

11. (a) Draw and explain in detail Android Architecture. 9

(b) Write a short note on features of Android SDK. 5

**OR**

12. (a) Why is there need of Bound Services in Android ? 7

(b) Explain various hardware tools used in Android. 7

**NTK/KW/15/7587**

**Faculty of Engineering & Technology  
Seventh Semester B.E. (Infor. Tech.) (C.B.S.) Examination  
Elective—I : MOBILE COMPUTING**

Time—Three Hours] [Maximum Marks—80

**INSTRUCTIONS TO CANDIDATES**

- (1) All questions carry marks as indicated.
- (2) Solve Question No. **1 OR** Question No. **2**.
- (3) Solve Question No. **3 OR** Question No. **4**.
- (4) Solve Question No. **5 OR** Question No. **6**.
- (5) Solve Question No. **7 OR** Question No. **8**.
- (6) Solve Question No. **9 OR** Question No. **10**.
- (7) Solve Question No. **11 OR** Question No. **12**.
- (8) Assume suitable data wherever necessary.
- (9) Illustrate your answers wherever necessary with the help of neat sketches.

1. (a) Explain cellular communication with its generations. 6

(b) Explain GSM System Architecture. 8

**OR**

2. (a) List and explain various examples of Wireless Communication Systems. 7
- (b) Explain Handover. Explain the different types of handover in GSM. 7
3. (a) What are the different tiers in three tier architecture ? Describe the functions of these tiers. 7
- (b) Describe the significance of core, edge and access network. What are their functions ? 6

**OR**

4. (a) Draw and explain the content architecture with respect to mobile computing. 6
- (b) What is content adaptation and transcoding ? Classify different types of transcoding. 7
5. (a) What are the advantages and disadvantages of wireless LAN ? 6
- (b) Explain 802.11 architecture in detail. 7

**OR**

6. (a) Explain different types of wireless LAN. 6
- (b) Explain mobility in wireless LAN. 7
7. (a) Explain Mobile Agents with its characteristics. 6
- (b) Explain the Aglet Object Model. 7

**OR**

8. (a) What are the requirements for implementing Mobile Agent System ? 5
- (b) Explain architecture of Agent Tcl. 8
9. (a) Describe the WAP protocol stack. What are the functions of different layers in this protocol stack ? 7
- (b) What is WAP Push ? How is push different from pull ? 6

**OR**

10. (a) What is a WAP Gateway ? What are its functions ? 7
- (b) Explain in brief wireless Markup language. Also list features of WML. 6