K19P 0008

Reg. No. : .....

Name : .....

Fifth Semester M.C.A. Degree (Reg./Supple./Imp.)
Examination, January 2019
(2014 Admission Onwards)
Elective – IV : MCA 5E 13 : MOBILE COMPUTING

Time : 3 Hours Max. Marks : 80

Instructions : 1) *Answer **any ten** questions from Section – **A**. **Each** question carries **three** marks.*
2) *Answer **all** questions from Section – **B**. **Each** question carries **ten** marks.*

SECTION – A

Note : Answer **any ten** questions. **Each** question carries **three** marks.

1. What are the goals of mobile computing ?
2. What are the limitations of Bluetooth ?
3. How to distinguish between authentication and security in GSM ?
4. Explain advantages of GPRS over GSM.
5. Write a note on handover procedure in GSM.
6. What are LLC, RLC and MAC in GPRS ?
7. What are the significant features of media gateway in mobile computing ?
8. Mention the basic capabilities of mobile IP.
9. List the advantages of third generation wireless networks.
10. What are the capabilities of WML script ?
11. What is Wireless Application Environment ?
12. List the applications of VoIP. **(10×3=30)**

P.T.O.

SECTION – B

Note : Answer **all** questions. **Each** question carries **ten** marks.

13. a) Discuss the classification of mobile computing with various applications. **10**

OR

b) Explain in detail about the design considerations for mobile computing. **10**

14. a) i) Explain the requirements of Mobile IP. **5**

ii) Explain the merits and demerits of satellite communication systems. **5**

OR

b) With a neat diagram, explain protocol stack of Bluetooth. **10**

15. a) Draw the functional architecture of a GSM system. Explain the various subsystems. **10**

OR

b) Explain the protocol architecture of the transmission plane for GPRS. **10**

16. a) With a neat diagram explain the WAP architecture. **10**

OR

b) i) Explain the basic features those are included in WML. **5**

ii) Write a short note on 802.11 standards. **5**

17. a) Compare the various features of voice over IP and mobile voice over IP. **10**

OR

b) Write a note on the following.

i) Voice over WLAN. **5**

ii) SIP in mobile computing . **5**