COMPUTER

◆ Definitions in Simple Language

1. What is Troubleshooting?
➢ Troubleshooting means finding and fixing problems in computers or machines to make them work properly again.

2. What is Downtime?
➢ Downtime is the time when a system is not working and cannot be used.

3. What is Data Integrity?
➢ Data integrity means the data is correct, safe, and not changed or damaged.

4. What are Peripherals?
➢ Peripherals are external devices that connect to a computer, like a mouse, keyboard, printer, etc.

5. What is RAM (Random Access Memory)?
➢ RAM is a temporary memory in a computer that stores data while the system is working.

6. What is a Hard Drive?
➢ A hard drive is the storage device in a computer where data, files, and software are saved.

7. What is Malware?
➢ Malware is harmful software, like a virus, that can damage your computer or steal information.

8. What is a Backup?
➢ A backup is a copy of important data made to protect it in case it gets lost or damaged.

9. What is System Functionality?
➢ System functionality means the system is working correctly and doing its job properly.

◆ Short Questions and Comprehensive Answers

10. What is system troubleshooting?
➢ System troubleshooting is the step-by-step process of identifying and fixing problems in computers or machines to keep them working smoothly.

11. Why is troubleshooting important in computing systems?
➢ It is important because it helps fix problems quickly, prevents damage, protects data, improves security, and saves time and money.

12. What is the first step in the troubleshooting process?
➢ The first step is to identify the problem, such as finding out why a computer is not turning on or a program is not working.

13. What does "establish a theory of probable cause" mean?
➢ It means to guess what might be causing the problem. For example, thinking that the battery is dead or a cable is loose.

14. How do you test the theory in troubleshooting?
➢ You check if your guess is correct. For example, try another charger if you think the power cord is faulty.

15. What does it mean to implement a solution?
➢ It means to take action and fix the problem based on your plan, such as replacing a battery or reconnecting a cable.

16. What should you do after fixing the problem?
➢ You should verify that the system works properly and the problem is completely solved.

17. Why is documentation important in troubleshooting?
➢ It helps record what the problem was and how it was fixed, so you or others can solve similar issues more easily in the future.

18. How does troubleshooting prevent downtime?
➢ It helps fix problems quickly so that the computer or system doesn't stay off for long and work continues without delay.

19. How does troubleshooting ensure data integrity?
➢ It finds and fixes problems like corrupted files or storage issues, which helps keep data safe and correct.

20. How does troubleshooting improve system security?
➢ It helps detect and remove viruses or fix security flaws that could allow hackers to attack the system.

21. How can troubleshooting improve performance?
➢ It finds and fixes reasons for slow system performance, like low memory or faulty hardware, making the system faster.

22. How does troubleshooting save costs?
➢ It avoids expensive repairs and replacements by solving problems early before they become serious.

23. What is application freezing and how do you fix it?
➢ When an app stops responding, it is frozen. You can press Ctrl + Alt + Delete to open Task Manager and end the task, or restart the app.

24. What should you do if a peripheral device like a printer stops working?
➢ Check the connection, unplug and reconnect the device, or update its driver software.

25. Why is restarting a computer useful in troubleshooting?
➢ Restarting can fix many problems because it clears memory, closes unnecessary apps, and refreshes the system.

26. What should you do if a computer does not respond to shutdown?
➢ Press and hold the power button to force shut down, but only as a last option to avoid data loss.

27. What are common hardware issues?
➢ Common hardware issues include loose cables, overheating, or unresponsive external devices.

28. How can you prevent hardware problems in your workspace?
➢ Use cable ties, label cables, ensure good airflow, and keep the computer in a clean, ventilated area.

29. What are symptoms of RAM failure?
➢ Frequent crashes, blue screen errors (BSOD), and very slow system performance can be signs of faulty RAM.

30. How can you test RAM problems?
➢ Use tools like Windows Memory Diagnostic or MemTest86 to check if the RAM is working correctly.

31. What are signs of hard drive failure?
➢ Strange clicking sounds, corrupted files, very slow system, or booting problems can be signs of hard drive failure.

32. How can you check hard drive health?
➢ Use tools like CrystalDiskInfo or SMART status checks to monitor the hard drive condition.

33. How do you upgrade RAM?
➢ First, check your computer's supported RAM type. Then buy compatible RAM sticks, shut down the system, open the case, and insert them into the RAM slots.

34. How do you replace a hard drive?
➢ Back up your data, buy a new compatible drive, remove the old one, insert the new one, reinstall the operating system, and restore the data.

35. Why should you regularly update your software?
➢ Updates fix bugs, improve performance, and protect the system from security threats.

36. How can you remove malware from your computer?
➢ Use antivirus software to scan and remove any malicious software. Keep it updated and perform regular scans.

37. What makes a password strong?
➢ A strong password includes capital and small letters, numbers, and special characters. Example: MyPass#2025!

38. What is the benefit of using cloud storage?
➢ Cloud storage lets you save and access files online from anywhere, even if your personal computer is damaged or lost.

39. Why are regular backups important?
➢ Backups help protect your data in case of system failure, accidental deletion, or virus attack.

40. What are some tools that help in troubleshooting?
➢ Tools like built-in help features, online tutorials, YouTube guides, and tech forums (e.g., Stack Overflow) provide step-by-step help to fix problems.

41. Why is it helpful to assist others in troubleshooting?
➢ Helping others improves your own skills and creates a supportive learning environment.

42. How does collaboration help in troubleshooting?
➢ Working with classmates or IT experts allows you to learn new methods, solve problems faster, and share knowledge.

43. What is meant by software conflict?
➢ When two programs interfere with each other and cause errors or crashes.

44. How do you resolve software conflicts?
➢ Uninstall one of the conflicting apps, reinstall the needed software, or update both to compatible versions.

45. What is cable management and why is it necessary?
➢ Organizing cables neatly to prevent tangles, damage, and confusion. It helps in solving issues faster and maintaining safety.

46. What is proper ventilation in computing?
➢ Giving the computer enough space and airflow so it does not overheat. Cleaning dust from fans also helps.

47. How does overheating affect a computer?
➢ It slows down performance, causes crashes, or damages the hardware like CPU and RAM.

48. What is data management?
➢ It means organizing, storing, and cleaning up files so they are easy to find and use.

49. What are common ways to manage storage space?
➢ Delete unnecessary files, move big files to external or cloud storage, and organize folders.

50. What are two main methods of data backup?
➢ You can back up data using (1) external storage devices like USB or hard drives, and (2) cloud services like Google Drive or OneDrive.