



WEST BENGAL STATE UNIVERSITY
B.A./B.Sc. Honours 5th Semester Examination, 2021-22

CMAACOR12T-COMPUTER APPLICATION (BCA) (CC12)

Time Allotted: 2 Hours

Full Marks: 50

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

GROUP-A

1. Answer any **five** questions from the following: 2×5 = 10
- (a) How router forward a packet?
 - (b) A signal travels from point A to point B. At point A, the signal power is 200 W and at point B, the power is 170 W. Calculate attenuation in decibels.
 - (c) What is the difference between bit rate and baud rate?
 - (d) What is the network address of the block if one of the host IP address is 182.44.82.16/26?
 - (e) What is the function of Address Resolution Protocol (ARP)?
 - (f) What is socket address?
 - (g) What is the function of POP3 protocol?
 - (h) What is the drawback of Parity code in error detection?

GROUP-B

- Answer any **five** questions from the following 8×5 = 40
2. (a) Compare and contrast between OSI and TCP/IP reference model. 4
- (b) Contrast and compare various transmission media. 4
3. (a) Describe Logical Address and Physical address of a host. 2
- (b) Describe Classful Addressing. 4
- (c) How Subnet mask differ from default mask in classful addressing? 2

4. (a) Describe Distance Vector Routing Algorithm. 4
(b) What is the purpose of BGP (Border Gateway Protocol)? 2
(c) Compare Static and Dynamic routing table. 2
5. (a) Describe CSMA/CD (Carrier Sense Multiple Access / Collision Detection). 4
(b) Compare Pure ALOHA and Slotted ALOHA. 2
(c) Describe Port Address. 2
6. (a) Compare TCP and UDP. 3
(b) Describe SMTP. 3
(c) How remote logging is implemented using TELNET? 2
7. (a) What is CSMA/CD? Explain the working principle. 2+2
(b) Compare and contrast between Non Adaptive Routing Algorithm and Adaptive Routing Algorithm. 4
8. Write short notes (any *two*): 4×2 = 8
(a) Local Area Network
(b) Token Ring
(c) Time Division Multiplexing.

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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