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Total number of printed pages – 2

B. Tech
FECE 6402

Seventh Semester Back Examination – 2014

PRINCIPLES OF MOBILE COMPUTING

BRANCH (S) : AEIE, EC, ETC, IEE

QUESTION CODE : L 185

Full Marks – 70

Time : 3 Hours



Answer Question No. 1 which is compulsory and any **five** from the rest.
The figures in the right-hand margin indicate marks.

1. Answer the following questions : 2×10
 - (a) Define the frequency range of Sky wave and Ground wave.
 - (b) Differentiate between Scattering and Diffraction with example.
 - (c) List different methods for Personal communication Services.
 - (d) What are the roles of BSS Application part in GSM System ?
 - (e) What are the advantage and disadvantages of Infrared transmission ?
 - (f) Differentiate between Infrastructure based and ad-hoc based wireless network.
 - (g) What do you mean by virtual network ? Give an example of it.
 - (h) How WCDMA is Different from CDMA ?
 - (i) What is WPAN ? Explain with an example.
 - (j) What do you mean by sniff state ? List its benefit in wireless LAN.
2. With a neat diagram explain the PCS architecture. Explain how it facilitates different type of services for user, device and location. 10
3. Draw the protocol architecture of GSM with signaling protocols and interfaces. Discuss the functionality of each component. 10
4. (a) How synchronization is achieved in IEEE 802.11 LAN Standard ? 5
(b) Briefly classify Bearer services from Tele services with example. 5

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5. (a) Draw the Architecture of GPRS network and Discuss the advantage and disadvantage with GSM network. 5
- (b) Draw the Protocol stack of WAP gateway and list its benefit. 5
6. (a) Explain the configuration of IMT 2000. 5
- (b) Explain the tunneling concept of mobile IP with an example. 5
7. (a) What is Bluetooth ? Where it is used ? Describe the general format of packet and packet header I Bluetooth. 5
- (b) Discuss Iridium Satellite system with a neat diagram. 5
8. Write short notes on any **two** of the following : 5×2
- (a) Wireless Local Loop
- (b) Wireless Markup Language
- (c) ICO.

