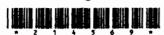
Printed Pages: 3



MCAE-34

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID: 214569

Roll No.

M. C. A.

(SEM. V) (ODD SEM.) THEORY EXAMINATION, 2014-15 MOBILE COMPUTING

Time: 3 Hours]

[Total Marks: 100

Note: Attempt all questions.

- 1 Attempt any four parts of the following: 5×4= 20
 - (a) Explain mobile computing and its standards.
 - (b) Explain GSM architecture and its elements.
 - (c) Explain Hand Off and its types with reference to network.
 - (d) Discuss Channel allocation and its method in brief.
 - (e) Describe HSCSD and GPRS of GSM network.
 - (f) Explain spread spectrum and write difference between DSSS and FHSS.

- 2 Attempt any four parts of the following: 5×4= 20
 - (a) What is Bluetooth Protocol stack and also explain the functionality of each layer?
 - (b) Discuss hidden node and exposed node problem in wireless LAN.
 - (c) Compare WAP Architecture with Internet Architecture when using WWW.
 - (d) Explain Mobile IP and IP packet Delivery in brief.
 - (e) Explain the impact of Piconet when Bluetooth device are connected to mobile unit.
 - (f) Explain Tunneling and Encapsulation in brief.
- 3 Attempt any two parts of the following: 10×2=20
 - (a) Discuss clustering giving the detail of adaptive clustering for mobile wireless network. and write the requirement of clustering.
 - (b) Explain CODA file system and its features.
 - (c) Enumerate the Issues and challenges of data management in 3G mobile standards
- 4 Attempt any two parts of the following: $10\times2=20$
 - (a) Discuss mobile agent and its security design and performance issues.
 - (b) What is Mobile TCP? Discuss the advantages and disadvantages of it.
 - (c) Explain the following terms w.r.t. mobile computing:
 - (i) Query processing
 - (ii) Caching for data management

- 5 Attempt any two parts of the following:
 - (a) Explain Proactive and Reactive routing protocol and its differences. Explain with examples.
 - (b) Explain in detail GSR (Global State Routing) with example.
 - (c) Explain Temporary ordered routing algorithm (TORA) with example.

2×10=20