26.4

| Reg. No. | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

| Question Paper Code | 11813 |
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**B.E. / B.Tech. - DEGREE EXAMINATIONS, APRIL / MAY 2023**

Sixth Semester

**Computer Science and Engineering**

**CS8601 - MOBILE COMPUTING**

(Regulations 2017)

Duration: 3 Hours Max. Marks: 100

**PART - A (10 × 2 = 20 Marks)**

Answer ALL Questions

| | | *Marks, K-Level, CO* |
|---|---|---|
| 1. | Define Mobile computing. | *2,K1,CO1* |
| 2. | What are the different random assignment schemes in MAC? | *2,K1,CO1* |
| 3. | Differentiate the functionalities of Home agent and Foreign agent. | *2,K2,CO2* |
| 4. | Mention the supplementary services in GSM. | *2,K1,CO2* |
| 5. | What is Mobile IP? | *2,K1,CO3* |
| 6. | Why does Congestion occur in a network? | *2,K2,CO3* |
| 7. | Distinguish proactive and reactive protocols. | *2,K2,CO4* |
| 8. | Compare VANET and MANET. | *2,K2,CO4* |
| 9. | State the uses of WAP. | *2,K1,CO5* |
| 10. | Name the libraries specified by WMLScript. | *2,K1,CO5* |

**PART - B (5 × 13 = 65 Marks)**

Answer ALL Questions

| | | | |
|---|---|---|---|
| 11. | a) | Explain the different categories of MAC protocols in detail. | *13,K2,CO1* |
| | **OR** | | |
| | b) | Discuss in detail with a neat diagram: | |
| | | (i) Hidden terminal problem. | *7,K2,CO1* |
| | | (ii) Exposed terminal problem. | *6,K2,CO1* |
| 12. | a) | Explain in detail about the UMTS architecture and its services detail. | *13,K2,CO2* |
| | **OR** | | |
| | b) | Discuss in detail about the handover in GSM. | *13,K2,CO2* |
| 13. | a) | What is encapsulation? Explain the various encapsulation techniques in mobile IP. | *13,K2,CO3* |

*K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create*

**OR**

b) Describe in detail about the Carrier Sense Multiple Access Protocols. *13,K2,CO3*

14. a) Explain the major types of security attacks that are possible in a mobile ad hoc network. *13,K2,CO4*

**OR**

b) Discuss how multicast routing is carried out in ad-hoc networks. *13,K2,CO4*

15. a) Illustrate with a neat diagram the working of WTA architecture and WSP in detail. *13,K2,CO5*

**OR**

b) Explain Wireless Transaction protocol and WDP in detail. *13,K2,CO5*

**PART - C (1 × 15 = 15 Marks)**

16. a) Explain Android platform, software stack, SDK and its applications. *15,K2,CO6*

**OR**

b) Explain with neat diagram the structure of M-Commerce and discuss about its applications. *15,K2,CO6*