



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

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

**FOURTH SEMESTER – APRIL 2017**

**CA 4809- MOBILE COMPUTING**

Date: 25-04-2017  
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

**SECTION-A**

**ANSWER ALL THE QUESTIONS:**

**(10 X 2 = 20)**

1. Define Pervasive Computing.
2. Name any two applications of RFID.
3. What is Burst formatting?
4. Expand IMEI and state its purpose.
5. Enumerate any two advantages of Wireless LAN.
6. Expand WML and state its use.
7. Differentiate between IPv4 and IPv6.
8. What is Self-healing?
9. What are Mobile Adhoc Networks?
10. List out any two features of mPayment.

**SECTION-B**

**ANSWER ALL THE QUESTIONS:**

**(5 X 8 = 40)**

11. a) Describe the functions of Mobile Computing.  
(OR)  
b) Explain about the multiple access procedures.
12. a) Explain the authentication and security algorithms used in GSM.  
(OR)  
b) How does the PDP context activation procedure work?
13. a) Explain WML and its features.  
(OR)  
b) Describe the architecture of Wireless LAN.
14. a) Explain security features in IPv6.  
(OR)  
b) Discuss about service discovery in Mobile Agents.
15. a) Explain the methodologies used in Power-aware computing.  
(OR)  
b) Discuss about caching invalidation mechanisms.

**SECTION-C**

**ANSWER ANY TWO QUESTIONS:**

**(2 X 20= 40)**

16.(a) Discuss about the types of middleware and gateways in mobile computing. (10)

(b) Explain GPRS network architecture with a neat diagram. (10)

17. (a) Describe the reasons which leads to Hidden Terminal and Exposed Terminal in Wireless LANs. (10)

(b) Discuss about the Mobile IP architecture with a neat diagram. (10)

18. (a) Explain the database transaction models and ACID rules. (10)

(b) Describe the different data recovery procedures. (10)

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