a senior citizen."

- 18. Write a script that performs the following tasks:
  - A. Creates a directory named 'ProjectFiles'.
  - B. Navigates into this directory.
  - C. Creates 5 empty text files named file1.txt to file5.txt.
  - D. Lists all files in the directory with their sizes.
- 19. Prepare a hard disk for OS installation by creating disk partitions. Explain the steps required to create at least 3 partitions.
- 20. How do you perform disk defragmentation on Windows? Describe the steps involved.
- 21. Solder electronic components onto a PCB. Describe the steps and precautions to ensure a proper solder joint.
- 22. Install Windows and Linux operating systems on two different partitions of the same hard drive. Describe the process.
- 23. Install and uninstall application software, such as Office, Multimedia players, or Antivirus programs.
- 24. Execute the following Linux commands: touch, echo, clear, ls, dir, mkdir, cat, rmdir, rm, cp, mv. Provide examples of each.
- 25. Create a magazine using columns, page borders, header, and footer in OpenOffice. Describe the formatting options available.
- 26. Create a marksheet in a spreadsheet with data validation, and create a chart to visualize the marks.
- 27. Execute the following Linux commands: find, head, tail, tar, gzip, bzip2, alias, sed, wc, sort.

  Provide a brief explanation of each command.
- 28 Preate a file using the vim editor, write a paragraph in it, and copy the content to another file.
- 29. Remove the cabinet from a PC, identify the motherboard components, slots, sockets, and connectors, and remount them.
- 30. Prepare a hard disk for OS installation by creating disk partitions. Create at least 3 disk partitions and assign drive letters.
- 31. Install or uninstall application software (Office, multimedia, or antivirus) on a computer. Explain the steps.
- 32. Use the TTY command to find the terminal ID in Linux. Explain how to know which terminal you are working in.
- 33. Draw a house sketch using Microsoft Paint or a similar drawing tool.
- 34. Create your resume using document editing commands, including formatting and layout adjustments.
- 35. Create a purchase order using tables and images in Microsoft Word. Explain how to format the document.

- 36. Create a magazine in Microsoft Word or OpenOffice, using columns, page borders, headers, and footers.
- 37. Create an invitation letter using mail merge for multiple invitees in Microsoft Word or OpenOffice.
- 38. Create a marksheet using a spreadsheet with data validation, and generate a chart to display the data visually.
- 39. Create a pay slip using functions and formulae in a spreadsheet to calculate employee earnings.
- 40. Create a Pivot Table and chart in a spreadsheet for inventory management, and explain how to organize and visualize the data.
- 41. Create a presentation by inserting charts, tables, and images to illustrate the organizational structure of a company.



Directorate General of Training