Total No. of Questions: 10]

SEAT No. : ____

PB2303

[Total No. of Pages :2

[6263]-142
B.E. (E & TC)
MOBILE COMPUTING
(2019 Pattern) (Semester-VIII) (Elective-V) (404191E)

Time : 2½ Hours] ***[Max. Marks : 70***

Instructions to the candidates:

1) ***Answer Q.1 or Q.2, Q.3 or Q.4, Q5 or Q6, Q7 or Q8. and Q.9 or Q.10.***
2) ***Neat diagrams must be drawn wherever necessary.***
3) ***Figures to the right indicate full marks.***
4) ***Assume suitable data if necessary.***

Q1) a) Explain basic terminologies of mobile IP. **[8]**

b) How does dynamic source routing (DSR) route the data? What are its advantages and disadvantages? **[8]**

OR

Q2) a) Explain MANETs using mobile IP with suitable diagram. **[8]**

b) What is the basic purpose of DHCP? Explain the protocol with suitable diagram. **[8]**

Q3) a) Write short note on selective retransmission, an extension of TCP. List its advantages and disadvantages. **[8]**

b) Explain with diagram the registration process of a mobile node via foreign agent (FA) and directly with home agent (HA). **[8]**

OR

Q4) a) Explain the modifications of Indirect TCP. What are its advantages and disadvantages? **[8]**

b) Compare indirect TCP, snooping TCP and mobile-TCP. **[8]**

P.T.O.

Q5) a) Explain reflection, Scattering and ISI in multipath fading channel with suitable diagram. **[7]**

b) What is non-coherent detection? Explain with neat diagram, non-coherent detection of FSK. **[7]**

OR

Q6) a) Explain fading in detail? Classify types of fading. **[7]**

b) Describe multipath propagation with neat diagram. What is ISI in multipath fading channels? **[7]**

Q7) a) What is a mobile payment system? Explain payment process using credit card. **[7]**

b) List and explain in brief the design issues of a mobile OS. **[7]**

OR

Q8) a) Explain mobile operating system. What are needs of a mobile OS? List different types of OS. **[7]**

b) Draw B2B model and explain any one B2B application. **[7]**

Q9) Explain any five characteristics of mobile computing. **[10]**

OR

Q10) Explain Rayleigh distribution. How mean and variance of Rayleigh distribution is calculated? **[10]**