# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

# M.C.A. DEGREE EXAMINATION – COMPUTER APPLICATIONS

FOURTH SEMESTER – NOVEMBER 2016

## **CA 4809 - MOBILE COMPUTING**

Date: 12-11-2016 Time: 01:00-04:00 Dept. No.

Max.: 100 Marks

# PART - A

# Answer ALL questions

- 1. What is WPAN?
- 2. List the types of middleware components and gateways.
- 3. Give the categories of GSM services.
- 4. Define GPRS.
- 5. What are IEEE standards?
- 6. Define Wireless Transaction Protocol.
- 7. What is VoIP?
- 8. Write few features of the file system in a mobile computing system.
- 9. What is context in mobile computing?
- 10. Define MANET.

## PART - B

## **Answer ALL questions**

11. a) Write note on mobile computing functions.

Or

- b) Describe various multiple access techniques.
- 12. a) What is the need for handovers? Explain its scenarios in GSM network.
  - b) Elucidate on the advantages and disadvantages of various satellite orbits.
- 13. a) Write short notes on Bluetooth technologies.

#### Or

- b) Discuss on the various layers of WAP.
- 14. a) Explain how the location management of mobile node is done.

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- b) Illustrate on service discovery of mobile devices.
- 15. a) Explain the recovery process of mobile data.

b) Describe in detail on mCommerce.

 $10 \ge 2 = 20$ 

5 X 8 = 40

Or

### Answer any TWO questions

## PART – C

16. a) With a neat diagram explain the mobile computing architecture.

b) "Android is the popular mobile OS because of its features" - Justify.

- 17. a) Explain the architecture of GSM with necessary diagram.
  - b) Elaborate the system and protocol architecture of WirelessLAN.
- 18. a) Discuss on tunneling and encapsulation of mobile IP.
  - b) Explain the various forms of mobile data organization.

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