

Total No. of Questions : 8]

SEAT No. :

**PB2325**

**[6263]-173**

[Total No. of Pages : 2

**B.E. (Information Technology)**

**MOBILE COMPUTING**

**(2019 Pattern) (Semester - VII) (414444 A) (Elective - III)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, and 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)** What is 4G and how it works? List down specification of 4G. **[8]**

b) Discuss the evolutions of Mobile Communication Technologies in detail. **[9]**

OR

**Q2) a)** Write short note on : Fifth generation telecommunication standard or 5G. **[8]**

b) Explain Massive MIMO technology in details. **[9]**

**Q3) a)** Illustrate the need of Mobile IP and its working with a diagram? **[9]**

b) Explain VANET Architecture in details. **[9]**

OR

**Q4) a)** Write a short note on Hybrid Routing ZRP Protocol, Explain with architecture. **[9]**

b) Why is Mobile IP packet required to be forwarded through a tunnel? Explain minimal techniques of encapsulation of Mobile packet. **[9]**

**Q5) a)** Explain the working of Mobile TCP and its advantages and disadvantages. **[8]**

b) Describe briefly WAP protocol stack in details. **[9]**

OR

**P.T.O.**

- Q6)** a) What is Mobile Agent? Describe different features of Mobile Agent. [8]  
b) Compare I-TCP, Snooping TCP and Mobile TCP. [9]

- Q7)** a) Describe Application Framework of Android Operating system. [9]  
b) Discuss any three Mobile Operating systems that are widely used in mobile phones. [9]

OR

- Q8)** a) Describe iOS Software Development Kit (SDK) in details. [9]  
b) What is Mobile Payment? Explain types of Mobile payment in detail. [9]

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