(ii) How many layers are there in OSI model ?

(a) Five

(b) Seven

(c) Three

(d) Four

(iii) Which of the following is not provided by the physical layer ?

(a) Multiplexing

(b) Encoding

(c) Circuit Switching

(d) Packet Switching

(iv) The parity check can be of how many types ?

(a) Two

(b) Single

(c) Three

(d) Four

(v) How many unique addresses are possible using IPV4 ?

(a) 2^{64}

(b) 2^{32}

(c) 2^{128}

(d) None of these

(vi) A packet of IP is called as ....

(vii) Define routing.

(viii) The primary function of data link layer is to provide service to session layer.

(True/False)

(ix) 802.11 is a wireless protocol.

(True/False)

(x) Framing is the process of ....

$1 \times 10 = 10$

2. (B) (i) How does a network provide cost cutting ?

(ii) Explain UDP with its applications.

(iii) What is classful addressing ?

(iv) What is star topology ? Explain.

(v) Write short note on burst error.

$4 \times 5 = 20$

Part–B $10 \times 1 = 10$

3. Explain the terms LAN, MAN and WAN. Discuss the difference among them.

4. What is computer network ? What are its main components ?

Part–C   10×1=10

5. What is hamming code ? Explain the procedure to correct the data using hamming code with example.

6. What is transmission media ? Explain the working of twisted pair cables with advantages and disadvantages.

Part–D   10×1=10

7. What is network switch ? What are the different types of network switches and how can you choose the right ones ?

8. Explain Ethernet with its operation, frame format, cabling and components.

Part–E   10×1=10

9. What is Internet Architecture Board ? What is the main purpose of IAB ?

10. Explain various TCP/IP services protocol in detail.

Note :– Attempt *five* questions in all, selecting *one* question from each Part. Part–A is compulsory.

Part–A

(Compulsory Question)

1. (A) Do as directed :

(i) Which of the following topology is suitable for networks having hierarchical flow of data ?

(a) Ring

(b) Star

(c) Tree

(d) Bus