# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



## **B.C.A.** DEGREE EXAMINATION - **COMPUTER APPLICATIONS**

FIFTHSEMESTER - APRIL 2018

#### CA 5407- CELLULAR AND MOBILE COMPUTING

| Date: 08-05-2018  | Dept. No. | Ma | x. : 100 Marks |
|-------------------|-----------|----|----------------|
| Time: 00:00-12:00 |           |    |                |

## PART A

 $(10 \times 2 = 20 \text{ marks})$ 

## Answer ALL the questions.

- 1. Define Mobile computing.
- 2. What are the different types of Multiplexing?
- 3. Define frequency reuse.
- 4. What is Radio frequency?
- 5. State any two components of Mobile IP.
- 6. Give any two advantages of Mobile TCP.
- 7. What is the need of WAP?
- 8. How does a Wi-Fi network works?
- 9. Write the benefits of SMS.
- 10. Define Pervasive computing.

### PART B

 $(5 \times 8 = 40 \text{ marks})$ 

# Answer ALL the questions.

11 a. Discuss the characteristics of Mobile computing.

(OR)

- b. Explain N-Tier architecture and WWW.
- 12 a. Explain 3<sup>rd</sup> generation Mobile Communication networks.

(OR)

- b. Discuss about CSMA with its different types.
- 13 a. Compare IPV4 and IPV6

(OR)

- b. .Explain Mobile IP operation
- 14 a. Explain the mobility management in GPRS.

(OR)

- b. Explain WAP protocols.
- 15 a. Explain WSDL.

(OR)

b. Explain about Mobile Web.

#### PART C

 $(2 \times 20 = 40 \text{ marks})$ 

## Answer any TWO questions.

- 16 a. Discuss in detail about Cellular system.
  - b. Explain briefly about Bluetooth and its types.
- 17 a. Explain SMS with its architecture.
  - b. Explain about Mobile Transport layer.
- 18 a. Explain in detail about the GSM architecture with its components.
  - b. Discuss the introduction about smart phone.

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