TILAK MAHARASHTRA VIDYAPEETH, PUNE MASTER OF BUSINESS ADMINISTRATION (M.B.A.) EXAMINATION : DECEMBER/JANUARY – 2022-2023 SEMESTER - I

Sub: Basics of Computers & Information Technology (MBA106)

Date:	02/01/2023	Total marks: 60	Time: 10.00 am To 12.30 pm
<u>SECTION – I</u>			
Q. 1.	Fill in the blanks.		(5)
1.	In CU, C stands for,		
	a) Chip	b) Cell	
	c) Central	d) Control	
2.	Octal numbers are represented as base		
	a) 10	b) 8	
	c) 2	d) 16	
3.	Light pen is device.		
	a) Input	b) Output	
	c) Memory	d) None of these	
4.	is a secondary memory	7.	
	a) RAM	b) ROM	
	c) Hard Disk	d) None of these	
5.	Laser Scanner is devic	e.	
	a) Input	b) Output	
	c) Memory	d) None of these	
Q. 2.	Answer the following. (Any Two)	4	(20)
1. 2.	Explain the generations of compu What is application software?	ters.	
	* *	1 . 11	
3.	Explain Mobile operating system in	detail.	
4.	Write a note on OSI.		
Q. 3.	Write notes on. (Any Two)		(10)
1.	Windows.		
2.	Parallel Communication		
3.	Fiber optic cable		

SECTION - II

Q. 4. Case Study

The architecture of a wireless network is as below.

Stations: All components that can connect into a wireless medium in a network are referred to as stations. All stations are equipped with wireless network interface cards (WNICs). Wireless stations fall into one of two categories: access points and clients.1. Access Points: Access points (APs) are base stations for the wireless network. They transmit and receive radio frequencies for wireless enabled devices to communicate with.2. Clients: Wireless clients can be mobile devices such as laptops, personal digital assistants, IP phones, or fixed devices such as desktops and workstations that are equipped with a wireless network interface. Basic Service Set: The basic service set (BSS) is a set of all stations that can communicate with each other. There are two types of BSS: independent BSS and infrastructure BSS. Every BSS has an identification (ID) called the BSSID, which is the MAC address of the access point servicing the BSS.1. Independent BSS: An independent BSS is an ad-hoc network that contains no access points, which means they cannot connect to any other basic service set.2. Infrastructure BSS: An infrastructure BSS can communicate with other stations not in the same basic service set by communicating through access points. Extended Service Set: An extended service set (ESS) is a set of connected BSSes. Access points in an ESS are connected by a distribution system. Each ESS has an ID called the SSID which is a 32-byte (maximum) character string. For example, "linksys" is the default SSID for Linksys routers. Distribution System: A distribution system connects access points in an extended service set. A distribution system is usually a wired LAN but can be a wireless LAN also. Wireless WAN-A WWAN differs from a WLAN (e.g. wireless LAN) because it uses cellular network technologies such as WIMAX, UMTS, GPRS, CDMA, GSM, CDPD, Mobitex or HSDPA to transfer data. It can also use LMDS and Wi-Fi to connect to the Internet. These cellular technologies are offered regionally, nationwide, or even globally and are provided by a wireless service provider for a monthly usage fee. Various computers now have integrated WWAN capabilities (such as HSDPA in Centrino). This means that the system has a cellular radio (GSM/CDMA) built in, which allows the user to send and receive data. There are two basic means that a mobile network may use to transfer data: Packet Switched Data Networks (GPRS/CDPD), Circuit Switched Dialup Connections, Since radio communications systems do not provide a physically secure connection path, WWANs typically incorporate sophisticated encryption and authentication.

Explain the following in short.

- 1. Independent BSS
- 2. Access points
- 3. Wireless WAN.
- 4. Extended service set.
- 5. Distribution system.

Q. 5. Answer the following:

a) What are the applications of networks?

OR

b) Write a note on Bluetooth.

(10)

(15)