



COA 301

B.A./B.Sc. Vth SEMESTER EXAMINATION, 2023-24

COMPUTER APPLICATION

(Data Communication and Computer Network)

AFFIX PRESCRIBED
RUBBER STAMP

Paper ID

(To be filled in the OMR
Sheet)

Date (तिथि) : _____

1393

अनुक्रमांक (अंकों में) :

Roll No. (In Figures)

अनुक्रमांक (शब्दों में) :

Roll No. (In Words) : _____

Time : 1:30 Hrs.

समय : 1:30 घण्टे

Max. Marks : 75

अधिकतम अंक : 75

नोट : पुस्तिका में 50 प्रश्न दिये गये हैं, सभी प्रश्न करने होंगे। प्रत्येक प्रश्न 1.5 अंक का होगा।

Important Instructions :

1. The candidate will write his/her Roll Number only at the places provided for, i.e. on the cover page and on the OMR answer sheet at the end and nowhere else.
2. Immediately on receipt of the question booklet, the candidate should check up the booklet and ensure that it contains all the pages and that no question is missing. If the candidate finds any discrepancy in the question booklet, he/she should report the invigilator within 10 minutes of the issue of this booklet and a fresh question booklet without any discrepancy be obtained.

महत्वपूर्ण निर्देश :

1. अभ्यर्थी अपने अनुक्रमांक केवल उन्हीं स्थानों पर लिखेंगे जो इसके लिए दिये गये हैं, अर्थात् प्रश्न पुस्तिका के मुख्य पृष्ठ तथा साथ दिये गये ओ०एम०आर० उत्तर पत्र पर, तथा अन्यत्र कहीं नहीं लिखेंगे।
2. प्रश्न पुस्तिका मिलते ही अभ्यर्थी को जाँच करके सुनिश्चित कर लेना चाहिए कि इस पुस्तिका में पूरे पृष्ठ हैं और कोई प्रश्न छूटा तो नहीं है। यदि कोई विसंगति है तो प्रश्न पुस्तिका मिलने के 10 मिनट के भीतर ही कक्ष परिप्रेक्षक को सूचित करना चाहिए और बिना त्रुटि की दूसरी प्रश्न पुस्तिका प्राप्त कर लेना चाहिए।



1. Transmission media are usually categorized as:
 - (A) Fixed or unfixd
 - (B) Determinate or indeterminate
 - (C) Guided or unguided
 - (D) Metallic or nonmetallic
2. Which of the following is not a guided media?
 - (A) Twisted -Pair
 - (B) Coaxial cable
 - (C) Fible-optic
 - (D) Atmosphere
3. Computer network permits sharing of:
 - (A) Resources
 - (B) Information
 - (C) Both (A) and (B)
 - (D) None of these
4. The inter-networking Protocol is known as:
 - (A) SMTP
 - (B) PPP
 - (C) TCP/IP
 - (D) NNTP
5. Repeater operates in which layer of the OSI model?
 - (A) Physical layer
 - (B) Network layer
 - (C) Data link layer
 - (D) Transport layer
6. In asynchronous serial communication, the physical layer provides:
 - (A) Start and stop signaling
 - (B) Flow control
 - (C) Both (A) and (B)
 - (D) None of these

7. Which layer of OSI determines The interface of the system with the user?
- (A) Network
 - (B) Application
 - (C) Data link
 - (D) Physical
8. Which transmission mode is called for data communication along telephone lines?
- (A) Parallel
 - (B) Serial
 - (C) Synchronous
 - (D) Asynchronous
9. Which topology is used for large network?
- (A) Bus
 - (B) Ring
 - (C) Star
 - (D) Mesh
10. What is the minimum number of wires required for sending data over a serial communications links?
- (A) 1
 - (B) 2
 - (C) 3
 - (D) 4
11. LAN Contains the following topology:
- (A) Bus
 - (B) Star
 - (C) Ring
 - (D) All of these
12. Which type of Network is FDDI?
- (A) Ring
 - (B) Star
 - (C) Mesh
 - (D) Bus

13. A Modem is connected in between a telephone line and a?
- (A) Network
 - (B) Computer
 - (C) Communication adopter
 - (D) Serial Port
14. Communication circuits that transmit Data in both directions but not at the same time are operating in:
- (A) Simplex mode
 - (B) Half duplex mode
 - (C) Full duplex mode
 - (D) Asynchronous mode
15. Who invented the modem?
- (A) Wang laboratories
 - (B) AT and T
 - (C) Apple Computers
 - (D) Satyam Conferencing
16. Which of the following is used for modulation and demodulation?
- (A) Modem
 - (B) Protocols
 - (C) Gateway
 - (D) Multiplexer
17. How many OSI layers are caused in the X.25 standard?
- (A) 3
 - (B) 2
 - (C) 7
 - (D) 6
18. Which data communication method is used to transmit the data over a serial communication link?
- (A) Simplex
 - (B) Full duplex
 - (C) Half duplex
 - (D) Bi flex

19. Which of the following is not a standard synchronous communication protocol?
- (A) SDLC
 - (B) SLIP
 - (C) SMTP
 - (D) PAS
20. Which allow you to connect and login to a remote computer?
- (A) Telnet
 - (B) FTP
 - (C) HTTP
 - (D) SMTP
21. Telnet is used for:
- (A) Television on net
 - (B) Network of Telephones
 - (C) Remote logik
 - (D) Teleshopping site
22. Which operating mode of telnet is full duplex?
- (A) Default mode
 - (B) Server mode
 - (C) Line mode
 - (D) Character mode
23. Home internet access is provided by:
- (A) DSL
 - (B) FTTP
 - (C) Cable
 - (D) All of the above
24. Multiplexing is used for:
- (A) Packet Switching
 - (B) Circuit Switching
 - (C) Data Switching
 - (D) Both (A) and (B)

25. Which multiplexing technique used to transmit digital signals?
- (A) FDM
 - (B) TDM
 - (C) WDM
 - (D) FDM and WDM
26. Multiplexing provides:
- (A) Efficiency
 - (B) Privacy
 - (C) Anti Jamming
 - (D) Both Efficiency and Privacy
27. Transmission delay does not depend on:
- (A) Packet length
 - (B) Distance between the routers
 - (C) Transmission rate
 - (D) Bandwidth of medium
28. Most packet switches use this principle:
- (A) Stop and Wait
 - (B) Store and forward
 - (C) Store and Wait
 - (D) Stop and forward
29. In which systems, resources are allocated on demand:
- (A) Packet switching
 - (B) Circuit Switching
 - (C) Line switching
 - (D) Frequency switching
30. Which multiple access technique is used by IEEE802.11 standards for Wireless LAN?
- (A) CDMA
 - (B) CSMA/CA
 - (C) ALOHA
 - (D) CSMA/CD

31. Devices in a star or tree topology are usually configured in a _____ relationship.
- (A) Peer-to-Peer
 - (B) Primary- secondary
 - (C) Multiplexed
 - (D) Mesh
32. Which topology is a Variation of a Star topology?
- (A) Ring
 - (B) Bus
 - (C) Mesh
 - (D) Tree
33. A Bus topology has a _____ line configuration.
- (A) Point -to-point
 - (B) Multipoint
 - (C) Passive
 - (D) None of the above
34. There are n devices arranged in ring topology. A device is deleted than how many links of cable are there?
- (A) n-1
 - (B) n-2
 - (C) n
 - (D) n+2
35. Which is the example of a simplex device?
- (A) Repeater
 - (B) Tap
 - (C) Walkie-talkie
 - (D) Keyboard
36. What Can determine the category of a network?
- (A) Size
 - (B) Ownership
 - (C) Physical architecture
 - (D) All of the above

37. Which OSI layer is implemented mainly by hardware?
- (A) Application
 - (B) Session
 - (C) Presentation
 - (D) Physical
38. Which Cable uses 10 Base 5:
- (A) Thick coaxial
 - (B) Thin coaxial
 - (C) Twisted pair
 - (D) Fiber optic
39. In asynchronous serial communications, the physical layer provides:
- (A) Start and Stop Signalling
 - (B) Flow Control
 - (C) Both (A) and (B)
 - (D) None of these
40. IPV4 address is:
- (A) 8 bit
 - (B) 16 bit
 - (C) 32 bit
 - (D) 64 bit
41. Which of the following is not a connecting device?
- (A) Bridge
 - (B) Gateway
 - (C) Transceiver
 - (D) Hub
42. In FDM, which signals can all have the same frequency range?
- (A) Modulating
 - (B) Carrier
 - (C) Modulated
 - (D) None of these

43. The gaps between characters in asynchronous transmission are _____ in length.
- (A) Variable
 - (B) Fixed size
 - (C) Exactly one character
 - (D) One bit
44. Which type of network operating system in Novell Netware?
- (A) Client
 - (B) Server
 - (C) Both (A) and (B)
 - (D) None of these
45. Which of these is a standard interface for serial data transmission?
- (A) ASC II
 - (B) RS232C
 - (C) ZX
 - (D) Centronics
46. Which one of the following is the most common Internet protocol?
- (A) HTML
 - (B) NetBEUI
 - (C) TCP/IP
 - (D) IPX/SPX
47. IPX/SPX is used in:
- (A) Mac-Macintosh
 - (B) Apple
 - (C) Microsoft
 - (D) Novell's Netware Network
48. In modems:
- (A) Digital signal is amplified
 - (B) Several digital signals are multiplexed
 - (C) A digital signal changes some characteristics of a carrier wave
 - (D) None of these

49. O S I stands for:

- (A) Open System Interface
- (B) Out System Interface
- (C) Open System Interconnection
- (D) Out System Interconnection

50. Which has continuous transmission?

- (A) Asynchronous
- (B) Synchronous
- (C) Both (A) and (B)
- (D) None of these
