

Seat No. : \_\_\_\_\_

**AL-116**

**April-2015**

**IV Year M.Sc., (CA & IT) Integrated Sem.-VIII**

**Mobile Computing**

**Time : 3 Hours]**

**[Max. Marks : 100**

**Instruction :** Draw the figure wherever necessary.

1. (A) Attempt the following : (any **three**) **15**
- (1) What is modulation ? Explain various modulation schemes.
  - (2) What are antennas ? Explain various radiation patterns of antennas.
  - (3) What is spread spectrum ? Explain Direct Sequence spread spectrum.
  - (4) What is MAC ? Explain CDMA in detail.
- (B) Attempt the following : **5**
- (1) Signal
  - (2) Diffraction
  - (3) Refraction
  - (4) Multiplexing
  - (5) Give full-form of GMSK
2. (A) Attempt the following : (any **three**) **15**
- (1) Explain Radio subsystem.
  - (2) What is GPRS ? Explain GPRS architecture.
  - (3) Explain GSM handover in detail.
  - (4) Explain GSM security.

- (B) Attempt the following : 5
- (1) Roaming
  - (2) HLR.
  - (3) VLR.
  - (4) EIR.
  - (5) TMSI.
3. Attempt the following : (any **four**) 20
- (1) Explain IEEE 802.11 MAC frame.
  - (2) Explain MAC Management.
  - (3) Explain Hiperlan2 Data Link Control Layer.
  - (4) Explain Bluetooth Security Model.
  - (5) Explain Wireless Sensor Network with its Architecture.
4. Attempt the following : (any **four**) 20
- (1) Explain Agent Discovery with Agent Advertisement and Agent Solicitation packets.
  - (2) Explain Registration in Brief.
  - (3) What is Encapsulation ? Explain IP-in-IP Encapsulation and GRE Encapsulation.
  - (4) Explain DHCP.
  - (5) What is Routing in mobile Ad-hoc networks ? Explain DSDV and DSR routing schemes.
5. Attempt the following : (any **four**) 20
- (1) Explain snooping TCP and mobile TCP with its advantages and disadvantages.
  - (2) Explain Wireless Datagram Protocol in detail.
  - (3) Explain Wireless Transaction Protocol and its Service classes.
  - (4) Explain WML & WMLScript with capabilities.
  - (5) Explain Push architecture.