`Reg. No…….. Name…… **18U424**

B.C.A DEGREE END SEMESTER EXAMINATION MARCH 2018

SEMESTER **– 4: BACHELOR OF COMPUTER APPLICATION (BCA) (CORE COURSE)**

COURSE: **16U4CRBCA14: MOBILE DEVICE AND NETWORK ARCHITECTURE**

(For Regular - 2016 Admission)

Time: Three Hours Max. Marks: 75

SECTION A

Answer ***all*** questions. Each question carries ***1*** mark

1. Name two benefits of Digital Signals.
2. Define protocols used in transport layer in ISO/OSI Model.
3. What is PLMN?
4. What is SMSC?
5. UMTS stands for ……?
6. List the operating frequencies of GSM.
7. Define Care of Address [COA].
8. Define the term wireless.
9. Mention the uses of SS7 protocol.
10. Expand GSM, GPRS. (1 x 10 = 10)

SECTION B

Answer ***any Eight*** questions. Each question carries ***2*** marks

11. Explain the terms: i) Local loop ii) Trunk
12. Explain fixed networks? Give example.
13. What is the use of HLR and VLR?
14. List out the various processing subsystems in mobile phones.
15. Explain the various GPRS support nodes.
16. List the differences between circuit and packet switched networks.
17. Define Bluetooth.
18. Briefly describe about the keypad frequencies used in mobile phones.
19. Describe the concept of Mobile Identity.
20. Define SIM. (2 x 8 =16)

SECTION C

Answer ***any Five*** questions. Each question carries ***5*** marks

21. Differentiate Analog & Digital communication
22. Describe the structure of PSTN

23. Describe the various entities used in mobile IP
24. Explain the function of RF Subsystems.
25. Explain various handset components.
26. What are the various types of handoff in cellular system?
27. Write short notes on Handset Bill of Materials. (5 x 5 = 25)

SECTION D

Answer ***any Two*** questions. Each question carries ***12*** marks

28. Explain OSI Model in computer networks.
29. Explain SMS network architecture with necessary diagrams.
30. Explain with a neat diagram: GPRS network architecture
31. Describe in detail Handset Hardware architecture. (12 x 2 = 24)

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