



Series

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CODE : 20

Write here Roll Number and Answer Sheet No.

Question Booklet Sl. No.

Roll No.

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Answer Sheet No.

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Duration : 1 Hour

Total Marks : 100

Declaration by Invigilator :

I Certify that I have checked that the Roll Number and the Answer Sheet Number written by the Candidate on the question paper and the OMR Sheet are correct and the Answer Sheet Number matches the Question Booklet Number exactly.

Signature of the Invigilator with Name

Declaration by Candidate :

I undertake not to employ any unfair means in this exam. I have checked the Question Booklet Number and the Answer Sheet Number and both are identical and have been correctly entered by me wherever indicated.

Signature of the Candidate with Name

Read the following instructions carefully before you begin to answer the questions.

IMPORTANT INSTRUCTIONS TO CANDIDATES

- The Roll No. is a 7 digit No., the candidate needs to circle the Roll No. in the Answer Sheet.
- The appropriate Circle should be shaded for Roll No. This should be done carefully because only the shaded circles are scanned.
- Valuation of Answer Sheet will be done on the computer. Candidate should not make any stray marks on the Answer Sheet, tamper with or mutilate it. Otherwise it will not be evaluated.
- Please check all the pages of the Booklet carefully. In case of any defect, please ask the Invigilator for replacement of the Booklet.
- You must not tear off or remove any sheet from this Booklet. The Answer Sheet must be handed over to the Invigilator before you leave the Examination Hall.
- All questions are compulsory and each Question carries 2 marks.
- The paper carries negative marking. For each wrong answer 0.50 mark will be deducted.**
- This Booklet contains 50 questions.
- Use of Calculator/Palmtop/Laptop/Other Digital Instrument/Mobile/Cell Phone/Pager is **not** allowed.
- Candidates found guilty of misconduct/using unfair means in the Examination Hall will be liable for appropriate penal/legal action.
- No Rough Work is to be done on the Answer Sheet and only single OMR Answer Sheet will be provided.**
- This booklet contains 12 pages.
- Directions :** Each question or incomplete statement is followed by four alternative suggested answers or completions. In each case, you are required to select the one that correctly answers the question or completes the statement and blacken (●) appropriate circle a, b, c or d by Blue / Black Ball-Point Pen provided by the board against the question concerned in the Answer Sheet.
- Mark your answer by shading the appropriate circle against each question. The circle should be shaded completely without leaving any space. The correct method of shading is given below.

Wrong Method	Wrong Method	Wrong Method	Correct Method
☐ ☒ ☐ ☐	☐ ☒ ☐ ☐	☐ ☒ ☐ ☐	☐ ☒ ☐ ☐

The Candidate must mark his/her response after careful consideration, as it is not possible to change the response once it is marked.

- There is only one correct answer to each question. You should blacken (●) the circle of the appropriate column, viz., a, b, c or d. If you blacken (●) more than one circle against any one question, the answer will be treated as wrong.
- Use the space for rough work given at the beginning of the Question Booklet only and not on the Answer Sheet.
- You are NOT required to mark your answers in this Booklet. All answers must be indicated in the Answer Sheet only.**



DO NOT WRITE HERE



SPACE OR ROUGH WORK



SPACE FOR ROUGH WORK



1. The 2's complement of 11001 is
 - (a) 10011
 - (b) 00110
 - (c) 00111
 - (d) 10101
2. Which region of the transistor is heavily doped ?
 - (a) Base
 - (b) Collector
 - (c) Emitter
 - (d) ll of the above
3. When potential at anode is smaller than the potential at cathode, diode is said to be
 - (a) Forward biased
 - (b) Reverse biased
 - (c) Unbiased
 - (d) None of the above
4. The Octal equivalent of HEX number CD.AB is
 - (a) 315.526
 - (b) 205.667
 - (c) 315.625
 - (d) 205.526
5. Which of the following is not a semiconductor material ?
 - (a) Silicon
 - (b) Germanium
 - (c) Aluminum
 - (d) Gallium Arsenide
6. _____ is a special type of diode used to regulate or stabilize the voltage in home appliances.
 - (a) PN junction diode
 - (b) Tunnel diode
 - (c) Zener diode
 - (d) BJT
7. The data in the floppy disk is divided into
 - (a) Clusters and heads
 - (b) Tracks and sectors
 - (c) Vectors and heads
 - (d) Heads and sectors
8. Which of the following memory retains its contents only as long as power is being supplied ?
 - (a) Dynamic RAM
 - (b) Static RAM
 - (c) ROM
 - (d) EEPROM



9. Time sharing operating system enables
- (a) Many people at different terminals to use a system at the same time
 - (b) Single person use the computer at multiple times
 - (c) Controls external device in real time
 - (d) Connects multiple remote devices at the same time
10. In a power point, _____ is a connection from one slide to another or a connection to a web page, or a file.
- (a) Action button
 - (b) Hyperlink
 - (c) Autoshape
 - (d) None of these
11. _____ communication protocol which has become very popular for connecting communication devices through various types of transmission media such as copper, wireless and optical fibre.
- (a) Ethernet
 - (b) Internet
 - (c) IP
 - (d) TCP
12. _____ is a data communication technology which allows IP phones and computers to connect to telephones through PSTN and mobile networks.
- (a) VPN
 - (b) VoIP
 - (c) TCP
 - (d) None of these
13. _____ is the top most layer in TCP/IP model.
- (a) Physical layer
 - (b) Data link layer
 - (c) Network layer
 - (d) Application layer
14. In context of the Internet, the number of bits transferred by a channel per unit time is
- (a) Frequency
 - (b) Wavelength
 - (c) Bandwidth
 - (d) Roadband
15. Connection from one slide to another or a connection to a web page, or a file is achieved by the help of
- (a) URL
 - (b) Hyperlink
 - (c) Datasheet
 - (d) None of these



16. Which function key is used to edit cell contents in MS excel ?
(a) F1 (b) F2
(c) F3 (d) F4
17. computer that facilitates sharing of data, software and hardware resources on the network is known as
(a) Server (b) Client
(c) Node (d) Workstation
18. By default, a workbook or spreadsheet contains _____ sheets.
(a) 2 (b) 3
(c) 4 (d) 5
19. _____ is the most popular protocol to connect web applications.
(a) Hyper text transfer protocol
(b) Higher text transfer protocol
(c) Higher transfer of text protocol
(d) Highest text transfer protocol
20. Which region of the transistor is very thin and lightly doped ?
(a) Base (b) Collector
(c) Emitter (d) All of the above
21. Which of the following protocols divides large data into smaller packets, assigns sequence number to the packet, transmits the data through IP layer ?
(a) UDP (b) TCP
(c) FTP (d) HTTP
22. microprocessor unit, a memory unit, and an input/output unit form a
(a) CPU (b) compiler
(c) Micro-computer (d) ALU
23. Scanner is a/an _____
(a) Input device (b) Output device
(c) Central Processing Unit (d) None of the above



24. _____ is a chip which performs arithmetic and logical instructions in CPU.
- (a) Main memory
 - (b) Microcontroller
 - (c) Microprocessor
 - (d) SDRAM
25. One megabyte has _____ bytes.
- (a) 1024
 - (b) 1024 kilo
 - (c) 1024 giga
 - (d) 1024 tera
26. Operating system is a type of
- (a) Application software
 - (b) Utility
 - (c) System software
 - (d) Language processor
27. Which of the following operating system is distributed under the GNU General Public License, that permits free access to source code, but mandates redistribution of software under the same license ?
- (a) MAC
 - (b) WINDOWS
 - (c) MSDOS
 - (d) LINUX
28. _____ is the process of hardware waking up and getting ready to load the operating system.
- (a) Restarting
 - (b) Booting
 - (c) Sleeping
 - (d) Hibernating
29. When the computer is boots, Basic Input Output System activates a series of hardware checks called
- (a) POST
 - (b) GNU
 - (c) NTLDR
 - (d) UEFI



30. _____ is an internal DOS command Takes on or off argument to decide whether commands file, batch file are displayed or not.
- (a) PATH (b) TYPE
(c) REN (d) ECHO
31. _____ is a Linux shell command to Store keyboard input to a new file.
- (a) Cat (b) Cat->
(c) Cat->> (d) Cat->>>
32. _____ tool in MS Office helps in creation and maintenance of databases.
- (a) Word (b) Excel
(c) Powerpoint (d) Access
33. Spreadsheet files are generally stored with an extension
- (a) .doc (b) .xsl
(c) .xcl (d) .xls
34. Which one of the following is the default folder for saving the files ?
- (a) c:\ (b) d:\
(c) my documents (d) new folder
35. Which of the following is a special purpose key in computer keypad ?
- (a) Enter (b) F11
(c) Delete (d) None of these
36. URL stands for
- (a) Uniform Research Limited
(b) Uniform Resource Locator
(c) UniLine Resource Labs
(d) Uniform Research Locator
37. Set of rules that controls communication between two devices is called
- (a) Network (b) Application
(c) Protocol (d) Media



38. IP4 address is _____ bits in length.
- (a) 8 (b) 16
(c) 32 (d) 64
39. Full form of WWW is
- (a) Word Wide Web
(b) World Wild Web
(c) World Wide Web
(d) None of these
40. Computer networks help in the sharing of large files through
- (a) SMTP (b) FTP
(c) TCP (d) TTP
41. Remote login over a TCP/IP is achieved by
- (a) telnet (b) UDP
(c) ftp (d) slip
42. _____ provides single central node through which all other nodes communicate with each other.
- (a) Bus topology
(b) Ring topology
(c) Mesh topology
(d) Star topology
43. The network spread over a large area, interconnecting several LANs and MANs is called
- (a) PAN (b) CAN
(c) WAN (d) None of these
44. Malware which locks user data and demands payment of money to a specific account for unlocking the data is called
- (a) Adware (b) Bot
(c) Rasomeware (d) Trojan



45. _____ converts digital information from computer to analogue signal over telephone line and vice versa.
- (a) Switch (b) Bridge
(c) Modem (d) Repeater
46. _____ used for transfer of email between local host and remote host.
- (a) FDP (b) UDP
(c) TTP (d) SMTP
47. _____ separates a small network from the Internet. It scrutinizes all incoming and outgoing data and prevents communication of harmful data.
- (a) Proxy server
(b) Peer to peer networking
(c) Firewall
(d) Network topology
48. In an OSI 7 layer model, which among the following is a bottom most layer ?
- (a) Application layer (b) Network layer
(c) Physical layer (d) Data layer
49. Address binding is
- (a) Address of the networking hardware
(b) Address assigned to a host when it is connected to a network
(c) Mapping of a logical address to a physical address
(d) None of the above
50. _____ was the first operating systems to support multi-tasking and multiple user logins.
- (a) Windows (b) Mac
(c) Unix (d) None of these

