	HIS AND SCIENCE
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V Semester B.C.	A. Degree (CBCSS - Reg./Sup./Ir

V Semester B.C.A. Degree (CBC98 – Reg./Sup./Imp.) Examination, November 2020 (2014 Admn. Onwards) Core Course 5B14BCA : DATA COMMUNICATION & NETWORKS

Time : 3 Hours

SECTION - A

1. One word answer :

$(8 \times 0.5 = 4)$

Max Marks: 40

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- a) _____ is method of data transmission in continuous wave form.
- b) _____ is the expansion of ISO OSI.
- c) _____ layer is responsible for bits stuffing.
- d) _____ is a connection oriented transport layer protocol.
- e) Cable TV network is an example of _____ type of networks.
- f) _____ is an example for adaptive routing technique.
- g) RSA is a secret key cryptographic method. True/False.
- h) _____ are specialized computers used to connect two or more transmission lines.

SECTION - B

Write short notes on any seven of the following.

 $(7 \times 2 = 14)$

- 2. What do you mean by computer networks ?
- 3. Write disadvantages of mesh network.
- 4. What do you mean by flow control ?
- 5. Define simplex transmission.
- 6. What is a service point addressing ?

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7. What do you mean by substitution ciphers ?

8. What are the 3 requirements of public key cryptographic method ?

9. What do you mean by asynchronous data transmission ?

10. Define optimality principle.

11. What do you mean by protocol ?

SECTION - C

Write short notes on any four of the following.

12. Explain different network topologies.

13. Write short note on stop and wait protocol.

14. Explain token bucket algorithm.

15. Write short note on TCP protocol.

16. Explain DES algorithm.

17. Write short note on important elements of data communication.

SECTION - D

Write short notes on any two of the following.

 $(2 \times 5 = 10)$

18. Explain functions of various layers of ISO OSI reference model.

19. Explain various error control methods.

20. Write notes on various guided transmission media.

21. Write notes on Dijkstras shortest path routing.

 $(4 \times 3 = 12)$