Q. Code:514589

Reg. No. | | | | | | | | | | | | | |

B.E./ B.TECH. DEGREE EXAMINATIONS, MAY 2023

Second Semester

IT22252 – COMPUTER APPLICATIONS AND PYTHON PROGRAMMING

(Information Technology)

(Regulation2022)

TIME:1 HOUR 30 MINUTES **MAX. MARKS: 50**

COURSE OUTCOMES	STATEMENT	RBT LEVEL
CO 1	Understand the characteristics and data processing methodologies of a computer.	**2**
CO 2	Analyze various network components and their underlying terminologies.	**4**
CO 3	Understand the recent advancements in computers.	**2**

PART- A (10x2=20Marks)

(Answer all Questions)

		CO	RBT LEVEL
1.	Convert 4 Tera byte to its equivalent Mega and Kilo bytes.	**1**	**2**
2.	Your organization requires a system for online ticket booking and payment processing system. Which type of computer is suitable for the same?	**1**	**2**
3.	Convert the following octal number to its equivalent hexadecimal number: 1067420	**1**	**2**
4.	Convert the following hexa decimal number to its equivalent binary number: 1A203DC	**1**	**2**
5.	Calculate the time required in minutes to transfer a 4Gb from one ship to another ship using wide band connection of 4Mbps.	**2**	**3**
6.	Distinguish between MDA and MTA.	**2**	**4**
7.	Compare guided medium and unguided medium.	**2**	**4**
8.	Generate the Key matrix for playfair cipher for the keyword: TECHNOLOGY	**3**	**2**
9.	Predict the last digit in the given IMEI number: 490154203237518	**3**	**2**
10.	Illustrate how passwords are stored in the system.	**3**	**2**

PART- B (2x 10=20Marks)

		Marks	CO	RBT LEVEL
11. (a)	Discuss in brief about various classifications of computers.	**(10)**	**1**	**2**
	(OR)			
(b)	Illustrate about the memory hierarchy in Computers.	**(10)**	**1**	**2**

		Marks	CO	RBT LEVEL
12. (a)	Illustrate and compare various configurations of Firewall with its relevant applications.	**(10)**	**3**	**2**
	(OR)			
(b)	Exemplify the working of Bluetooth and GPS in a Mobile device with necessary architecture.	**(10)**	**3**	**2**

PART- C (1x 10=10Marks)

(Q.No.13 is compulsory)

		Marks	CO	RBT LEVEL
13.	You are the network administrator of the lab which contains 20 systems. Illustrate about various topologies how these systems can be connected within the lab premises with necessary calculations of cables and I/O device requirements.	**(10)**	**2**	**4**

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