



VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234
DEPARTMENT OF COMPUTER SCIENCE

Course Code:	10EP5A	Programme:	B.SC.,	CIA:	I
Date:	18.09.2021	Major:	Comp. Sci.	Semester:	V
Duration:	2 Hours	Year:	III	Max.Marks:	50
Course Title:	CLOUD COMPUTING				

SECTION – A (Remembering)

Answer **ALL** the Questions:

(10 X 1 = 10 Marks)

- 1 Which of the following are the working models for cloud computing? CO1
A. Deployment Models B. Configuring Model C. Collaborative Model D. All of the above
- 2 The allows systems and services to be accessible within an organization. CO1
A. Private cloud B. Public cloud C. Community cloud D. Hybrid Multiple
- 3 Virtual Machine Ware (VMware) is an example of CO1
A. Infrastructure Service B. Platform Service C. Software Service
- 4 A good cloud computing network can be adjusted to provide bandwidth on demand. CO2
A. True B. False
- 5 Amazon Web Services is which type of cloud computing distribution model? CO2
A. Software as a Service (SAAS) B. Platform as a Service (PAAS)
C. Infrastructure as a Service (IAAS)
- 6 Cloud computing is a kind of abstraction that is based on the notion of combining physical resources and represents them as _____resources to users. CO2
A. Virtual B. Real C. Cloud D. none of the mentioned
- 7 The overhead associated with _____ staff is a major cost. CO3
a) Data Center b) IT c) Non IT d) All of the mentioned
- 8 Cloud computing is also a good option when the cost of infrastructure and management is CO3
a) low b) high c) moderate d) none of the mentioned
- 9 _____ is a financial estimate for the costs of the use of a product or service over its lifetime. CO3
a) TCO b) TOC c) COT d) All of the mentioned
- 10 Which of the architectural layer is used as backend in cloud computing? CO3
a) client b) cloud c) soft d) all of the mentioned

SECTION – B (Remembering)

Answer any **FIVE** Questions:

(5 X 2 = 10 Marks)

- 11 Define cloud computing? CO1
- 12 Give any four advantages of cloud computing? CO1
- 13 What is mean by migrating in cloud computing? CO2
- 14 Why we use Migrating? CO2
- 15 Define Software testing. CO3
- 16 What is SPI? CO3
- 17 State the limitations of virtualization. CO3

SECTION – C (Understanding)

Answer any **THREE** Questions:

(3 X 6= 18 Marks)

- 18 Write short notes on origins of cloud computing CO1
- 19 Compare the characteristics of IaaS, PaaS, SaaS? CO1
- 20 What is virtualization? What are its benefits? CO2
- 21 List and discuss various types of virtualization? CO2
- 22 Explain in detail about system testing . CO3


SECTION – D (Applying)

Answer any **ONE** Question:

(1X 12= 12 Marks)

- 23 Identify the challenges in cloud computing? CO1
- 24 Apply the concept of seven-step model for migration into a cloud. CO2



	VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234 DEPARTMENT OF COMPUTER SCIENCE					
	Course Code:	10SB31	Programme:	B.Sc	CIA:	I
	Date:	04.10.2021	Major:	Comp. Sci.	Semester:	III
	Duration:	1 Hour	Year:	II	Max. Marks:	25
	Course Title:	OPERATING SYSTEM				

SECTION – A

Answer **ALL** the Questions:

(5 X 1 = 5 Marks)

- 1 Which of the following is not an operating system? CO1
a) Windows b) Linux c) Oracle d) DOS
- 2 Which of the following is the extension of Notepad? CO1
a) .txt b) .xls c) .ppt d) .bmp
- 3 OS stands for CO1
a) Operating solve b) Open Source c) Open System d) Operating system
- 4 Which is the first program run on a computer when the computer boots up? CO2
a) System software b) Operating system c) System operations d) None
- 5 Which of the following memory unit that processor can access more rapidly CO2
a) Main Memory b) Virtual Memory c) Cache memory d) Read Only Memory

SECTION – B

Answer any **TWO** Questions:

(2 X 2 = 4 Marks)

- 6 What is an Operating system? CO1
- 7 What is the Kernel? CO1
- 8 What is the advantage of Multiprogramming? CO2
- 9 What is an Interactive computer system? CO2

SECTION – C

Answer any **ONE** Question:

(1 X 6 = 6 Marks)

- 10 List the various services provided by operating systems CO1
- 11 Elaborate about the free space management on I/O buffering and blocking CO2

SECTION – D

Answer any **ONE** Question:

(1 X 10 = 10 Marks)

- 12 Explain different operating system structures with neat sketch CO1
- 13 Explain about given memory management techniques. (i) Partitioned allocation (ii) Paging and translation look-aside buffer. CO2





VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234
DEPARTMENT OF COMPUTER SCIENCE

Course Code:	10SB51	Programme:	B.SC.,	CIA:	I
Date:	13.09.2021	Major:	Comp. Sci.	Semester:	V
Duration:	1 Hour	Year:	III	Max. Marks:	50
Course Title:	COMPETITIVE EXAMINATION FOR IT				

SECTION – A

Answer **ALL** the Questions:

(50 X 1 = 50 Marks)

- 1 ADS stands for–
(A) Automatically Detect Settings (B) All Date System (C) And Digit System (D) All of these
- 2 ISP is–
(A) Internet Service Provider (B) Internet System Policy (C) Initial System Plan (D) All of these
- 3 IC stands for–
(A) Integrated Circuit (B) Initial Call (C) Internal Cost (D) Initial Complex
- 4 Micro Computer is/ are–
(A) Laptop or Notebook Computers (B) Car (C) Mobile (D) TV
- 5 EDI stands for–
(A) Electronic Data Interchange (B) E-Demand Internet (C) Efficiency Data Internet
(D) All of these
- 6 Which is/are main input devices of Computer?
(A) Digital Camera and Character Reader (B) Scanner (C) Punch Card (D) Keyboard
- 7 Which is an eye of Computer?
(A) Scanner (B) Local Area Network System (C) Card (D) Board
- 8 Which is known as Micro Processor?
(A) Processor (B) First and Second generation (C) SX (D) DX
- 9 Which is not the feature of the Internet?
(A) Chat, Net Meeting and Telnet (B) Room (C) Bulletin Board (D) WWW
- 10 A programming language is a language used to write–
(A) Computer Programs (B) Production Programs and Systems (C) Cost (D) Price
- 11 A computer is a machine that manipulates data according to–
(A) Person (B) A list of instruction (C) Book (D) LAN
- 12 Errors in Computer Programs are called–
(A) Lugs (B) Mistake related to computation (C) Bugs (D) Risk
- 13 Which is / are part of Computer Hardware?
(A) Auxiliary Memory Devices (B) Input Devices (C) CPU (D) All of these
- 14 Processing is based on–
(A) Manually, Mechanically and Electronically (B) Selection (C) Plan (D) Cost
- 15 . Which is/ are the tools of Computer System?
(A) Keyboard, Monitor and Printer (B) Network (C) C+ (D) B++
- 16 MIS stands for–
(A) Management Information System (B) Money-in-System (C) Most-in-System
(D) Man-in-System
- 17 Which is Secondary Memory?
(A) RAM (B) Magnetic and Optical (C) ROM (D) All of these
- 18 Application Software is/ are–
(A) Word Processing (B) Graphics and Browsers (C) Spreadsheet (D) All of these
- 19 Which is the first logic Programming language?
(A) Prolog (B) Systems Programming and Planning (C) Algol 60 (D) COBOL
- 20 CPU stands for–
(A) Central Processing Unit (B) Cost Per Unit (C) Cost Per Union (D) Cost Per Unit
- 21 ALU stands for–
(A) All Logic Unit (B) Arithmetic and Logic Unit (C) All-Live Unit (D) All-Logic Union

- 22 Each memory address represents-
(A) One octet (8 Bits) (B) Two octet (16 Bits) (C) Power (D) Cost
- 23 Analog Computer may be used in-
(A) Electronic Watch (B) Car (C) Management Information System (D) House
- 24 Which is/ are type of Network Topology?
(A) Bus Network (B) System Path and Network (C) UVS (D) D+
- 25 Which one is the first search engine in internet
(a) Google (b) Archie (c) Altavista (d) WAIS
- 26 Which of the following programming language is used to create programs like applets?
(a) COBOL (b) C Language (c) Java (d) BASIC
- 27 Firewall in computer is used for
(a) Security (b) Data Transmission (c) Authentication (d) Monitoring
- 28 Which of the following is not a database management software
(a) MySQL (b) Oracle (c) Sybase (d) COBOL
- 29 Number of layers in the OSI (Open Systems Interconnection) Model
(a) 9 (b) 3 (c) 7 (d) 11
- 30 1024 bit is equal to how many byte
(a) 1 Byte (b) 128 Byte (c) 32 Byte (d) 64 Byte
- 31 A mother is twice as old as her son. If 20 years ago, the age of the mother was 10 times the age of the son, what is the present age of the mother?
A.38 years B.40 years C.43 years D.45 years
- 32 Four years ago a man was 6 times as old as his son. After 16 years he will be twice as old as his son. What is the present age of man and his son?
A.34, 9 B.33, 7 C. 35, 5 D.36, 6
- 33 The ratio of the ages of Minu and Meera is 4:2. If the sum of their ages is 6 years, find the ratio of their ages after 8 years.
A. 8:6 B.6:5 C.6:4 D.7:5
- 34 The ratio of the ages of Seeta and Geeta is 2:7. After 6 years, the ratio of their ages will be 1:2. What is the difference in their present ages?
A.8 years B.9 years C.10 years D.11 years
- 35 Ten years ago, the sum of ages of a father and his son was 34 years. If the ratio of present ages of the father and son is 7:2, find the present age of the son.
A.12 years B.11 years C.10 years D.8 years
- 36 The sum of the ages of father and his son is 44 years. If 6 years after the father will be 3 times as old as his son, what are their present ages?
A. 36, 8 B.38, 6 C.35, 9 D.37, 7
- 37 If January 1, 1996, was Monday, what day of the week was January 1, 1997?
A.Thursday B.Wednesday C.Friday D.Sunday
- 38 The first republic day of India was celebrated on January 26, 1950. What day of the week was it?
A.Wednesday B.Friday C.Thursday D.Tuesday
- 39 On February 5, 1998, it was Thursday. The day of the week on February 5, 1997, was
A.Wednesday B.Monday C.Friday D.Sunday
- 40 Today is Wednesday, after 68 days, it will be
A.Friday B.Sunday C.Monday D.Thursday
- 41 What was the day of the week on June 17, 1991?
A.Tuesday B.Wednesday C.Friday D.Monday
- 42 What is the HCF of 1095 and 1168?
A.37 B.73 C.43 D.83
- 43 Find the HCF of 210, 385, and 735.
A.7 B.14 C.21 D.35
- 44 What will be the HCF of 608, 544; 638, 783; and 425, 476 respectively?
A. 32, 29, 17 B.17, 32, 29 C.29, 32, 17 D.32, 17, 29

- 45 Find the greatest integer that divides 358, 376, and 334 and leaves the same remainder in each case.
A.6 B.7 C.8 D.9
- 46 Find the greatest number that will divide 43, 91 and 183 so as to leave the same remainder in each case.
A.4 B.7 C.9 D.13
- 47 The H.C.F. of two numbers is 23 and the other two factors of their L.C.M. are 13 and 14. The larger of the two numbers is:
A.276 B.299 C.322 D.345
- 48 Six bells commence tolling together and toll at intervals of 2, 4, 6, 8, 10 and 12 seconds respectively. In 30 minutes, how many times do they toll together ?
A.4 B.10 C.15 D.16
- 49 The greatest number of four digits which is divisible by 15, 25, 40 and 75 is:
A.9000 B.9400 C.9600 D.9800
- 50 The product of two numbers is 4107. If the H.C.F. of these numbers is 37, then the greater number is:
A.101 B.107 C.111 D.185





VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234
DEPARTMENT OF COMPUTER SCIENCE

Course Code:	10AT11	Programme:	B.Sc	CIA:	I
Date:		Major:	Comp. Sci.	Semester:	I
Duration:	2 Hours	Year:	I	Max.Marks:	50
Course Title:	DISCRETE MATHEMATICS				

SECTION – A (Remembering)

Answer **ALL** the Questions:

(10 X 1 = 10 Marks)

- 1 A set containing no element is called _____. CO1
A. null set B. finite set C. infinite set D. equal set
- 2 $A = \{1, 3, 5, 7, 9\}$ is a _____. CO1
A. null set B. finite set C. singleton set D. infinite set
- 3 If $n[p(A)] = 64$, then $n(A)$ is _____ CO1
(A)6 (B)8 (C)4 (D)5
- 4 A compound proposition that is neither a tautology nor a contradiction is called a _____ CO3
a) Contingency b) Equivalence c) Condition d) Inference.
- 5 A compound proposition that is always _____ is called a tautology. CO3
a) True b) False c) Either true or false d) neither true nor false
- 6 A compound proposition that is always _____ is called a contradiction. CO3
a) True b) False c) Either true or false d) neither true nor false.
- 7 Each loop counting has _____ edges CO5
a) 1 b) 2 c) 3 d) 4
- 8 A graph in which every vertex has same degree is called _____ graph. CO5
A. regular B. simple C. complete D. null
- 9 An edge with identical ends is called _____. CO5
A. complete graph B. bipartite graph C. loops D. link
- 10 Any vertex having degree one is called _____. CO5
A. Simple vertex B. pendent vertex C. regular vertex D. complete vertex

SECTION – B (Remembering)

Answer any **FIVE** Questions:

(5 X 2 = 10 Marks)

- 11 Define Sets CO1
- 12 Define functions CO1
- 13 Define Truth Table CO3
- 14 Write about Tautology CO3
- 15 Define Graph CO5
- 16 Define Complete graph CO5
- 17 Define Simple Graph CO5

SECTION – C (Understanding)

Answer any **THREE** Questions:

(3 X 6 = 18 Marks)

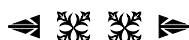
- 18 Find $A \cup B$, $A \cap B$, $A - B$ and $B - A$ for the following sets. CO1
(i) $A = \{2, 6, 10, 14\}$ and $B = \{2, 5, 14, 16\}$
(ii) $A = \{a, b, c, e, u\}$ and $B = \{a, e, i, o, u\}$
- 19 Discuss about the Relation and its types CO1
- 20 Explain about AND, OR, NOT, NAND, NOR, Conditional. CO3
- 21 Find $(P \vee Q) \vee (Q \vee R)$ using truth tables CO3
- 22 Explain about Tree Traversal and its types CO5

SECTION – D (Applying)

Answer any **ONE** Question:

(1X 12 = 12 Marks)

- 23 List out the types of function and its explain CO1
- 24 Find $(P \wedge Q) \vee (Q \wedge R) \vee (R \wedge S)$ CO3





VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234
DEPARTMENT OF COMPUTER SCIENCE

Course Code:	10AT31	Programme:	B.Sc	CIA:	I
Date:	06.10.2021	Major:	Comp. Sci.	Semester:	III
Duration:	2 Hours	Year:	II	Max.Marks:	50
Course Title:	OPERATIONS RESEARCH				

SECTION – A (Remembering)

Answer **ALL** the Questions:

(10 X 1 = 10 Marks)

- 1 Which method is used to obtain optimum solution for TP? CO5
a) VAM b) MODI c) Hungarian d) none
- 2 If $m+n-1$ = number of occupied cells, then the solution is CO5
a) Feasible b) unfeasible c) un balanced d) none
- 3 The dummy source or destination in a transportation problem is added to CO5
a) to make balanced one b) prevent solution from becoming degenerate
c) ensure that total cost does not exceed a limit d) all of the above
- 4 The unbalanced assignment problem is said to be ----- CO4
a) rows=columns b) rows \neq columns c) order of matrix=assigning zero's d) none
- 5 Operations research analysts do not CO1
a) Predict future operations b) Build more than one model
c) Collect relevant data d) Recommend decision and accept
- 6 O.R. came into existence during CO1
a) World War I b) India and Pakistan War
c) World War II d) None of the above
- 7 The first step in solving Operations Research problem is CO1
a) Model building b) Obtain basic feasible solutions
c) Formulation of the problem d) Obtain alternate solutions
- 8 If number of rows and columns equal to number of allocated zero's then the problem is CO4
called-----
a) Balanced b) unbalanced c) optimum d) not optimum
- 9 The Hungarian method for solving an assignment problem can also be used to solve CO4
a) a transportation problem b) a traveling salesman problem
c) both (i) and (ii) d) only (ii)
- 10 In an assignment problem, CO4
(a) One agent can do parts of several tasks
(b) One task can be done by several agents
(c) Each agent is assigned to its own best task
(d) None of the above

SECTION – B (Remembering)

Answer any **FIVE** Questions:

(5 X 2 = 10 Marks)

- 11 Define Transportation Problem CO5
- 12 Define Maximization Transportation Problem and how solve it? CO5
- 13 What is a model? CO1
- 14 Distinguish between Assignment problem and Transportation Problem (any two) CO4
- 15 Give the mathematical formulation of Assignment Problem CO4
- 16 Define Assignment Problem CO4
- 17 What is iconic model? CO1

SECTION – C (Understanding)

Answer any **THREE** Questions:

(3 X 6 = 18 Marks)

- 18 Find the starting solution of the following transportation problem using NWCR CO5

SOURCE	DESTINATION					AVAILABLE
	A	B	C	D	E	
P	4	1	2	6	9	100
Q	6	4	3	5	7	120
R	5	2	6	4	8	120
DEMAND	40	50	70	90	90	

- 19 Explain the steps to solve the procedure of VAM method
 20 Solve the following Assignment Problem

CO5
 CO4

	A	B	C	D
I	1	4	6	3
II	9	7	10	9
III	4	5	11	7
IV	8	7	8	5

- 21 Explain any SIX types models in OR
 22 Discuss about general methods for solving OR models

CO1
 CO1

SECTION – D (Applying)

Answer any **ONE** Question:

(1X 12= 12 Marks)

- 23 Determine the main phases of OR
 24 Apply the following methods on the Transportation Problem (i) NWCR (ii) LCM
 (iii) VAM

CO1
 CO5

	DESTINATION				
		A	B	C	SUPPLY
SOURCE	I	2	7	4	5
	II	3	3	1	8
	III	5	4	7	7
	IV	1	6	2	14
	DEMAND	7	9	18	





VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234
DEPARTMENT OF COMPUTERSCIENCE

Course Code:	10CT11	Programme:	B.Sc	CIA:	I
Date:	19.10.2021	Major:	Comp. Sci.	Semester:	I
Duration:	2 Hours	Year:	I	Max.Marks:	50
Course Title:	PROGRAMMING IN C				

SECTION – A (Remembering)

Answer **ALL** the Questions:

(10 X 1 = 10 Marks)

- 1 Standard ANSI C recognizes number of keywords? CO1
a)30 b) 32 c) 24 d) 36
- 2 A C variable cannot start with CO1
a) A number b) A special symbol other than underscore c) Both d) An alphabet
- 3 C Language developed at? CO1
a) AT & T's Bell Laboratories of USA in 1972
b) AT & T's Bell Laboratories of USA in 1970
c) Sun Microsystems in 1973
d) Cambridge University in 1972
- 4 The variable which has been declared before the main is called _____ variable. CO3
a) local. b) global. c) static. d) auto.
- 5 The & operator displays_____. CO2
a) address of the variable. b) value of the variable. c) result of the variable
d) both (a) & (b).
- 6 A character array always ends with_____. CO2
a) null (\0) character. b) question mark (?). c) full stop(.). d) exclamation mark(!).
- 7 Which header file is essential for using strcmp() function? CO2
a. string.h; b. strings.h; c. text.h; d. strcmp.h
- 8 It is necessary to declare the type of a function in the calling program if _____. CO3
a) the function returns a non-integer value.
b) the function returns an integer.
c) the function is not defined in the same file.
d) the function is defined in the same file.
- 9 Recursion is a process in which a function calls _____. CO3
a. itself. b. another function. c. main() function. d. sub program.
- 10 .By default the function returns_____. CO3
a. integer value. b. float value. c. char value. d. double.

SECTION – B (Remembering)

Answer any **FIVE** Questions:

(5 X 2 = 10 Marks)

- 11 Define C CO1
- 12 Why we need to study C language? CO1
- 13 How to declare an array in C CO2
- 14 How many integer values can the array n[5][5] store? CO2
- 15 Distinguish between actual and formal arguments CO3
- 16 Define Auto and static CO3
- 17 How does main function differ from user defined function? CO3

SECTION – C (Understanding)

Answer any **THREE** Questions:

(3 X 6= 18 Marks)

- 18 Explain basic structure of C program with example CO1
- 19 Discuss about the basic datatypes in C CO1
- 20 Describe about one dimensional Array CO2
- 21 Write short notes about String functions in C CO2
- 22 Discuss about create a user-defined function CO3

SECTION – D (Applying)

Answer any **ONE** Question:

(1X 12= 12 Marks)

- 23 Illustrate switch statement with example CO1
- 24 Write about declare and various types of read and write a String with example CO2



**VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234****DEPARTMENT OF COMPUTER SCIENCE**

Course Code:	10CT12	Programme:	B.Sc	CIA:	I
Date:	22.10.2021	Major:	Comp. Sci.	Semester:	I
Duration:	2 Hours	Year:	I	Max.Marks:	50
Course Title:	DIGITAL PRINCIPLES AND COMPUTER ORGANIZATION				

SECTION – A (Remembering)Answer **ALL** the Questions:**(10 X 1 = 10 Marks)**

- 1 Which number system has a base 16
a.Hexadecimal b.Octal c.Binary d.Decimal **CO1**
- 2 What is a digital-to-analog converter? **CO1**
a. It stores digital data on the computer.
b. It converts alternating current (AC) into direct current (DC).
c. It converts electrical power into mechanical power.
d. It takes the digital data from an audio CD and converts it to a useful form
- 3 The following hexadecimal number $(1E.43)_{16}$ is equivalent to **CO1**
a. $(36.506)_8$ b. $(36.206)_8$ c. $(35.506)_8$ d. $(35.206)_8$
- 4 What is a multiplexer? **CO2**
a) It is a type of decoder which decodes several inputs and gives one output
b) A multiplexer is a device which converts many signals into one
c) It takes one input and results into many output
d) It is a type of encoder which decodes several inputs and gives one output
- 5 If the number of n selected input lines is equal to 2^m then it requires _____ select lines. **CO2**
a) 2 b) m c) n d) 2^n
- 6 How many select lines would be required for an 8-line-to-1-line multiplexer? **CO2**
a) 2 b) 4 c) 8 d) 3
- 7 One example of the use of an S-R flip-flop is as _____ **CO3**
a) Transition pulse generator b) Racer c) Switch debouncer d) Astable oscillator
- 8 The truth table for an S-R flip-flop has how many VALID entries? **CO3**
a) 1 b) 2 c) 3 d) 4
- 9 When both inputs of a J-K flip-flop cycle, the output will _____ **CO3**
a) Be invalid b) Change c) Not change d) Toggle
- 10 The logic circuits whose outputs at any instant of time depends only on the present input but also on the past outputs are called _____ **CO3**
a) Combinational circuits b) Sequential circuits c) Latches d) Flip-flops

SECTION – B (Remembering)Answer any **FIVE** Questions:**(5 X 2 = 10 Marks)**

- 11 State Distributive Law. **CO1**
- 12 Prove the Boolean theorems(a) $x + x = x$; (b) $x + xy = x$ **CO1**
- 13 List out various application of multiplexer. **CO2**
- 14 Define multiplexer? **CO2**
- 15 What are the classification of sequential circuits? **CO3**
- 16 Define Flip flop **CO3**
- 17 What are the different types of flip-flop? **CO3**

SECTION – C (Understanding)Answer any **THREE** Questions:**(3 X 6= 18 Marks)**

- 18 Simplify the following expression $X.Y+X(Y+Z)+Y(Y+Z)$ **CO1**
- 19 Explain SOP (Sum of Product) and POS (Product of Sum) in Boolean function **CO1**
- 20 How will you design a full adder using two half adders and an OR gate. **CO2**
- 21 Write short note on BCD adder. **CO2**
- 22 Discuss in detail about the pulse- triggered S-R Flip Flop with necessary diagrams **CO3**

SECTION – D (Applying)Answer any **ONE** Question:**(1X 12= 12 Marks)**

- 23 Simplify the following Boolean function $F(A, B, C, D) = \sum m(0, 1, 2, 3, 7, 8, 10)$ **CO1**
- 24 Build a combinational circuit in detail. **CO2**





VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234
DEPARTMENT OF COMPUTER SCIENCE

Course Code:	10CT31	Programme:	B.Sc	CIA:	I
Date:	05.10.2021	Major:	Comp. Sci.	Semester:	III
Duration:	2 Hours	Year:	II	Max.Marks:	50
Course Title:	COMPUTER NETWORKS				

SECTION – A (Remembering)

Answer **ALL** the Questions: (10 X 1 = 10 Marks)

- 1 When the packets are small and all the same size, they are often called _____ CO1
A. packet switched B. cells C. circuit switched D. virtual circuit
- 2 Sending packets to a group of stations is known as _____ CO1
A. broadcasting B. multicasting C. uncasing D. point-to-point
- 3 ISDN is an example of _____ network. CO1
A. packet switched B. circuit switched C. frame relay D. ring based.
- 4 The internet is divided into over 200 top level _____ CO2
A. domain B. websites C. WebPages D. crawlers
- 5 GPS is mean for CO2
A. Global Pointing System B. Global Positioning System
C. Great Pointing System D. Great Positioning System
- 6 A network that requires human intervention of route signals is called a _____ CO2
A. bus network B. ring network C. star network D. T- switched network
- 7 Which one of the following is a data link protocol? CO3
A. Ethernet B. point to point protocol C. HDLC D. all the above
- 8 Which layer of OSI model is responsible for creating and recognizing frame boundaries? CO3
A. Physical layer. B. Data link layer. C. Transport layer. D. Network layer
- 9 . CRC stands for CO3
A. cyclic redundancy check B. code repeat check
C. code redundancy check D. cyclic repeat check
- 10 In OSI network architecture the dialogue control and token management are CO3
responsibilities of _____
A. session layer B. network layer C. transport layer D. data link layer.

SECTION – B (Remembering)

Answer any **FIVE** Questions: (5 X 2 = 10 Marks)

- 11 Give any four advantages of computer networks? CO1
- 12 What is meant by modem? CO1
- 13 Define WAPs? CO2
- 14 Expend : TDM , PSTN CO2
- 15 Define Switching. CO3
- 16 Define Physical Layer? CO3
- 17 Explain error correcting code. CO3

SECTION – C (Understanding)

Answer any **THREE** Questions: (3 X 6= 18 Marks)

- 18 Brief a note on uses of computer networks? CO1
- 19 Explain the types of topology in computer networks? CO1
- 20 Brief a note on fiber optics? CO2
- 21 Brief a note on packet switching? CO2
- 22 Elaborate service provide to the network layer. CO3

SECTION – D (Applying)

Answer any **ONE** Question: (1X 12= 12 Marks)

- 23 Enumerate on the characteristics of OSI Reference model? CO1
- 24 Explain the Multiplexing and types CO2



**VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234****DEPARTMENT OF COMPUTER SCIENCE**

Course Code:	10CT32	Programme:	B.Sc	CIA:	I
Date:	09.10.2021	Major:	Comp. Sci.	Semester:	III
Duration:	2 Hours	Year:	II	Max.Marks:	50
Course Title:	COMPUTER GRAPHICS				

SECTION – A (Remembering)Answer **ALL** the Questions:**(10 X 1 = 10 Marks)**

- 1 ____ environments are used to determine how the operators of a vehicle are affected by certain motions. **CO1**
a) Wireframe display b) Virtual Reality c) operating system d) Architectural CAD
- 2 ____ device is used to produce painting through a specially designed software to produce automatic computer art. **CO1**
a) Inkjet printer b) Pen plotter c) Stylus d) camera
- 3 Film animation requires ____ no. of frames per second for an animated movement sequence. **CO1**
a) 24 b) 36 c) 20 d) 30
- 4 Picture Definition is stored in a memory called ____ **CO2**
a) Pixel b) pixmap c) refresh buffer d) bitmap
- 5 The Cartesian slope -intercept equation for a straight line is ____ **CO2**
a) $y = m.x + b$ b) $y = b.x + m$ c) $y = x.x + m$ d) $y = b + m.m$
- 6 Expansion of DDA algorithm is ____ **CO2**
a) Digital Difference Analyzer b) Direct Differential Analyzer
c) Digital Differential Analyzer d) Data Differential Analyzer
- 7 A translation is applied to an object by ____ **CO3**
a) Repositioning along straight line path b) Repositioning it along with circular path
c) Both a and b d) None of the above
- 8 The translation distances (dx, dy) is called as ____ **CO3**
a) Translation vector b) Shift vector c) Both a & b d) Repositioning Vector
- 9 The transformation that is used to alter the size of an object is ____ **CO3**
a) Scaling b) rotation c) translation d) reflection
- 10 ____ is a transformation that produces a mirror image of an object ____ **CO3**
a) Reflection b) Rotation c) Scaling d) Shear

SECTION – B (Remembering)Answer any **FIVE** Questions:**(5 X 2 = 10 Marks)**

- 11 List any two types of visualization techniques? **CO1**
- 12 Give any two applications of Computer Aided Designing? **CO1**
- 13 List the two methods to produce color display in CRT? **CO2**
- 14 Give any two advantages of DDA Line algorithm? **CO2**
- 15 Give the uses of Area Fill attributes? **CO3**
- 16 What is meant by translation distance? **CO3**
- 17 Define shear? **CO3**

SECTION – C (Understanding)Answer any **THREE** Questions:**(3 X 6 = 18 Marks)**

- 18 Summarize the working of a Refresh CRT with a neat diagram? **CO1**
- 19 Critically analyze the working of Color CRT monitors? **CO1**
- 20 Brief a note on emissive and non-emissive displays? **CO2**
- 21 Discuss on the working of Line Drawing algorithms? **CO2**
- 22 Brief a note on any three input devices used in modern graphics **CO3**

SECTION – D (Applying)Answer any **ONE** Question:**(1X 12 = 12 Marks)**

- 23 Explain in detail the applications of computer graphics in various industries? **CO1**
- 24 Explain in detail the working of midpoint circle algorithm? **CO2**





VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234
DEPARTMENT OF COMPUTER SCIENCE

Course Code:	10CT51	Programme:	B.Sc	CIA:	I
Date:	15.09.2021	Major:	Comp. Sci.	Semester:	V
Duration:	2 Hours	Year:	III	Max.Marks:	50
Course Title:	PYTHON PROGRAMMING				

SECTION – A (Remembering)

Answer **ALL** the Questions:

(10 X 1 = 10 Marks)

- 1 What is the maximum possible length of an identifier? CO1
A.16 B. 32 C. 64 D.None of these above
- 2 How many control statements python supports? CO1
A. 4 B. 5 C. 3 D. None of the these
- 3 What is the maximum possible length of an identifier? CO1
A. 16 B. 32 C 64 D. None of these above
- 4 What is the method inside the class in python language? CO2
A. Object B. Function C. Attribute D. Argument
- 5 Which of the following is correctly evaluated for this function? pow(x,y,z) CO2
A. (x**y) / z B. (x / y) * z C. (x**y) % z D. (x / y) / z
- 6 Which of the following option is not a core data type in the python language? CO2
A. Dictionary B. Lists C. Class D. All of the above
- 7 It is possible to convert the Numpy array to list in python? CO3
A.Yes B.No C.Sometimes D.None of the above
- 8 Numpy in the Python provides the CO3
A.Function B.Lambda function C.Type casting D.Array
- 9 Numpy.array(list), what it does ? CO3
A.It convert array to list B.It convert list to array
C.It convert array to array D.Error
- 10 Which of the following argument we need to pass in reshape() function? CO3
A.Array B.Shape C.only array D.Both array and shape

SECTION – B (Remembering)

Answer any **FIVE** Questions:

(5 X 2 = 10 Marks)

- 11 How to run a python program. CO1
- 12 Rules for creating variables in Python CO1
- 13 Function call with example. CO2
- 14 How to create function CO2
- 15 Define String CO3
- 16 What is Encapsulation CO3
- 17 Comment Table in python CO3

SECTION – C (Understanding)

Answer any **THREE** Questions:

(3 X 6= 18 Marks)

- 18 How to create a List with example program. CO1
- 19 Write a FOR statement with example. CO1
- 20 Explain any two function argument in python CO2
- 21 How to create user define function in python CO2
- 22 Write a while Statement in python CO3

SECTION – D (Applying)

Answer any **ONE** Question:

(1X 12= 12 Marks)

- 23 Write a python program to print prime numbers less than 20. CO1
- 24 Construct python program using any 6 math function. CO2





VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234
DEPARTMENT OF COMPUTER SCIENCE

Course Code:	10CT52	Programme:	B.Sc.,	CIA:	I
Date:	16.09.2021	Major:	Comp. Sci.	Semester:	V
Duration:	2 Hours	Year:	III	Max.Marks:	50
Course Title:	JAVA PROGRAMMING				

SECTION – A (Remembering)

Answer **ALL** the Questions:

(10 X 1 = 10 Marks)

- 1 _____ is the mechanism that binds together the code and the data. CO1
A. polymorphism. B. encapsulation. C. inheritance. D. together.
- 2 Java programs are _____ independent. CO1
A. platform. B. procedural. C. high level. D. Secure.
- 3 Which of the tool is used to compile java code? CO1
A. java B. javac C. javacompute D. javaend
- 4 Which of these keywords is used to make a class? CO2
A. class. B. struct. C. int. D. array.
- 5 Object is an _____ of a class. CO2
A. instance. B. implement. C. inheritance. D. invoke.
- 6 The _____ connects classes and objects. CO2
A. dot. B. super. C. new. D. variable.
- 7 Which of this keyword must be used to inherit a class? CO3
A. super. B. this. C. extent. D. extends
- 8 The concept of derived classes is involved in _____. CO3
A. encapsulation. B. information hiding. C. polymorphism. D. inheritance.
- 9 The class that inherits is called a _____. CO3
A. superclass. B. subclass. C. instance class. D. instantiate class.
- 10 A subclass is also called as _____. CO3
A. inner class. B. nested class. C. derived class. D. hidden class.

SECTION – B (Remembering)

Answer any **FIVE** Questions:

(5 X 2 = 10 Marks)

- 11 Define Data Hiding CO1
- 12 Difference between C++ and Java (Any Three) CO1
- 13 Define Class CO2
- 14 Write about Access Specifiers CO2
- 15 List out the types of Inheritance CO3
- 16 Define Array CO3
- 17 List out the types of Array CO3

SECTION – C (Understanding)

Answer any **THREE** Questions:

(3 X 6= 18 Marks)

- 18 Write about the JVM CO1
- 19 Discuss about the Data types, Variables and Identifiers CO1
- 20 Explain about Class, Objects and Methods CO2
- 21 Illustrate Array and its types CO2
- 22 Explain about Inheritance and its types CO3

SECTION – D (Applying)

Answer any **ONE** Question:

(1X 12= 12 Marks)

- 23 List out the basic concept of Oops in Java. Explain CO1
- 24 Construct the Java Program to create student mark list program using class and object CO2





VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234
DEPARTMENT OF COMPUTER SCIENCE

Course Code:	10CT53	Programme:	B Sc	CIA:	I
Date:	17.09.2021	Major:	Comp. Sci.	Semester:	V
Duration:	2 Hours	Year:	III	Max.Marks:	50
Course Title:	SOFTWARE ENGINEERING				

SECTION – A (Remembering)

Answer **ALL** the Questions:

(10 X 1 = 10 Marks)

- 1 A software can be defined as _____.
a) set of computer programs, procedures and its associated documents. CO1
b) a set of compiler instructions c) A mathematical formula d) None of above
- 2 Which of the following is not the characteristic of software?
a) Software does not wear out b) Software is flexible CO1
c) Software is not manufactured d) Software is always correct
- 3 Which of these Process models are used to develop client/server applications CO1
a) Spiral Model b) Concurrent Model c) Waterfall model d) Incremental model
- 4 How many maturity level does CMMI standard have_____ a) 6 b) 5 c) 4 d) 3 CO2
- 5 Which of these is not defined in the Software Requirement Specification?
a) Functional requirements b) Non-functional requirements CO2
c) Goals of Implementation d) Algorithms
- 6 Which of these is not a part of Requirements Engineering?
a) Requirements Elicitation b) Requirement analysis CO2
c) Requirements Design d) Requirements documentation
- 7 _____ defines the informational, functional and behavioural domain of a problem. CO3
a) elicitation b) specification c) elaboration d) validation
- 8 _____ helps to examine all requirements in the requirement specification for its ambiguity, inconsistencies, lack of clarity or errors. CO3
a) analysis b) elaboration c) validation d) Inception
- 9 _____ is used to to describe state changes in a system with transitions states. CO3
a) PERT chart b) Gnatt chart c) Petri net d) DFD
- 10 _____ type is used to represent framework activity of a software process CO3
a) Task pattern b) Stage pattern c) Phase pattern d) Analysis Pattern

SECTION – B (Remembering)

Answer any **FIVE** Questions:

(5 X 2 = 10 Marks)

- 11 List the characteristics of a software product? CO1
- 12 Define software engineering according to IEEE? CO1
- 13 List the types of prototyping ? CO2
- 14 Give the pitfalls of cascading model? CO2
- 15 List the various capability levels in CMMI? CO3
- 16 Define Inception? CO3
- 17 Define Process pattern? CO3

SECTION – C (Understanding)

Answer any **THREE** Questions:

(3 X 6= 18 Marks)

- 18 Outline the principles of software engineering practices? CO1
- 19 Discuss on RAD process model? CO1
- 20 Summarize on the work products produced on completing elicitation of requirements? CO2
- 21 Interpret on the elements of an analysis model? CO2
- 22 Classify types of coupling? CO3

SECTION – D (Applying)

Answer any **ONE** Question:

(1X 12= 12 Marks)

- 23 Identify the phases of waterfall model, their characteristics and pitfalls? CO1
- 24 Interpret the steps involved in requirements engineering? CO2

