2015

M.Sc.

1st Semester Examination

COMPUTER SCIENCE

PAPER—COS-103

Full Marks : 50

Time : 2 Hours

The figures in the margin indicate full marks.

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

Illustrate the answers wherever necessary.

Answer any *four* questions.

1. Why OSI layer is open system ? What is topology ? Discuss the types of transmission mode. What are the different components of transmission ? Define point to point network.   2+2+3+2+1

2. (a) Compaire and contrast between OSI and TCP/IP reference model.   3

(Turn Over)

(b) Discuss CMSA/CA with help of flow chart. 4

(c) What is pure ALOHA and slotted ALOHA? 3

3. (a) What is public IP and Private IP?

   Describe the range of private IP in various classes.

   3

   (b) Describe TCP header format. 5

   (c) What is the difference between bridge and switch?

   2

4. (a) What is congession? Describe any congession control algorithm in detail. 5

   (b) What is port address? Describe various type of port address with their ranges. 3

   (c) What is piggy backing? 2

5. (a) How ARP works? Describe in detail. 4

   (b) What is NAT? Briefly discuss about working principle of NAT. 4

   (c) What are the metric of RIP and OSPF? 2

6. Write short note on any *two* :   2×5

(a) Fire Wall ;

(b) CRC ;

(c) DNS ;

(d) IPV$_6$.

[Internal Assessment — 10 Marks]

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