(130)

JAYA GROUP OF INSTITUTIONS – THIRUNINRAVUR.

8TH SEMESTER – B.E / B.Tech.

INTERNAL ASSESSMENT - I (MODEL EXAMINATION - I)

Sub.Name: **TELECOMMUNICATION AND SWITCHING NETWORK** Date:**10/02/2015**

Sub.Code: **EC2044** Branch: **ECE**

Duration: 180 Minutes Max.Marks:100

PART – A (10X2=20) Answer all questions

1. What is meant by Nyquist rate?

2. Distinguish between bit interleaving and word interleaving.

3. Compare Synchronous and Statistical time division multiplexing.

4. What is meant by data scrambling?

5.What are the advantages of bipolar coding with 50% duty cycle pulses?

6.Distinguish between Space division and time division switch.

7. Define time division switching.

8. Why are higher sampling rates preferred in analog time division switching?

9. How do the control memory in TS implement?

10. Compare the single stage switching and multistage switching.

PART – B (5X16=80) Answer the questions as per the choice

11) a)Explain the concept of FDM multiplexing and modulation. (16)

OR

b)Describe the ds3 payload,Virtual tributaries,e4 payload mapping. (16)

12) a)Explain the following terms.

(i)TDM loops and rings. (ii)Binary N-zero substitution with example. (8+8)

OR

b)Explain the functions of SONET multiplexing and networks. (16)

13) a)Give a brief note on operation, administrative and maintenance features of SONET. (16)

OR

b)Explain the following.(i).STS switching. (ii)TST Switching.
(iii)Time division switching(TDS). (16)

14) a)Explain the Elements of SS7 signaling with SS7 Architecture. (16)

OR

b) Explain in detail about NO:4 ESS toll switch. (16)

15) a)Explain the concept of digital switching in an analog environment. (16)

OR

b)Explain the concept of digital cross connect systems(DCS). (16)