

OCTOBER 2013

**P/ID 16107/  
KAG/PITD**

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Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) What are SAP address in FM radio broadcasting?

Or

- (b) What could be the solution to the problem of synchronization from physical layer?

2. (a) What is flow control and is it deployed at the data link layer?

Or

- (b) What is piggybacking? Discuss its advantages.

3. (a) How does channel acquisition take place at the MAC layer? What are techniques used?

Or

- (b) Wireless networks use Collision avoidance better than collision detection methods. Why? Justify.

4. (a) How is telephone circuit different from virtual circuit? Discuss.

Or

- (b) What is congestion? What is annoying about congestion?

5. (a) What is process-level addressing? Why is it needed at the transport layer?

Or

- (b) Explain in detail about transmission media.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

6. Explain in detail about narrow band ISDN and broad band ISDN.
7. Discuss and compare the two methods of acknowledgement generation.
8. Describe the half-duplex and full-duplex modes of data communication ? what is the default mode in gigabit Ethernet.
9. With an example, describe how multiplexing and de multiplexing is done at the transport layer?

10. How does the transport layer manage dynamic connections ? Write a short note on this.
  11. Explain in detail about the issues in Internet working.
  12. Differentiate between star and cascaded star topologies.
  13. Describe the basic concepts of IPv6 and compare with earlier ones.
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