



BRAINWARE UNIVERSITY

Term End Examination 2023-2024 Programme - B.Sc.(ANCS)-Hons-2023 Course Name - Computer Networks Course Code - BNC10101 (Semester I)

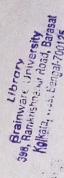
Full Marks: 60

c) Router

208 Rathers mapur Road Tool 22

Time: 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.] 1 x 15=15 Group-A (Multiple Choice Type Question) Choose the correct alternative from the following: (i) Stop-and-wait is a name for the ______ technique. b) Flow control a) Line discipline d) Session management c) Error control (ii) The network layer is related with __ b) frames a) bits d) segments c) packets (iii) Select the primarily use of ICMP. b) physical addressing a) error and diagnostic functions d) none of the mentioned c) IP addressing (iv) Determine the maximum range of Bluetooth Technology. b) 100 meters a) 10 meters d) 10 kilometers c) 1000 meters (v) Select the name of the transmission type for the communication between a computer and a keyboard. b) Half-duplex a) Automatic d) Simplex c) Full-duplex (vi) Identify the job of a node in computer network. b) the computer that routes the data a) the computer that originates the data d) all of the mentioned c) the computer that terminates the data (vii) Identify the network type of Bluetooth. b) LAN a) PAN d) MAN c) WAN (viii) Name the device that forwards packets between networks by processing the routing information included in the packet. b) Firewall a) Bridge d) Repeater



| | (ix) Name the first step in troubleshooting a LAN system issue. | | | |
|-----------------------|--|--|--|---------------------------------|
| | | a) Gathering information about the problem c) Checking the network settings d) Rebooting the system (x) Determine the common cause of slow network performance on a LAN system. a) Insufficient bandwidth b) Outdated hardware c) Insufficient bandwidth d) Outdated hardware (xi) Determine in which topology there is a central controller or hub? | | |
| | | | | |
| | 1974 | a) Star c) Ring How many layers operate in the OSI model? | b) Mesh d) Bus | |
| | a) 4 b) 5 c) 6 d) 7 (xiii) Identify the layer, responsible for the process to process delivery. | | | |
| | | a) Physical c) Network Identify a Wireless Transmission among the foll | b) Data link d) Transport | |
| | | a) radio waves c) infrared Communication applied by TCP is | b) microwaves d) all of the mentioned | |
| | | a) Full-duplex c) Simplex | b) Half-duplex d) Semi-duplex | |
| | Group-B (Short Answer Type Questions) | | | 3 x 5=15 |
| 3. E. 4. D 5. E | | Examine the differences between CSMA/CD and CSMA/CA. Explain the TCP/IP model's network access layer. Describe the functioning of the Internet. Explain the charecteristics of different types of fiber optic cable. Evaluate the operation of software tools like network monitor. OR | | (3) (3) (3) (3) (3) |
| | Analyze the procedure of Token management in a Token Ring network. | | | (3) |
| | Group-C (Long Answer Type Questions) | | | 5 x 6=30 |
| | Illustrate the header structure of a TCP Segment. Using a suitable diagram, explain star topology with its advantages and disadvantages. Discuss about the functions of the protocols related to Email. Discuss about various types of broadband technologies. Differentiate between the types of Network Interface Card. Summarize the use of ARP with commands. | | (5) (5) (5) (5) (5) (5) | |
| | Consider Gigabit Ethernet and distinguish the differences from other Ethernet standards. | | | s. (5) |
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