



LOYOLA COLLEGE (AUTONOMOUS) CHENNAI – 600 034

B.C.A. DEGREE EXAMINATION – COMPUTER APPLICATIONS

FIFTH SEMESTER – NOVEMBER 2024

UCA 5602 – MOBILE COMPUTING



Date: 21-11-2024

Dept. No.

Max. : 100 Marks

Time: 09:00 am-12:00 pm

SECTION A - K1 (CO1)

Answer ALL the Questions -

(10 x 1 = 10)

1. Answer the following

- a) Define Mobile Computing.
- b) What is mobile station?
- c) Define protocol.
- d) What is mobile node?
- e) Define CODEC.

2. MCQ

- a) Which layer in the three-tier architecture is responsible for interacting with the user?
 - i. Presentation layer
 - ii. Application layer
 - iii. Data layer
 - iv. Transport layer
- b) What is the abbreviation for GSM?
 - i. Global Standard for Mobile Communications
 - ii. General System for Mobiles
 - iii. Global System for Mobile Communications
 - iv. General Standard for Messaging
- c) What does WAP stand for?
 - i. Wireless Access Protocol
 - ii. Web Application Protocol
 - iii. Wireless Application Protocol
 - iv. Wide Area Protocol
- d) Length of IPV6 address is _____ bits.
 - i. 32
 - ii. 64
 - iii. 128
 - iv. 256
- e) _____ is XML specified file format for describing vector graphics.
 - i. MPEG
 - ii. GIF
 - iii. SVG
 - iv. PNG

	SECTION A - K2 (CO1)	
	Answer ALL the Questions	(10 x 1 = 10)
3.	Fill in the blanks	
a)	_____ is a technology used for short-range wireless communication between devices.	
b)	The first step to GSM security is _____.	
c)	_____ technology uses spread-spectrum communication.	
d)	_____ is not a transmission type of IPV6.	
e)	The process of reducing the space for storing a media is called _____.	
4.	True or False	
a)	Mobile IP allows mobile devices to maintain a permanent IP address while moving across different networks.	
b)	The BSS (Base Station Subsystem) connects the Mobile Station and the NSS (Network and Switching Subsystem).	
c)	WAP is a protocol used exclusively for 3G networks.	
d)	The access method in Bluetooth is TDD-TDMA.	
e)	GIF produces animations by storing multiple images in one file, accompanied by control data which produces temporal effects with the stored images.	
	SECTION B - K3 (CO2)	
	Answer any TWO of the following	(2 x 10 = 20)
5.	Construct the wireless broadband.	
6.	Experiment GSM addresses and identifiers with the examples.	
7.	Build the wireless LAN with its advantages.	
8.	Classify indirect TCP and Snooping TCP.	
	SECTION C – K4 (CO3)	
	Answer any TWO of the following	(2 x 10 = 20)
9.	Classify the mobile computing and three tier architecture.	
10.	Categorize GPRS network operations.	
11.	Choose any five WAP components and explain.	
12.	Distinguish Traditional TCP and implications on mobility.	
	SECTION D – K5 (CO4)	
	Answer any ONE of the following	(1 x 20 = 20)
13.	a. Interpret in detail about RFID. (10 Marks)	
	b. Explain the GSM entities. (10 Marks)	
14.	a. Compare the Ad hoc networks and sensor networks. (10 Marks)	
	b. Determine voice over IP-H-323 framework for voice over IP. (10 Marks)	
	SECTION E – K6 (CO5)	
	Answer any ONE of the following	(1 x 20 = 20)
15.	a. Construct in detail about Mobile TCP. (10 Marks)	
	b. Discuss in detail about coder and decoder. (10 Marks)	
16.	Elaborate in detail about popular compression techniques.	
