

**PG CBCS**  
**M.Sc. Semester-III Examination, 2022**  
**COMPUTER SCIENCE**  
PAPER: COS 303  
(MOBILE COMPUTING)



**Full Marks: 40**

**Time: 2 Hours**

**GROUP-A**

**1. Answer any FOUR of the following questions: 4×2=8**

- (a) What is pervasive computing?
- (b) State the functions of bearer mobility.
- (c) What is nomadic computing?
- (d) How is an ad hoc network different from cellular network?
- (e) What is FDM?
- (f) Define snooping TCP?
- (g) What are the primary goals of WAP Forum?
- (h) What are trapdoor attacks?

**GROUP-B**

**2. Answer any FOUR of the following questions: 4×4=16**

- (a) What do you mean by Multiple Access? Briefly state the CSMA protocol.
- (b) How frequency is being reused? Explain.
- (c) State the difference between FDMA and TDMA.
- (d) Write down the advantages and disadvantages of I-TCP.
- (e) Describe the protocol stack of Bluetooth.
- (f) State the difference between IPv4 and IPv6.
- (g) What operations are performed in roaming management?
- (h) Consider a LAN with four nodes S1, S2, S3 and S4. Time is divided into fixed sizes slots and node can begin its transmission only at the beginning of slot. A collision is said to be occurred if more than one node transmits the same slot. The probability of generation of frame in a time slot by S1, S2, S3 and S4 are 0.1, 0.2, 0.3 and 0.4 respectively. The probability of sending a frame in first is slot without any collision by any of these four stations.

**GROUP-C**

3. Answer any **TWO** of the following questions:

**2×8=16**

- (a) Explain the various types of Physical layer as described in IEEE 802.11
- (b) What is CSMA/CD? Explain the flow diagram of CSMA/CD. 2+6
- (c) What is tunneling? What are the two different types of destination address those can be assigned to a mobile node when it is attached to a foreign network? 2+6
- (d) What do you Mobile IP? Write down the goals of mobile IP. Explain the IPv6 header. 1+3+4



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