Total No. of Questions : 8]

SEAT No. :

PB-2253

[Total No. of Pages : 2

[6263]-91

B.E. (Computer Engineering)

MOBILE COMPUTING

(2019 Pattern) (Semester - VII) (410245C) (Elective - IV)

Time : 2½ Hours] *[Max. Marks : 70*

Instructions to the candidates :

1) ***Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.***
2) ***Neat diagrams must be drawn wherever necessary.***
3) ***Figures to the right indicate full marks.***
4) ***Assume suitable data, if necessary.***

Q1) a) Define and explain GSM Bust with diagram. **[5]**

b) Draw and explain the GPRS protocol stack. **[5]**

c) Explain spectrum allocation with the help of neat diagram. **[7]**

OR

Q2) a) Explain different architectures of WLAN. **[5]**

b) Explain UTRA-Network (UTRAN) architecture. **[5]**

c) Explain various traffic and control channels used in GSM network. **[7]**

Q3) a) Explain difference between Hard and Soft Handoff. **[5]**

b) Explain the Cell dragging in detail. **[5]**

c) Explain the process of call origination and call termination in GSM. **[7]**

OR

Q4) a) Explain mobility management with neat diagram. **[5]**

b) Define Handover. List and explain the types of handover. **[5]**

c) Explain GSM interfaces and GSM protocol architecture. **[7]**

P.T.O.

Q5) a) Describe data transfer from a mobile node to a fixed node and vice versa. **[6]**

b) Explain agent advertisement and discovery registration in mobile network. **[6]**

c) Why and how can optimization in mobile IP be achieved? **[6]**

OR

Q6) a) How is packet delivery achieved to and from mobile node. **[6]**

b) Discuss how tunneling works for mobile IP using IP_in_IP encapsulation. **[6]**

c) Explain the principal of snooping TCP. State advantages and disadvantages of Snooping TCP. **[6]**

Q7) a) Write short note on VoLGA architecture. **[6]**

b) Explain evolution from UMIS to LTE. **[6]**

c) Explain forward W-CDMA channel and reverse W-CDMA channel. **[6]**

OR

Q8) a) Explain in detail Frame format of TD-SCDMA and explain disadvantages of TD-SCDMA. **[6]**

b) What is HSPA? Explain in detail. **[6]**

c) Draw and explain functional architecture of 5G. **[6]**

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