



Sample Paper

Course : CHNA Version-II

Duration : 03:00 Hours

Maximum Marks : 180

Note:

- Attempt all questions in Section A - (2 marks each).
- All questions are compulsory in Section B - (5 marks each). However, out of 12 questions 6 questions will have additional questions as internal choices.
- All questions are compulsory in Section C - (15 marks each). However, out of 4 questions 2 questions will have additional questions as internal choices.

Section A

1. What type of UPS provides continuous power to connected devices without interruption during mains power failure?
 - a) Standby UPS
 - b) Line-Interactive UPS
 - c) Online UPS
 - d) Offline UPS
2. Which software is loaded first when a computer starts up?
 - a) System software
 - b) None of the options
 - c) Operating system
 - d) System operations
3. Name the networking device that can also act as a firewall?
 - a) Hub
 - b) Repeater
 - c) Switch
 - d) Router

4. Which of the following devices regenerates network signals to maintain communication over longer distances?
- a) NIC
 - b) Switch
 - c) Router
 - d) Repeater
5. In the standard troubleshooting methodology, at which step is a possible cause of the issue determined?
- a) Develop a theory
 - b) Plan of Action
 - c) Test the Theory
 - d) Identify the problem
6. Windows Server is commonly used for server applications and services.
- a) False
 - b) True
7. Which of the following is a good practice for protecting a computer from viruses?
- a) Clicking on suspicious pop-up ads
 - b) Downloading everything you find online
 - c) Sharing your computer with everyone
 - d) Only downloading from trusted websites
8. Linux servers are typically used for stability and flexibility in various server roles.
- a) True
 - b) False
9. Adjustable voltage regulators offer several benefits. Which of the following is *not* one of them?
- a) better performance
 - b) None of the mentioned
 - c) Non-versatile
 - d) Increased reliability

10. Which factor is most important when installing a CPU cooler on a processor?
- a) Ensuring it is lightweight
 - b) Ensuring it is placed upside down
 - c) Ensuring it has the right color
 - d) Ensuring proper contact with thermal paste
11. The SATA (Serial ATA) interface provides a communication link between the motherboard and storage devices such as hard drives and DVD drives.
- a) False
 - b) True
12. Effective time management and strong organizational skills are essential for completing tasks on time and handling multiple responsibilities efficiently.
- a) False
 - b) True
13. When an external peripheral fails to respond, which issue should be checked first?
- a) Outdated software
 - b) Low disk space
 - c) Loose connections or unplugged
 - d) Incorrect BIOS settings
14. Device drivers are specialized programs that help the operating system recognize and operate specific hardware devices.
- a) True
 - b) False
15. An IP configuration process involves providing a network interface with the required IP address, subnet mask, and default gateway details.
- a) False
 - b) True
16. Computers of the second generation used integrated circuits (ICs) instead of traditional transistors.
- a) True
 - b) False

17. What type of security software is used to identify, block, and remove viruses and other malware?
- a) Secure network infrastructure
 - b) DNS hardware & software
 - c) Anti-virus software packages
 - d) Virtual Private Network
18. Which Unix command is used to change file permissions?
- a) chown
 - b) chmod
 - c) chgrp
 - d) chmodown
19. Which SATA revision offers the highest data transfer speed as of September 2021?
- a) SATA II (3 Gbps)
 - b) SATA III (6 Gbps)
 - c) SATA IV (12 Gbps)
 - d) SATA I (1.5 Gbps)
20. USB cables can be used to connect devices such as monitors, printers, and scanners to a computer.
- a) True
 - b) False
21. What type of cloud environment is created for the exclusive use of a particular organization?
- a) Public Cloud
 - b) Printed
 - c) Private Cloud
 - d) Tape
22. @ symbol is mandatory for an:
- a) None of the options
 - b) URL
 - c) E-mail Address
 - d) IP Address

23. What is the main purpose of maintaining security in financial transactions?
- a) To support transparency in financial systems.
 - b) To protect sensitive financial details and prevent fraudulent activities.
 - c) To complicate the process of financial transactions
 - d) To increase transaction costs
24. The homepage is the primary page of a website that introduces users to its content and available resources.
- a) False
 - b) True
25. By default, how many columns are available in an MS Word document
- a) 1
 - b) 2
 - c) 4
 - d) 3
26. A strong password management tool allows users to create and maintain unique passwords for multiple accounts.
- a) True
 - b) False
27. A half adder is a combinational logic circuit that adds two binary digits and gives a sum output along with a carry output.
- a) False
 - b) True
28. The Title bar is placed at the bottom area of the window.
- a) False
 - b) True

29. Administrators can use Group Policy to apply security configurations, including rules for creating strong passwords.
- a) True
 - b) False
30. Effective communication skills, including verbal, written, and non-verbal abilities, play an important role in improving employability.
- a) False
 - b) True

Section B

1. What does HTTP stand for? Explain its purpose in web communication?
- OR
- Name any three key components of a standard Wi-Fi network and briefly explain their functions.
2. Explain how to install and manage a Print Server using Windows Server.
- OR
- Define NTFS permissions and describe how they differ from share permissions.?
3. Explain the function of File Transfer Protocol (FTP) in transferring files across a network.
- OR
- Describe the purpose of Wi-Fi cards and explain how they provide wireless network connectivity to devices?
4. Discuss the benefits of using private or incognito mode for maintaining online privacy?
- OR
5. Define multithreading and explain its importance in an operating system.
6. How are CCTV cameras different from digital cameras
7. Briefly explain voltage and how it is determined in an electrical circuit?
- OR
- Explain the importance and benefits of using a bridge rectifier instead of a half-wave rectifier.
8. a) Explain nibble and Kilobyte. b) Explain advantages and disadvantages of Compiler in computer language.
9. Write a short note on memory of computer.
10. What a short note on cloud storage?



11. Explain the effects of damaged system files on the stability and performance of a computer system?

OR

What is malware, and how can it affect the security of a computer system?

12. How do you handle challenging situations in your role, and can you provide an example of how you successfully resolved one?

Section C

	A	B	C	D	E	F
1	SUBJECT	Marks 1	Marks2	Marks 3	TOTAL	AVERAGE
2	Hindi	20	15	20		
3	English	30	12	15		
4	Math	15	14	14		
5	Physics	12	17	17		
6	Chemistry	14	18	18		

1. Calculate the following using cell reference
- Find the total marks in all subjects.
 - Find the average marks of each subject.
 - Find the subject having highest marks in Marks1
2. How is disk partitioning performed during a Linux installation? Describe the procedure.

OR

Explain the steps involved in performing data backup and recovery using sync software?

3. Explain the method used to install, configure, and access an external hard drive.
4. Explain how Trojan horse programs spread and infect computer systems?

OR

What are the steps involved in creating a bootable USB drive for Windows 10 installation?