

BACHELOR OF TECHNOLOGY (C.B.C.S.) (2020 COURSE)
B.Tech.Sem - V Electronics & Communication : WINTER- 2022
SUBJECT : ITC-III: TELECOM SWITCHING TECHNIQUES

Day : Friday

Time : 02:30 PM-05:30 PM

Date : 16-12-2022

W-24614-2022

Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Use of non-programmable calculator is **allowed**.
- 4) Assume suitable data **WHEREVER** necessary.
- 5) Draw neat diagram **WHEREVER** necessary.

a) Q.1 State and explain the control of switching systems and call processing function in detail. (10)

OR

b) Q.1 What are the features of SPC? Compare the centralized SPC and distributed SPC in electronic space division switching. (10)

a) Q.2 With the help of neat block diagram describe Signaling Connection Control Part (SCCP). (10)

OR

b) Q.2 Explain the format of signaling System No. 7 (SS7). (10)

Q.3 Draw and explain session initiation protocol system architecture. (10)

OR

Q.3 With the help of neat flow diagram explain call flow in session initiation protocol. (10)

Q.4 500 calls were offered to a trunk group and 05 calls were lost, call holding average time duration was 3.5 minutes. Find traffic intensity of successful calls. (10)

OR

Q.4 Define grade of service and distinguish how GOS and blocking probability differs. (10)

Q.5 Explain ISDN technology (Integrated Service Digital Network) and its implementation in different organization. (10)

OR

Q.5 Describe the B-ISDN functional module interconnections with neat diagram and write broadband channel rates. (10)

Q.6 Explain IP multimedia subsystem call flow with focus on UE and network interactions. (10)

OR

Q.6 Draw the neat diagram of IMS architecture and explain functions of each layer. (10)
