# 1<sup>st</sup> Sem / COMMON/ 2021(W) New

# Th1(b) Computer Application

			Time- 3 Hrs	
		Answer any five Questions including Q No.1& 2 Figures in the right hand margin indicates marks		
1.		Answer All questions		2 x 10
	a.	Defile algorithm?		
	b.	What do you mean by GFLOPS		
	c.	Write about escape sequence character constant		
	d.	Define protocol and give two example of protocol		
	e.	Draw the symbols used for I/O statements, decision and general processind raw a flow chart	ng to	
	f.	Write two rules for naming a variable in C programming language		
	g.	Define CPS		
	h.	Write four example of antivirus software		
	i.	What do you mean by www		
	j.	Define pointer		
2.		Answer Any Six Questions		6 x 5
	a.	Give an account of application software and system software		
	b.	Write on star and ring topology		
	c.	Describe on types of network		
	d.	Compare between time sharing and multi programming operating system	1	
	e.	Draw a flow chart to get smallest number among three numbers		
	f.	Explain on register and cache memory		
	g	Write on various types of method of data processing		
3		Give an account of generation of computer generation		10
4		What do you mean by operating system? Write the functions of OS		10
5		Define file and folder? Describe about different types of file access metho	d	10
6		Define topology? Write on various types of connecting media used to form network	n a	10
7		Write a program in C and draw a flow chart to get factorial of a given num	ıber	10

#### 1st Sem. /CIVIL/ELECT/ETE/MECH/AUTO/ CSE/META/DRILLING/ARCH/ 2021(W) BET104 COMPUTER APPLICATION

		BET104 COMPUTER APPLICATION		
Full Marks: 80Time- 3 Hrs				
		Answer any five Questions including Q No.1& 2 Figures in the right hand margin indicates marks		
1.		Answer All questions	2 x 10	
	a.	Name 2 input devices and 2 output devices of computer.		
	b.	Distinguish between EPROM and EEPROM		
	C.	Differentiate between computer hardware and software.		
	d.	Differentiate compiler and interpreter.		
	e.	Define network.		
	f.	Write two drawbacks of hub.		
	g.	Define OCR and RFID.		
	h. i.	Define algorithm.		
	ı. j.	State different types of logical operators in 'C'. Distinguish between library function and user defined function in		
	J.	'C'.		
2.		Answer any Six questions.	6 x 5	
	a.	Distinguish between primary memory and secondary memory.		
	b.	Give a comparison between 2 <sup>nd</sup> and 3 <sup>rd</sup> generation computers.		
	c.	Discuss different types of area networks briefly.		
	d.	Explain various modes of data transmission.		
	e.	What is file? Explain different file access methods briefly.		
	f.	Define flowchart. Mention its advantages. List down different		
		symbols used in flowchart with their purpose.		
	g	Write a program in 'C' to find factorial of a number using function		
		concept.		
3		Describe basic organisation of computer with a neat functional block	10	
		diagram.		
4		Define OS. Explain different functions of OS.	10	
5		Define network topology. Briefly discuss different types of topologies	10	
		exist to form a network.		
6		Draw the flowchart and write a program to check a number is	10	
-		positive, negative or zero.		
7		Write short notes on:	5	
		(a) DOS OS vs. WINDOWS OS	5 5	
		(b) while loop vs. dowhile loop	5	

#### 3<sup>rd</sup> Sem./ E&TC/ AE & IE/CSE/ 2021(W) ETT321/ ETT 302 DIGITAL ELECTRONICS

Full Marks: 80

Time- 3 Hrs

2 x 10

5X6

Answer any five Questions including Q No.1& 2 Figures in the right hand margin indicates marks

- 1. Answer **All** questions
  - a. Subtract (28)<sub>10</sub> from (39)<sub>10</sub> by using 2's complement methods.
  - b. Convert (0011011) from gray to binary.
  - c. Define the term resolution and monotonicity.
  - d. What is decoder and where it is used?
  - e. Define don't care condition.
  - f. Explain the term fan-in and fan-out.
  - g· Perform excess-3 subtraction of (267-175).
  - h. What is the difference between weighted and non-weighted codes?
  - i. What is the meaning of Min. term and Max. term
  - j. Define racing condition.
- 2. Answer **Any Six** Questions
  - a. Design a 1:4 de-multiplexer with a neat circuit diagram.
  - b. With a neat diagram explain the operation of PIPO register.
  - c. Explain with sketch the working of a TTL NAND gate.
  - d. Simplify the Boolean expression

Y=AB+A(B+C)+B(B+C)

Draw the logic circuit for the simplified function.

- e. Explain the working of Full subtractor. Draw its circuit using any one of universal gate.
- f. Differentiate between combinational and sequential circuit.
- g Design an 8:3 encoder with neat circuit diagram.
- 3 With a neat diagram explain 4-bit ripple counter with its waveforms. 10
- 4 Which gates are referred to as universal gates and why? How other 10 gates can be realized using NAND gates?
- 5 Draw the logic diagram of Master-Slave JK flip flop. Explain its 10 working with a functional table.
  - 10
- 6 Simplify and minimize the four variable logic expression using k-map  $F(A,B,C,D)=\Sigma M(1,5,7,8,9,10,11,14,15)$
- 7 Explain with a neat sketch the successive approximation A/D 10 converter.

#### 3<sup>rd</sup> Sem./ E&TC/ AE & IE/CSE/ 2021(W) ETT321/ ETT 302 DIGITAL ELECTRONICS

Full Marks: 80

Time- 3 Hrs

2 x 10

5X6

Answer any five Questions including Q No.1& 2 Figures in the right hand margin indicates marks

- 1. Answer **All** questions
  - a. Subtract (28)<sub>10</sub> from (39)<sub>10</sub> by using 2's complement methods.
  - b. Convert (0011011) from gray to binary.
  - c. Define the term resolution and monotonicity.
  - d. What is decoder and where it is used?
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- 7 Explain with a neat sketch the successive approximation A/D 10 converter.

#### III-SEM./CSE/IT/ 2021(W)

TH-I Computer System Architecture

Full Marks: 80 Time- 3 Hrs Answer any five Questions including Q No.1& 2 Figures in the right hand margin indicates marks 2 x 10 1. Answer All questions What is computer architecture? a. b. What are the different types of field contain in an instruction format? Define indexed addressing mode. c. d. What is the requirement of page table? What is the use of RAID system? e. f. Define the types of micro operations. Define MIPS. g. Define MAR & MDR. h. i. Define hit ratio. What is parallel processing? j. 2. 5X6 Answer Any Six Questions a. Differentiate between SRAM & DRAM. Explain the different address instruction format. b. Comparison between I/O mapped I/O & memory mapped I/O. C. How an instruction is executed? Explain the steps of each cycle. d. Why cache memory is needed? Explain the mapping procedures of e. cache memory. f. Explain five addressing modes with suitable example. Explain the working principle USB protocol. g 3 What is pipelining? Draw the space time diagram to represent the 10 processing in a pipeline. Define interrupt. Explain interrupt initiated I/O method of data 4 10 transfer to and from peripherals. 10 5 Describe the FLYNN's classification. 6 What is bus structure? Explain the basic parameter of bus design. 10 Write the function of each type of bus. 7 Draw a functional block diagram of a computer and explain the 10 function of each unit.

## III-SEM./ IT/CSE/ 2021(W)

#### TH-II Data Structure

Full	Full Marks: 80 Time- 3 Hrs Answer any five Questions including Q No.1& 2				
			the right hand margin indicate		
1.		Answer <b>All</b> questions			2 x 10
	a. b.	What is the need of tim State at least two appli	ne-space trade off of an a	Igorithm?	
	о. с.	Differentiate between			
	d.	What will be the outpu			
		char str[]="Knowledge	-		
		printf("%d", strlen(str))			
		printf("%d", sizeof(str))	;		
	e. f.	Define ADT. Explain sparse matrix.			
	ı. g.		polish notation? How it d	iffers from two other	
	Б.	notations?			
	h.	Differentiate between	path matrix and adjacenc	y matrix in a graph?	
	i.		t binary tree and complet	te binary tree.	
	j.	What will be the outpu			
		int arr[5]={10,20,30,70, printf("%d",a[5]);	,90};		
2.		Answer any five			5X6
	a.		underflow status of Queu	ue with example.	
	b.	Write a C program for I	inear search.		
	c.		to insert a node at the en	d of a single linked list.	
	d.	Write the algorithm for	•		
	e. f.		differs from single linked ing library functions with	•	
	g		epresentation of one-dime	•	
	U	example.			
3		Write a C program to ir	nput and print a 3x2 dime	nsional matrix.	10
4			ganization and access me		10
5		Illustrate the push and arithmetic expression.	pop operation of stack in	evaluating an	10
6		•	cuss the traversing of a bi	nary tree with example?	10
7		Write short notes of	_	,	10
		a) Priority Queue	•	e) Hashing	
		b) BST	d) Garbage Collection		

#### III-SEM./ETC/AE&IE/CSE/IT/MECHATRONICS/ ELECTRICAL(INST & CTRL/ECE/ 2021(W) TH-III Digital Electronics

Time- 3 Hrs

Full Marks: 80

1.

2.

#### Answer any five Questions including Q No.1& 2 Figures in the right hand margin indicates marks Answer All questions 2 x 10 State De-Morgan's theorems. a. Convert $(10110101)_2$ from binary to grey code. b. Find out the number of input lines, output lines and select lines in : (i)1:8 Dec. Mux (ii)16:1 Mux Write down the truth table of half subtractor. d. Define race-around condition in flip flop and suggest a method to overcome it. e. f. Difference between combination and sequential logic circuit.(any 4) Mention the type of flip flops used in : (i)Ripple Counter (ii)Shift Register g. Write the excitation table of D-flip flop. h. List down different types of: (i) Analog to Digital Convertors, (ii) Digital to i. Analog Convertors Define Fan In and Fan Out. j. Answer **Any Six** Questions 6 x 5 Simplify the below given expression using Karnaugh's map and draw the logic a. circuit using logic gates. $F(a, b, c, d) = \Sigma m (0,2,3,4,7,9,10,11,15) + d (1,6,8)$ Explain the function of 4: 1 MUX with neat diagram and truth table. b. Design the operation of full adder with the help of truth table and circuit diagram. c. Design a JK flip flop using a RS flip flop. d. With neat circuit diagram, Explain the working of R-2R ladder type DAC. e. Write any 5 differences between SRAM and DRAM. f. Draw CMOS logic circuit of NAND and NOR gates. g

Realize all the logic gates (NOT, AND, OR, NAND, NOR, XOR, XNOR) using 3 10 NAND gates only. Design a 2-bit magnitude comparator using logic gates. 10 4 Sketch the logic diagram of clocked JK Flip - Flop. Explain its working with 5 10 functional table. Explain briefly SISO, SIPO, PISO and PIPO shift register. 6 10 7 Design a mod-6 synchronous up counter. 10

### 3rd Sem. Common 2021(W)

#### **Th-5** Environmental Studies

			Time- 3 Hrs	
		Answer any five Questions including Q No.1& 2 Figures in the right hand margin indicates marks		
1.		Answer All questions	2 x 10	
	a.	Define acid rain.	0	
	b.	What is ecological succession?		
	c.	What do you mean by soil erosion?		
	d.	Define genetics and species.		
	e.	Mention any two causes of marine pollution.		
	f.	Define environment.		
	g.	What is mortality?		
	h.	What do you mean by sustainable development?		
	i.	What leads to conflicts over water?		
	j.	Define water pollution.		
2.		Answer Any Six Questions	6 x 5	
	a.	Define and explain food chain with at least one example.		
	b.	Explain the changes caused by modern agriculture.		
	c.	Explain Biodiversity at National level.		
	d.	Give a brief note on ozone layer depletion along with its consequences.		
	e.	Discuss in brief 'Human Rights'.		
	f.	Discuss the needs of public awareness towards environment.		
	g	Explain cyclone disaster management.		
3		Explain the effects of mine extraction on environment and tribal people.	10	
4		Explain different threats to biodiversity.	10	
5		Describe forest ecosystem.	10	
6		Write down the causes, effects and controlling measures of soil pollution.	10	
7	a	Urban problems related to energy.	5	
	b	Family welfare program.	5	

#### BST-501 ENVIRONMENTAL STUDIES

Full	Full Marks: 80 Time- 3		
		Answer any five Questions including Q No.1& 2 Figures in the right hand margin indicates marks	
1.	a. b. c. f. g. h. i. j.	Answer All questions What do you mean by hotspots of biodiversity? Define detritus food chain. What is Wasteland Reclamation? Define drought. What is the role of decomposer in an ecosystem? Write down any two effects of noise pollution. What is acid rain? What is Solid Waste Management? What do you mean by endemism? Define deforestation.	2 x 10
2.	a. b. c. d. e. f. g	Answer <b>Any Six</b> Questions Discuss the role of information & technology in environment & public health. Explain the causes & consequences of over utilisation of water resources. Differentiate between ex-situ & in-situ conservation of biodiversity. Explain the methods adopted in Solid Waste Management. "Environmental Studies is multidisciplinary in nature". Comment on this statement. Explain the importance of Family Welfare Programmes. Define Watershed Management. What are the objectives of Watershed management?	5X6
3		Write short notes on the following: (a) Rainwater Harvesting (b) Value Education	5*2=10
4		Discuss the salient features of Air (Prevention & Control of Pollution) Act , 1981.	10
5		Define renewable sources of energy? Give a brief account of various alternate energy sources.	10
6		What is climate change? Discuss the role of Public Awareness in the protection of environment.	10
7		Define ecological pyramids. Explain the different types of ecological pyramids.	10

#### 5th Sem./ /MECH/MECH(PROD)/MECH(MAINT) / 2021(W)OLD CET511 Object-Oriented Computer Programming

Full Marks: 80

a.

Answer any five Questions including Q No.1& 2 Figures in the right hand margin indicates marks

#### 1. Answer All questions

- a. Define Encapsulation in Object-Oriented Programming.
- b. Write down any two differences between object and class.
- c. Define data types in Object-Oriented Programming. Give an example of float data type.
- d. Define friend function in Object-Oriented Programming.
- e. How constructors are different from a normal member function. Give an example of default constructor.
- f. Write the use of Type Conversion in Object-Oriented Programming.
- g. Differentiate between subclass and super class.
- h. What do mean by formatted I/O?
- i. Why do we use strlen() in String manipulation?
- j. Write down any two differences between I/P stream and I/O stream.

### 2. Answer Any Six Questions

- Briefly explain the basic concepts of Object- Oriented Programming.
- b. Classify different types of inheritance in Object-Oriented Programming. How the private data is inherited by a derived class.
- c. Explain binary operator overloading in C++ with suitable example.
- d. Distinguish between static binding and dynamic binding.
- e. Write a program in C++ to display the reverse of a given number using function.
- f. Define exception. Elaborate the exception handling mechanism in C++.
- g. Give a brief idea about Polymorphism.
- 3 Elaborate the different types of operators used in Object-Oriented 10 Programming.
- 4 Give a brief explanation about an array. Explain the concept of dynamic 10 initialization of objects.
- 5 How does a Pointer work in Object-Oriented Programming? Write 10 down the role of '&' and '\*' operator in Pointer. Illustrate the use of pointers to object.
- 6 Explain the classes for file stream operations with proper diagrammatic 10 representation. How to opening and closing of files in Object-Oriented Programming?
- 7 Define Template in Object-Oriented Programming. Differentiate 10 between Class Templates and Function Templates. How to declare a Class Templates with multiple parameters?

2 x 10

Time- 3 Hrs

5X6

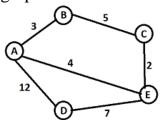
### 3rd SEM./CSE/IT/ 2021(W)

### CST301 Data Structure

Ful	Full Marks: 80 Tim Answer any five Questions including Q No.1& 2		
		Figures in the right hand margin indicates marks	
1.		Answer All questions	2 x 10
	a.	State the need of a Data structure.	
	b.	Define queue. Write the applications of queue data structure.	
	c.	What are the advantages of linked list over array?	
	d.	Define degree of node in a graph.	
	e.	Define a complete binary tree	
	f.	Write any string function with example.	
	g.	What postfix expression is equivalent to the following infix expression?	
	h.	(A + B) - C * D / (E - F / G) How 2 dimensional array is represent in memory	
	i.	Define sparse matrix	
	j.	Explain overflow and underflow condition.	
2.		Answer Any Six Questions	5X6
	a.	Define data structure and discuss different type operation on data structure	
	b.	Discuss about the best case, worst case and average case complexity	
	c.	Define linear array. Write an algorithm to insert an element in a linear array	
	d.	array. Define BST. Construct a binary search tree with 45, 15, 79, 90, 10, 55, 12, 20, 50	

- e. Define stack. Write an algorithm for POP operation.
- f. Discuss about garbage collection.
- g Define linked list .Write an algorithm for traversing a linked list.
- Define graph .Discuss about adjacency matrix. Construct the adjacency matrix for the below undirected weighted graph?

10



3

- 4 Define tree and discuss about different type of tree traversal with 10 example.
- 5 Define queue. What are the different types of queue? Write an 10 algorithm for inserting an element in a queue.
- 6 Define searching. Write an algorithm for binary search and discuss it 10 with an example.
- 7 Discuss about different collision resolution technique 10

### 5<sup>TH</sup> SEM /CSE/ 2021(W)OLD CST504 Database Management System

Full Marks: 80

Answer any five Questions including Q No.1& 2 Figures in the right hand margin indicates marks

- 1. Answer **All** questions
  - a. What is the function of primary key?
  - b. Define DML.
  - c. What is redundancy? How it can be avoided?
  - d. Differentiate Roll back and committed tranction.
  - e. Define Data dictionary.
  - f. What is the significance of data abstraction?
  - g. Define Tuple. Give one example.
  - h. Which command is used for removing (or deleting) a relation forms the SQL database?
  - i. What is lossless join?
  - j. Define BCNF.
- 2. Answer **Any Six** Questions
  - a. Explain the three-level architecture of database with a neat suitable diagram.
  - b. State different operations available in Relational Algebra. Give suitable examples.
  - c. What are the different states of Transaction? Explain concurrency in transaction processing.
  - d. State the basic notations of E-R diagram. Take a suitable example with diagram to explain the entities, attributes and E-R diagram.
  - e. Define functional dependency. Explain types of functional dependency. Give suitable example.
  - f. Explain features of Relational, Hierarchical and network data models.
  - g State and explain various security levels and authorization used in data base.
- 3 Define Concurrency control in database. Explain the concepts of Live lock and 10 Deadlock.
- 4 What is data encryption? Explain the security and integrity constraints. 10
- 5 What is a transaction? How it is scheduled for processing? Explain the 10 properties of transaction.
- 6 Define SQL. Write down the syntax and give example for the following 10 commands:

CREATE

ALTER

DROP

7 Why Normalization is needed? State the importance of Normalization. Explain 10 1<sup>st</sup>,2<sup>nd</sup>,3<sup>rd</sup>normal forms and compare.

2 x 10

6 x 5

#### 5th Sem./ CSE/Information Technology/ 2021(W) Th5 Mobile Computing

		Th5 Mobile Computing	
Fu	ll Ma	Time-3 Time-3	3 Hrs
		Answer any five Questions including Q No.1& 2 Figures in the right hand margin indicates marks	
1.		Answer All questions	2 x 10
	a.	Outline the various dimensions of Mobile Computing.	
	b.	Differentiate between ground wave propagation and Sky wave propagation.(any two)	
	c.	What do you mean by spread spectrum?	
	d.	What is hidden/exposed terminal?	
	e.	How does RF work?	
	f.	Define MAC layer.	
	g.	What do you mean by roaming?	
	h.	What is the need of WAP?	
	i.	What do you mean by ubiquitous network?	
	j.	Write the different classes of GPRS device.	
2.		Answer Any Six Questions	5X6
	a.	Explain any five characteristics of mobile computing.	
	b.	Briefly explain the working principle of Mobile agent.	
	c.	Sketch and explain about the layers of N-tier architecture in Mobile Computing.	
	d.	Define Infrared radiation. Write any five advantages and disadvantages of IR .	
	e.	Explain IEEE 802.11 and its architecture.	
	f.	What is Piconet? How Piconet is different from Scatternet.	
	g	Write any five comparisons between Mobile IPv4 and Mobile IPv6.	
3		Define Multiplexing. Explain different types of Multiplexing techniques used in Mobile Computing.	10
4		What do you mean by Rear/Far Terminals? Write and explain the basic access mechanism used in Mobile Computing.	10
5		Outline the various services supported by UMTS. Give a brief description about the channels in UMTS?	10
6		Define GPRS .Explain the architecture of GPRS in brief.	10
7		What does MMS stand for? Elaborate the working principal of MMS. Write	10

7 What does MMS stand for? Elaborate the working principal of MMS. Write 10 down the different formats supported by MMS.

### V-SEM./CSE/ 2021(W)

#### CST-501 Computer Graphics and Multimedia

Ful	Full Marks: 80 Time- 3		
		Answer any five Questions including Q No.1& 2 Figures in the right hand margin indicates marks	
1.		Answer All questions	2 x 10
	a.	Name the components of Multimedia.	
	b.	Define Psychoacoustic.	
	c.	What is the meaning of Projection in Computer Graphics ?	
	d.	Name any two clipping algorithm.	
	e.	What do you mean by Specular Reflection?	
	f.	Compare between musical sound and noise.	
	g.	What are the three characteristics of Colour?	
	h.	Define MPEG compression.	
	i.	Give any four examples of Computer Graphics Software.	
	j.	What does SECAM stand for?	
2.		Answer <b>Any Six</b> Questions	5X6
	a.	Write down five differences between Raster Graphics and Vector Graphics.	
	b.	Explain the applications of Computer Graphics.	
	c.	Explain Boundary Fill Algorithm in Computer Graphics.	
	d.	Portray the Linear Predictive Coding and its application.	
	e.	What does MP4 stand for? Explain about PAL with its advantages and disadvantages.	
	f.	Explain scaling, cropping and rotation of an image.	
	g	Give a brief description about the types of microphone.	
3		What are the two basic primitives in graphics? Elaborate Bresenhm's line	10
		drawing algorithm for drawing a line.	
4		What do you mean by viewing pipeline? Explain Parallel Projection and	10
		Perspective Projection in brief.	
5		Define 2D Geometric transformation. Describe 2D translation, Rotation &	10
		Scaling transformation.	
6		Define Diffuse Reflection. Explain basic Illumination Models in brief.	10

7 Define pixel? Briefly explain different types of image formats used in the 10 computer? List the name of various image editing software.

#### V-SEM./CSE/IT/2021(W)

#### TH-II Internet and Web Technology

Full Marks: 80			Time- 3 Hrs
		Answer any five Questions including Q No.1& 2	
		Figures in the right hand margin indicates marks	
1.		Answer All questions	2 x 10
	a.	What is a Modem?	
	b.	Which layer is responsible for the reliability, flow control and correction of data TCP/IP?	ı in
	c.	What does VSAT stand for?	
	d.	What is the difference between plain text and cipher text?	
	e.	Give four examples of social networking site.	
	f.	Classify the different types of Cascading Style Sheets.	
	g.	Write the use of radio button in HTML with an example?	
	h.	How to create a function in JavaScript?	
	i.	What does SQL stand for?	
	j.	How to declare a variable in PHP?	
	0		
2.		Answer Any Six Questions	6 x 5
	a.	What does ISP stand for? Explain the working principal of ISDN network.	
	b.	Explain about the CIDR Notation.	
	c.	Define SSL. Write the features of SSL.	
	d.	Differentiate between Static IP and Dynamic IP.	
	e.	Explain any six types of tags in HTML.	
	f.	Give a brief description about the loops in JavaScript.	
	g	Explain any five PHP string function.	

- 3 What do you mean by Internet Connectivity? Explain the various method of 10 connectivity.
- 4 What are the different types of form elements in HTML? Create a form using the form 10 elements in HTML.
- 5 How to create a variable in JavaScript? Elaborate the conditional statements used in 10 JavaScript.
- 6 What do you mean by Client Side Scripting? Explain the Server Side Scripting method. 10
- 7 Give an example of PHP code. What is the extension of PHP file? Explain about the 10 operators in PHP.

### 5th Sem./CSE/2021(W)

#### Th4 Computer Hardware and Maintenance

Ful	1 Ma		e- 3 Hrs
		Answer any five Questions including Q No.1& 2 Figures in the right hand margin indicates marks	
1.		Answer All questions	2 x 10
	a.	Name Four Major vendors of Computer Software.	
	b.	Write the Different parts of Mother Board	
	c.	Define Memory Access Time.	
	d.	What are the different types of network?	
	e.	Define POST sequence.	
	f.	What is CMOS?	
	g.	Write the function of North Bridge.	
	h.	What are the Different types of network connector?	
	i.	What is RTC ?	
	j.	Define different types of RAM.	
2.		Answer Any Six Questions	5X6
	a.	What are the different types of Job Carried out in an Organisation	?
	b.	Describe the procedure of partitioning and formatting of HDD.	
	c.	Describe about the two main chipset in Mother Board.	
	d.	What are the different types of Printers available explain it.	
	e.	Why a computer centre is needed? Explain the Hierarchy of	
		personnel engaged in different levels in an organisations.	
	f.	Describe about the Memory Hierarchy.	
	g	Write the difference between Core 2 Duo and Quad core Processor	
3		Describe the Factors which can be taken into account while	10
		preparing the computer room.	
4		Explain the Important factors affecting computer Maintenance.	10
5		Identify the components of Mother Board. Explain different	10
		standards of expansion slots.	
6		Describe major components of Hard Disk and explain its working	10
		Principle.	
7		List out the Interconnecting devices in a computer network and	10
		explain their functions briefly.	

# 3<sup>rd</sup> Sem./CSE/IT/ 2021(W) Th4 OBJECT ORIENTED METHODOLOGY

		Th4 OBJECT ORIENTED METHODOLOGY		
Full Marks: 80Time- 3 Hrs				
	Answer any five Questions including Q No.1& 2			
1		Figures in the right hand margin indicates marks	2 10	
1.		Answer All questions	2 x 10	
	a.	What is byte code?		
	b.	What are the different types of variables in java?		
	с.	Explain the usage of try and catch clause.		
	d.	How will you find out the length of a string in java?		
	e.	Define a package?		
	f.	How Java supports platform independency?		
	g.	Define Widening Type Casting		
	h.	Write the difference between method and constructor.		
	1.	Define stream.		
	j.	Difference between Buffered Reader and Scanner class in Java		
2.		Answer Any Six Questions	5X6	
	a.	Discuss about JVM. JRE, JDK.		
	b.	What are literals in Java? Mention their different types.		
	c.	Define stream. Discuss about Input Stream and Output Stream in Java.		
	d.	Distinguish between String and string buffer.		
	e.	Differentiate between Method Overloading and Method Overriding in		
		Java.		
	f.	Discuss about Exception handling mechanism?		
	g	Explain how to use a particular package in a Java program. Give		
		example.		
3		Define inheritance. Describe different forms of inheritance. Does Java	10	
		support multiple inheritances?		
4		List out the looping statements available in Java. Explain with example.	10	
5		Briefly explain the OOPS Concepts	10	
6		What do you mean by Constructor? Discuss different types of	10	
		constructor with example.		
7		Explain about Class, Objects and Methods in Java with an example	10	
		program		
		1		