

**B.Tech. – VIEP – COMPUTER SCIENCE AND
ENGINEERING (BTCSVI)**

Term-End Examination

00523

June, 2018

BICSE-014 : MOBILE COMPUTING

Time : 3 hours

Maximum Marks : 70

Note : Answer any **seven** questions. All questions carry equal marks.

1. Give reasons for a handover in GSM and problems associated with it. What are typical steps for handover ? What are different types of handovers ? 10

2. What is CDMA ? Draw and explain the forward channel structure of CDMA. 10

3. What is the main physical reason for the failure of many MAC schemes known from wired networks ? What is done in wired networks to avoid this effect ? 10

4. What is the difference between WAP service indication and service loading ? What applications could use these services ? 10

5. What is the requirement of different file systems for mobile or wireless networks ? How does the Coda file system meet these requirements ? 10
6. Explain in detail the channel allocation in cellular systems. 10
7. List the entities of Mobile IP and describe data transfer from a mobile node to a fixed node and vice versa. Why and where is encapsulation needed in Mobile IP ? 10
8. What are the differences between AODV and the standard distance vector algorithm ? Why are extensions needed in AODV ? 10
9. What are the benefits of location information for routing in ad-hoc networks ? What are the problems encountered during the routing process ? 10
10. Write short notes on any *two* of the following : $5+5=10$
 - (a) TORA
 - (b) CDMA
 - (c) GSR