Roll No : .....

Total No. of Questions : 11] [Total No. of Printed Pages : 3

SP–694

M.Sc. (Final) Examination, 2021

COMPUTER SCIENCE

Paper - MCS-201

(DCN)

Time : 1½ Hours] [*Maximum Marks : 50*

Section–A **(Marks : 2 × 10 = 20)**

Note :– Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

Section–B **(Marks : 3 × 5 = 15)**

Note :– Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **3** marks.

Section–C **(Marks : 5 × 3 = 15)**

Note :– Answer any *three* questions out of five (Answer limit **500** words). Each question carries **5** marks.

Section–A 2 each

1. Attempt all questions. Answer should not exceed **50** words in each question.

   (i) Define network and its types.

   (ii) What do you understand by topology ?

(iii) What is Digital Transmission in physical layer ?

(iv) What is the use of packet switching ?

(v) What is the basic need of data link layer ?

(vi) What do you understand by ARQ ?

(vii) Define Routing.

(viii) Describe usability of application layer.

(ix) What is cyber security ?

(x) What is SQL Injection ?

Section–B

3 each

Note :– Attempt all questions. Answer should not exceed **200** words in each question.

2. Explain security in Data Communication and Networking.

Or

What is TCP/IP stack ? Explain its uses.

3. Differentiate digital to analog and analog to digital transmission.

Or

Differentiate virtual circuit and permanent virtual circuit.

4. What is error detection and correction in data link layer ?

Or

What do you understand by flow control in data link layer ?

5. What is Internetworking, Tunnelling and Packet fragmentation ?

Or

What do you mean by application protocols and its network services ?

6. What are cyber offences ? Explain categories of cybercrime.

Or

What do you mean by phishing and its types ? Explain.

Section–C 5 each

Note :– Attempt any *three* questions out of five. Answer should not exceed **500** words in each question.

7. Explain OSI Model in detail.

8. Explain Wireless Transmission, Multiplexing, FDM, TDM, CDM.

9. Explain Stop ARQ, Wait ARQ and Sliding Window ARQ.

10. How transport layer with its end to end communication and transmission control protocol ?

11. What is the use of key loggers and spywares ? Discuss Indian ITA 2000.