



Net Centric Computing (1030)

P. Pages : 2

Time : Three Hours

Max. Marks : 100

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Attempt **any five** questions.
5. Figures to right indicate full mark.

1. a) What is the need of cyclic Redundance check ? How it is useful in error control. DLL protocol almost always put the CRC in trailer eather than in header why ? **10**
b) Explain which services include more overhead : connection - oriented OR connectionless services ? Why ? **10**
2. a) Explain duties and responsibilities of network administrators. **10**
b) What is meant by delay in communication. Describe components of delay. **10**
3. a) How is TCP/IP network stack used in internet different from SPX / IPX network stack ? **10**
b) A system has a n layer protocol hierarchy. Applications generate messages of length M bytes. At each of the layer h bytes header is added. What fraction of network bandwidth is filled with header. **10**
4. a) How the ESAU William's algorithm is better than constrained minimum spanning Tree (CMST) with suitable example. **10**
b) In Ethernet networks the length of network segment decreases when DTR increases. Does minimum frame size remain same in this case ? Justify your answer with calculations. **10**

5. a) What are the advantages of having fixed cell size in ATM ? 10
How small and fixed size cell affects the performance of the network ?
- b) Explain network design concept in terms of multipoint line layout heuristics ? 10
6. a) What do you mean by the DSL ? How it is different from ADSL ? 10
Explain the criterio for upstream & down stream in DSL line.
- b) Explain man in middle attack in Kerberos 4. What different parameters to be considered while setting validity period for ticket granting ticket and service granting ticket. 10
7. a) Give system architecture of VOIP. How quality of service in maintained in VOIP ? Is it cheaper service interm of cost as charged to other available services ? 10
- b) What are the principal behind compression ? Why do we need compression ? 10
8. a) What is network attached storage ? How does it provide better performance ? 10
- b) State types of lossy compressions. Explain any one with suitable example. 10
