

Answer the following questions (20 Marks)

- [Q-1] a) Explain the evolution of mobile computing with a neat diagram. [ 7 ]
- b) Describe the architecture of mobile computing and explain the three-tier model. [ 7 ]
- Or
- a) Discuss the security concerns and standards in mobile computing.
- b) 4. Explain how existing applications can be made mobile-enabled.
- [Q-2] a) Explain Bluetooth technology and its applications. [ 7 ]
- b) Describe GSM architecture with entities and call routing. [ 7 ]
- Or
- a) Explain Mobile IP and discuss advertisement, registration, and TCP connections.
- b) Discuss authentication and security in GSM.
- [Q-3] a) Explain GPRS and its relationship with packet data network. [ 7 ]
- b) Draw and explain the GPRS network architecture. [ 7 ]
- Or
- a) Describe various data services in GPRS.
- b) Discuss the operation of GPRS with its major entities.
- [Q-4] a) Explain the architecture and working of Wireless Application Protocol (WAP) [ 7 ]
- b) Compare CDMA and GSM technologies. [ 7 ]
- Or

a) Describe Wireless LAN architecture and IEEE 802.11 standards.

b) Discuss Voice over IP (VoIP) and H.323 vs SIP frameworks.

[Q-5] a) Answer the following question .[ 07]

1. Mobile computing allows users to \_\_\_\_.

a) work anywhere anytime. b) use only wired connections

c) share only text data. d) none of these

2. SOC stands for \_\_\_\_.

a) System on Chip. b) Server on Cloud. c) Service on Connection. d) None

3. GSM stands for \_\_\_\_.

a) Global System for Mobile Communication

b) General System for Modulation

c) Global Service for Media. d) None.

4. PLMN means \_\_\_\_.

a) Public Land Mobile Network. b) Private Local Mobile Network

c) Personal Line Mobile Network. d) None.

5. SGSN stands for \_\_\_\_.

a) Serving GPRS Support Node. b) Secure GPRS Service Node

c) Simple GSM Support Node. d) None.

6. VoIP stands for \_\_\_\_.

a) Voice over Internet Protocol. b) Virtual online IP.

c) Voice on Instant Packet. d) None.

7. Wi-Fi security is achieved using \_\_\_\_.

a) WPA / WPA2. b) IPX. c) PPP. d) DNS

b) Answer the following. Each question carries 1 marks.[ 07]

1. Define mobile computing.

2. What is Mobile IP?

3. What type of data transmission does GPRS use?

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4. Name one GPRS data service.

5. What is Mobile TCP?

6. What is SIP used for?

7. What is the full form of IMS?

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