



(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 131802

Roll No.

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B. Tech.

(SEM. VIII) THEORY EXAMINATION, 2014-15
ELECTRONICS SWITCHING

Time : 3 Hours]

[Total Marks : 100

1 Attempt **any four** parts : **5×4=20**

- (a) Explain and draw general trunking diagram.
- (b) Explain how packet switching is better than circuit switching for data communication system.
- (c) Explain Read electronic switch with support of diagram.
- (d) Explain one motion and two motion selector.
- (e) Explain register translator sender system.

2 Attempt **any four** parts : **5×4=20**

- (a) write down the difference between single stage and multistage network.
- (b) Briefly describe digital time division switching. Differentiate it with analog time division switching.

- (c) Derive blocking probability of a three stage network using lee graph.
- (d) Explain triangular cross point switches. Calculate the total number of cross points in a triangular crosspoint matrix with 100 subscribers.
- (e) Explain consolidation and segregation.

3 Attempt **any two** parts : **10×2=20**

- (a) Define pure birth process and derive the expression for the probability of K arrival. On average, one call arrive every 5 sec. During a period of 10 sec, calculate the probability that.
 - (a) No call arrives.
 - (b) One call arrives.
 - (c) Two call arrive.
 - (d) more than two call arrives.
- (b) Derive and explain erlang B formula and compare it with erlang C formula.
- (c) Derive an equation of grade of service and blocking probability of lost call cleared service.

4 Attempt **any two** parts : **10×2=20**

- (a) Explain common channel signalling with SS7 architecture. Compare common channel signalling with in channel.
- (b) Explain the sequence of operation in call processing function.
- (c) What do you understand by system software of SPC software.

5 Attempt **any two** parts :

10×2=20

- (a) Explain memory space memory switch. Draw 8×8 banyan switch network.
- (b) Discuss TCP/IP reference model.
- (c) Write a short note on:
 - (a) Fixed path routing.
 - (b) Space memory switch.
