BCA(III) — Comp.

Not. (303) Core – VII

2019

Time : 3 hours

Full Marks : 70

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

*Answer from **all** the Sections as directed.*

Section – A

(Compulsory)

1. Choose the correct answer from each of the following multiple choice questions : 2×10 = 20

   (a) The protocol data unit (PDU) for the application layer in the Internet stack is :

   (i) Segment (ii) Datagram

   (iii) Message (iv) Frame

(b) Which of the following transport layer protocol is used to support electronic mail ?

(i) SMTP (ii) IP

(iii) TCP (iv) UDP

(c) DHCP server provides _____ to the client.

(i) Protocol (ii) IP Address

(iii) MAC Address (iv) Network Address

(d) Which of the following layer is not network support layer ?

(i) Transport layer (ii) Network layer

(iii) Data link layer (iv) Physical layer

(e) For error detection _____ is used by the higher layer protocols (TCP/IP).

(i) Bit-Sum (ii) Check-Sum

(iii) Data Sum (iv) Error-bit

(f) Which of the following is not the possible ways of data exchange ?

(i) Simplex (ii) Multiplex

(iii) Half duplex (iv) Full duplex

(g) What is the size of source and destination IP address in IP header ?

(i) 4 bits (ii) 8 bits

(iii) 16 bits (iv) 32 bits

(h) Which of the following is reliable communication ?

(i) TCP

(ii) IP

(iii) UPD

(iv) All of these

(i) Which of the following protocol is/are defined in Transport Layer ?

(i) FTP (ii) TCP

(iii) UDP (iv) b & c

(j) Repeater operates in which layer of the OSI Model ?

(i) Physical Layer (ii) Data Link Layer

(iii) Network Layer (iv) Transport Layer

Section – B

Answer any **four** questions of the following : 5×4 = 20

2. Define any four Network Topologies with their advantages.

3. Define the parallel and serial transmission modes.

4. Describe the types of Network.

5. Describe the term DNS and HTTP.

6. Describe the network layer protocol of IP Protocol.

7. Describe the types of Guided Media.

8. What is error recovery protocols ?

9. What is TCP/IP Model ?

Soction – C

Answer any **two** questions of the following :

15×2 = 30

10. What is multiplexing ? Explain their types.

11. Describe the layered architecture of open system interconnection.

12. Explain the cocept of error dectection and correction.

13. What is switching ? Explain their types.