

Seat No. : _____

AE-142

April-2018

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

Mobile Computing

Time : 3 Hours]

[Max. Marks : 100

1. (A) Attempt any **two** : **14**
- (1) Explain spread spectrum. What are main benefits of spread spectrum ? How can spreading and dispreading be achieved ?
 - (2) How CDMA mechanism is implemented for Medium access control ?
 - (3) Explain signal propagation and signal propagation effects in detail.
- (B) Explain the following in brief. **6**
- (1) Rack receiver in DSSS
 - (2) Fast hopping in FHSS
 - (3) FCA in cellular system
2. (A) Explain Mobile Services in GSM. **10**
- (B) Explain Network and Switching System (NSS) in GSM. **7**
- (C) Define the following : (Any **Three**) **3**
- (1) Bursts
 - (2) Home Location Register
 - (3) Guard Space
 - (4) Broadcast Control Channel

3. (A) Attempt any **two**. **14**
- (1) Explain Bluetooth networking in detail.
 - (2) Explain Handover in WATM.
 - (3) How do IEEE 802.11 solve the hidden terminal problem.

(B) Explain MAC Management in Wireless Lan. **6**

4. (A) Recall routing in Fixed IP networks. Name the consequences and problems of using IP together with the standard routing protocols for mobile communications. What could be quick 'solutions' and why don't they work ? **10**

(B) Explain IP Packet Delivery in Mobile IP. **10**

OR

Write a short note on Indirect TCP.

5. Attempt any **two**. **20**

(A) Explain wireless telephony application and logical architecture of wireless telephony application.

(B) Explain push architecture of WAP in detail.

(C) Explain Bluetooth architecture in detail.
