

Third Year B.C.A.(Semester - II)Examination
Paper - 15BCA309
Mobile Computing

Time: Three hours]

[Full Marks - 60

- N.B. :**
- i) All questions carry equal marks
 - ii) Due credit will be given to neatness & adequate dimensions.
 - iii) Assume suitable data wherever necessary.
 - iv) Diagrams & Equations should be given wherever necessary.
 - v) Use Blue/Black ink/refill only for writing the answer book.

- Q. 1 Choose correct option from give alternatives. 5
- a) Simplified reference model of mobile computing consists of _____
 - i) 4 layers
 - ii) 5 layers
 - iii) 9 layers
 - iv) 6 layers
 - b) GPRS is a _____ network.
 - i) 3G
 - ii) 2.5G
 - iii) 4G
 - iv) 5G
 - c) _____ satellite have a distance of about 6000 to 20000 km above the Earth.
 - i) GEO
 - ii) MEO
 - iii) LEO
 - iv) HEO
 - d) Bluetooth is also called as adhoc _____.
 - i) piconet
 - ii) smallnet
 - iii) broadnet
 - iv) infranet
 - e) M-TCP stands for _____.
 - i) Mega TCP
 - ii) Mobile TCP
 - iii) Mini TCP
 - iv) Multi TCP

- Q.2 a) Explain the cellular system in brief. 5
 b) Explain the following terms. 6
 i) Signal ii) Antenna

OR

- Q.3 a) Explain signal propagation in wireless mobile networks. 5
 b) What do you mean by modulation? Explain any one type in short. 6

- Q.4 a) What is FDMA and SDMA? Explain in short. 6
 b) Explain the GSM authentication and security. 5

OR

- Q.5 a) Give the comparison of SDMA/TDMA/FDMA/CDMA. 4
 b) Explain GPRS network in short. 4
 c) Why specialized MAC protocol is required. 3

- Q.6 a) Explain digital video broadcasting in brief. 6
 b) Discuss the broadcast system in brief. 5

OR

- Q.7 a) List the various applications of satellite. 5
 b) Explain the types of satellites based on orbits. 6

- Q.8 a) Discuss infrared versus radio transmission in short. 5
 b) Discuss the advantages and disadvantages of Mobile adhoc network. 6

OR

- Q.9 a) Explain Bluetooth technology. 5
 b) What do you mean by DHCP. 6

- Q.10 a) Explain in detail classical TCP improvements. 5
 b) Explain the architecture of WAP. 6

OR

- Q.11 a) Explain the terms. 6
 i) SyncML ii) World wide web
 b) Discuss the WAP 2.0. 5
