

Total No. of printed pages = 3

PG/1st Sem/PCSE 115

2021

MOBILE AND PERVASIVE COMPUTING

Full Marks – 100

Time – Three hours

The figures in the margin indicate full marks for the questions.

Answer any *five* questions.

1. (a) Define Mobile Computing. 5
- (b) List various applications of Mobile Computing. 5
- (c) Discuss a real life problems where mobile computing interventions can help addressing it. 10
2. (a) Explain various challenges of Mobile Computing. 5
- (b) Discuss the impact of mobility on communication. 5

[Turn over



(c) What are the major factors of Mobile computing evolution ? Discuss in details.

10

3. (a) Define Cell in Mobile communication. 5

(b) Discuss possible shapes of the cell and discuss the reason for having a standard shape of the cell. 5

(c) Discuss types of antennas and their roles in present communication scenario. 10

4. Discuss the followings : 5×4=20

(a) Macro cell

(b) Micro cell

(c) Pico cell

(d) Femto cell.



5. Write short notes on the following : 10×2=20

(a) Multiple Access Schemes

(b) Handover Mechanisms.

6. (a) State and explain GSM architecture. 10
- (b) Explain call setup process and roaming in GSM architecture. 10
7. (a) State and explain 4G architecture. Explain How 4G architecture is different than 3G and 2G architecture ? 10
- (b) Explain OFDMA and SC-FDMA access mechanisms in LTE cellular system. 10

