

Course Code: 10AT11 VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

Residential & Autonomous – A Gurukula Institute of Life-Training Re-accredited (3rd Cycle) with 'A' Grade (CGPA 3.59 out of 4.00) by NAAC [Affiliated to Madurai Kamaraj University]

B.Sc., Comp. Sci. Degree (Semester) Examinations, November 2020

Part – III : Allied Subject : First Semester

DISCRETE ATHEMATICS

Under CBCS and OBE – Credit 5

Max. Marks: 75

SECTION – A (REMEMBERING) ANSWER ALL THE QUESTIONS: (10 x 1 = 10)1. If a relation is reflexive, then all the diagonal entries in the relation matrix must be **B**. 1 A. 0 C. 2 D. -1 2. One to one onto function is also called A. bijective B. injective C. surjective D. composite function 3. If a matrix is of order 2 X 3, then the number of elements in the matrix is B. 6 C. 2 A. 5 D. 3 4. If A and B are square matrices such that AB= I and BA= I, then B is C. Multiplicative inverse matrix D. –A A. Unit matrix B. Null matrix .5. A compound proposition that is neither a tautology nor a contradiction is called a A. Contingency B. Equivalence C. Condition D. Inference. 6. A sum of the variables and their negations in a formula is called B. elementary product D. DNF A. elementary sum C. CNF 7. _______ is the process of inferring the truth form a general statement for particular cases. A. Mathematical Induction B. Recursive C. Recurrence **D**. Function 8. The numbers in the sequence 0, 1, 2, 3, 5, 8, 13, 21, in which each new term is the sum of the previous two terms are called____ B. Fibonacci C. Recurrence A. Factorial D. Function 9. Each loop counting has _____ _____edges. C. 3 A. 1 B. 2 D. 4 10. An edge with identical ends is called A. complete graph B. bipartite graph C. loops D. link **SECTION – B (REMEMBERING) ANSWER ANY FIVE OF THE FOLLOWING:** $(5 \times 2 = 10)$ 11. Define Set 12. Write about Unit Matrix 13. Define Truth Table 14. Draw the logic network for (a+b). (a.b) 15. Define Recursive 16. Write the types of tree traversals 17. Expand : DFS and BFS

Time: 3 Hours

SECTION – C (UNDERSTANDING) ANSWER ANY THREE OF THE FOLLOWING

 $(5 \times 5 = 25)$

18. a) Let f:Z -> Z be a function defined by f(x)=2x+3, Let g:Z -> Z be a function defined by g(x) = -3x+2. Find i) fog ii) gof.

(OR)

- b) Draw the Venn diagram of De-Morgan's Law
- 19. a) Write about Matrix and its advantage

(OR)

b)	Find the rank of matrix	ſ	0	1	2	1	٦
			1	2	3	2	
			3	1	1	3	
		$\overline{\ }$				-	ν

20. a) Verify if the proposition (PVQ)VRVS is tautology or not.

(OR)

b) Discuss about the truth tables

21 a) Find the recurrence relation, satisfying $y^n = A(3)^n + B(-2)^n$

(OR)

b) Discuss about the Recursion and Mathematical Induction.

22. a) Explain about a. Graph b. Simple Graph c. Tree

(OR)

b) Write the types of connectedness in directed graph

SECTION – D (APPLYING)

ANSWER ANY ONE OF THE FOLLOWING

 $(3 \times 10 = 30)$

- 23. a) Let A={ -5,-3,-2,-1} B={-2,-1,0} and C={-6,-4,-2}. Find A\(B\C) and (A\B)\C.
 b) Write about a) Dictionary Order b) Cryptography c) Equivalence Relations
- 24. Explain about the Types of Matrix.
- 25. Construct the truth table for $(P^Q) V(Q^R)V(R^P)$
- 26. Suppose that f is defined recursively by f(0) = 2, f(n+1) = 3f(n) + 2, Find f(1), f(2), f(3), f(4)
- 27. Explain about Tree Traversals with example



Time: 3 Hours

Course Code: 10AT31 VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

Residential & Autonomous – A Gurukula Institute of Life-Training Re-accredited (3rd Cycle) with 'A' Grade (CGPA 3.59 out of 4.00) by NAAC [Affiliated to Madurai Kamaraj University]

B.Sc., Comp. Sci. Degree (Semester) Examinations, November 2020

Part – III : Allied Subject : Third Semester

OPERATION RESEARCH

Under CBCS and OBE – Credit 5

Max. Marks: 75

(10X1=10)

SECTION – A (REMEMBERING)

Answer all the questions

1. Operation research analysis do not a) predict future operation b) build more than model c) collect relevant data d) recommended decision adopt 2. Iconic model is known as ----a) Physical b) Chemical c) biological d) none 3. Which method is used to solve Assignment problem-----a) Hungarian b) MODI d) LPP c) VAM 4. The unbalanced assignment problem is said to be -----a) rows=columns b) rows≠columns c) order of matrix=assigning zero's d)none 5. The first step in formulating a linear programming problem is a) Identify any upper or lower bound on the decision variables b) State the constraints as linear combination soft the decision variables c) Understand the problem d) Identify the decision variables 6. Objective of linear programming for an objective function is to a) maximize or minimize b) Subset or proper set modeling c) row or column modelling d) adjacent modeling 7. An LPP deals with problems involving only a. single objective. b. multiple objective. c. two objective. d. none of these. 8. Transportation problem is a special class of _____ C).Graphical. d).Simplex. a).LPP. b).Assignment problem. 9. The dummy source or destination in a transportation problem is added to 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 10. Another name of Least Cost Method is b. Penalty Method a. Matrix Minima c. Row minima d. Column Minima

SECTION – B (REMEMBERING)

Answer any FIVE questions

(5X2=10)

- 11. Define Operation Research
- 12. Give any two advantages of operation research
- 13. What is mean by balanced assignment problem?
- 14. How you identify the given Transportation problem is balanced?

15. Write a note about maximization in Transportation Problem

16. Define Assignment problem

17. How many variables are need to solve the graphical method?

SECTION – C (APPLYING) ANSWER ALL THE QUESTIONS

(5X5=25)

18.a) Discuss about Scientific methods in OR (**OR**) b) Write any six models with explanation. 19. a) Write working procedure of graphical method (or) b) Solve the following LPP graphically Max $Z = 3x_1 + 4x_2$ Subject to $x_1 + x_2 \le 450$ $2x_1+x_2 \leq 600$ and $x_1, x_2 \ge 0$. 20. a) Write about slack and surplus variables (or) b) Express the following LPP in standard form Max $Z = 4x_1 + 2x_2 + 6x_3$ Subject to $2x_1 + 3x_2 + 2x_3 \ge 6$ $3x_1 + 4x_2 = 8$ $6x_1 - 4x_2 + x_3 \le 10$ and $x_1, x_2 \ge 0$. 21. a) Write a procedure to solve Vogel's Approximation Method

b) Find IBFS using VAM for the following Transportation problem To Available

From	7	3	2	2
TIOIII	2	1	3	3
	3	4	6	5
Demand	4	1	5	

22. a) Solve the Assignment problem

	Í	II	III	IV
Α	4	7	3	7
В	8	2	5	5
С	4	9	6	9
D	7	5	4	8
Е	6	3	5	4
F	6	8	7	3
(or)				

⁽or)

b) Consider the problem of assigning five jobs to five persons. The assignment costs are given as follows

Si ven us ion			JC	OBS		
		J1	J2	J3	J4	J5
PERSONS	А	8	4	2	6	1
PERSONS	В	0	9	5	5	4
	С	3	8	9	2	6
	D	4	3	1	0	3
	E	9	5	8	9	5
	E	9	5	8	9	5

SECTION – D (APPLYING)

Answer any THREE questions

(3X10=30)

- 23. Discuss about main phases of Operation Research
- 24. Explain about simplex algorithm
- 25. Solve the following LPP graphically
 - Max $Z = 5x_1 + 8x_2$
 - Subject to $15x_1 + 10x_2 \le 180$ $10x_1 + 20x_2 \le 200$
 - $10x_1 + 20x_2 \le 200$
 - $15x_1 + 20x_2 \le 210 \qquad \text{and} \ x_1 \ , x_2 \ge 0.$

26. Solve the following assignment problem to get maximum profit

	Are	a		
salesman	Ι	II	III	IV
Α	60	50	40	30
В	40	30	20	15
С	40	20	35	10
D	30	30	25	20

27. Find IBFS using NWCR, LCM and VAM for the following Transportation Problem TO AVAILABLE

	1	2	6	7
FROM	0	4	2	12
	3	1	5	11
DEMAND	10	10	10	

Course Code: 10CT11 VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

Residential & Autonomous – A Gurukula Institute of Life-Training Re-accredited (3rd Cycle) with 'A' Grade (CGPA 3.59 out of 4.00) by NAAC [Affiliated to Madurai Kamaraj University]

B.Sc., Comp. Sci. Degree (Semester) Examinations, November 2020

Part – III : Core Subject : First Semester

PROGRAMMING IN C

Under CBCS and OBE – Credit 4

Max. Marks: 75

SECTION – A (REMEMBERING)

ANSWER ALL QUESTIONS

1. Who is the founder of C language? [a] Dennis Ritchie [b] Larry Page [d] James Gosling [c] Bjarne Stroustrup ____ parts 2. The main function has [a] 1 [b] 2 [c] 3 [d] 4 3. The number of tokens in the following statement printf("i=%d,&i=%x",i,&i); [a] 5 [b] 4 [c] 10 [d] 0 4. If a=5, what is the result of a++ is [a] 5 [b] 4 [c] 6 [d] 55 5. The ______ specification is used to read or write a single character [a] %d [b] %c [d] %f [c] %s 6. The ______ operator is true only when operands are true [a] AND(&&) [b] NOT(!) [d] Assignment (=) [c] OR(||) 7. The strncat() function has ______ parameters. [a] 1 [b] 2 [c] 3 [d] 4 8. The function ______ is used to sort things in alphabetical order [a] strlen() [b] strcat() [c] strcmp() [d] sort() 9. If return type is not explicitly specified, C will assure that is _____ [a] void [b] int [c] float [d] none 10. The pointer is _____ data type [a] scalar [b] vector [c] An array [d] derived



Time: 3 Hours

(10X1=10)

SECTION-B(REMEMBERING)

ANSWER ANY FIVE

- 11. What is an Operator and Operand?
- 12. List out logical operators in 'C'
- 13. Differentiate break and continue statements
- 14. What is the purpose of getchar() function?
- 15. Specify the role of auto (storage class) in C
- 16. Write a notes on "return"
- 17. What is a Pointer? How a variable is declared to the pointer?

SECTION – C (UNDERSTANDING)

ANSWER ALL THE QUESTIONS

18. a) Explain the following topics (i) Keywords (ii) Variables (iii) Constants

[OR]

b) Write a C program to generate Student grade system using switch statement

19. a) Summarize single dimensional array with example

[**OR**]

b) Discuss string handling functions with example

20. a) List out the advantages of function

[OR]

b) Define function. Explain how to passing arrays to function with example

21. a) Discuss about unions

[**OR**]

- b) Differentiate arrays and structure with example
- 22. a) Explain about pointers in C with example

[OR]

b) Write a short notes on file I/O operation in C with example

SECTION – D (APPLYING)

ANSWER ANY THREE QUESTIONS

[3 X 10 = 30]

- 23. Describe different kinds of "if" statements in C with example
- 24. Write a C program to sort the following numbers in descending order using array
- 52, 45, 78, 100, 56, 10.
- 25. Discuss about recursive function with an example

26. Explain about structure and how to declare structure and access structure members with example

27. Write about files with example

[5 X 2 = 10]

[5 X 5 = 25]



Course Code: 10CT12 VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

Residential & Autonomous – A Gurukula Institute of Life-Training Re-accredited (3rd Cycle) with 'A' Grade (CGPA 3.59 out of 4.00) by NAAC [Affiliated to Madurai Kamaraj University]

B.Sc., Comp. Sci. Degree (Semester) Examinations, November 2020 Part – III : Core Subject : First Semester

DIGITAL PRINCIPLES AND COMPUTER ORGANIZATION

Under CBCS and OBE – Credit 4

Time: 3 Hours

Max. Marks: 75

SECTION – A (REMEMBERING)

Answer ALL Questions: (10 X 1 = 10 Marks)1. Which of the following is not a Hexadecimal number? C) A D) D A) F B) H 2. The expression of a NAND gate is B) A'B+AB' C) (A.B)' D) (A+B)' A) A.B 3. In D flip-flop, D stands for A) Distant B) Delay C) Desired D) Data 4. In 1-to-4 De-Multiplexer how many select lines are required? A) 2 B) 3 C) 4 D) 5 5. A set of instruction that performs task is called the_ B) Storage C) Software A) Data D) Program 6. Data are stored in and retrieved from a stack on a D) LOFI A) FIFO B) FILO C) LIFO 7. MFC expand for_ A) Memory Function Computer B) Memory Function Complex C) Memory Function Control D) Memory Function Completed 8. The instruction set of a computers are stored in a special memory called the_ A) Control Word B) Control Store C) Control Device D) Control Unit 9. The accumulator is an 8-bit register that is part of the_ A) ALU B) CPU C) Microprocessor D) None 10. The stack pointer is also a 16 bit register used as a B) Program Counter C) Memory D) Memory Pointer A) Stack Pointer

SECTION – B (REMEMBERING)

(5 X 2 = 10 Marks)

- 11. Convert the $(1011)_2$ to Equivalent Decimal Number.
- 12. Convert the 8765 Excess-3 Code.

Answer Any FIVE Questions:

- 13. Define Multiplexer.
- 14. Define Shift Register. And Give the Classification of Shift Register.
- 15. What is the Major Difference between Compiler and Interpreter.
- 16. Expand MAR and MDR.
- 17. Difference between Address Bus and Data Bus in Microprocessor.

Answer ALL Questions:

- 18. A) Convert the Following Numbers,
 - (i) $(23)_{10} = (?)_{10} (2 \text{ Mark})$
 - (ii) $(278.250)_{10} = (?)_2$ (2 Mark)

(iii) $(1100101111010)_2 = (?)_8 - (1 \text{ Mark})$

(**OR**)

B) Explain about the NOR Gate.

19. A) Discuss about the 4 - 1 Multiplexers.

(**OR**)

- B) Give a Short Notes and Illustrate on J-K Flip-Flop.
- 20. A) Explain about Basic Functional Units in Computer Architecture.

(**OR**)

B) Discuss about the Stack & Queue With Structure.

21. A) Write a Short Note on Micro-Programmed Control.

(**OR**)

B) Discuss about Any Five Types of Addressing Modes.

22. A) Explain about 8085 Architecture.

(**OR**)

B) Discuss about 8085 Instruction Set.

SECTION – D (APPLYING)

Answer Any THREE Questions:

23. Prove that A(A' + B) = AB.

- 24. Discuss about the R-S Flip-Flop.
- 25. What is Bus and discuss about the Bus Structure.
- 26. Explain about the DMA Controller with Neat Structure.
- 27. Explain about 8085 Programming Models in Microprocessor.

****BEST OF LUCK*****

(5 X 5 = 25 Marks)

(3 X 10 = 30 Marks)



Time: 3 Hours

Course Code: 10CT31 VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

Residential & Autonomous – A Gurukula Institute of Life-Training Re-accredited (3rd Cycle) with 'A' Grade (CGPA 3.59 out of 4.00) by NAAC [Affiliated to Madurai Kamaraj University]

B.Sc., Comp. Sci. Degree (Semester) Examinations, November 2020

Part – III : Core Subject : Third Semester

COMPUTER NETWORK

Under CBCS and OBE - Credit 4

Max. Marks: 75

SECTION – A (REMEMBERING) ANSWER ALL THE QUESTIONS:

(10 x 1 = 10)

1. A computer on the network shares resources for others to use, then it is called as a

a) Client b) Server c) mainframe d) workstation

- 2. The range of frequencies transmitted without being strongly attenuated is called
 - a) Baud rate b) Bandwidth c) Data transfer rate d) Attenuation
- 3. _____ cables are used for analog transmission and cable television networka) 30 ohmsb) 10 ohmsc) 75 ohmsd) 95 ohms
- 4. _____ is the range of frequencies that pass through the transmission channel minimum attenuation a) baud rate b) bandwidth c) modulation d) attenuation
- 5. Which layer of the OSI reference model resolves the problems of damaged or lost or duplicate frames?
 - a) Network b) Physical c) Datalink d) Application
- 6. _____is composed of four fields namely kind, seq,ack and info.
 - a) Packets b) frames c) parity bits d) fragments
- 7. _____ are set of operations performed by the user process to a access a service a) Trapping b) Primitives c) IP routing d) encoding
- 8. In User Datagram Protocol (UDP), queues are associated with _____
 a) Slots b) IP c) Ports d) Packets

9. TCP is a _____ layer protocola) Networkb) Transportc) Data Linkd) Application

10. ____ layer in the OSI is concerned with syntax and semantics of data

a) Application b) Presentation c) Data link d) Network

SECTION – B (REMEMBERING)

ANSWER ANY FIVE OF THE FOLLOWING:

11. Define computer networks.

- 12. Give any four advantages of computer networks?
- 13. What are the difference MUX and DEMUX
- 14. What is meant by modem?
- 15. Define Data link layer.
- 16. Define WAPs?
- 17. Define digital signature?

 $(5 \ge 2 = 10)$

SECTION – C (UNDERSTANDING) ANSWER ANY THREE OF THE FOLLOWING

18. a) Brief a note on uses of computer networks?

(**OR**)

b) Explain the types of topology in computer networks?

19. a) Write a summary on fiber optics?

(OR)

b) Write a summary Public Switched telephone network?

20. a) Elementary Data Link Protocols.

(**OR**)

- b) Discus about the Sliding Window Protocols.
- 21. a) Explain about the UDP protocol.

(**OR**)

- b) Discus about the IP protocol.
- 22. a) Explain the cryptography in computer networks?

(OR)

b) Explain about the E-mail.

SECTION – D (APPLYING) (2 10 20)

$(3 \times 10 = 30)$

ANSWER ANY ONE OF THE FOLLOWING

- 23. Enumerate on the characteristics of OSI Reference model?
- 24. What is Guided Transmission Media? Explain.
- 25. Explain in detail on Error correcting codes.
- 26. Dijkstra's algorithm to compute the shortest path through a graph.
- 27. Enumerate on the DNS.

 $(5 \times 5 = 25)$



Time: 3 Hours

Course Code: 10CT32 VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

Residential & Autonomous – A Gurukula Institute of Life-Training Re-accredited (3rd Cycle) with 'A' Grade (CGPA 3.59 out of 4.00) by NAAC [Affiliated to Madurai Kamaraj University]

B.Sc., Comp. Sci. Degree (Semester) Examinations, November 2020

Part - III : Core Subject : Third Semester

COMPUTER GRAPHICS

Under CBCS and OBE – Credit 4

Max. Marks: 75

SECTION – A (REMEMBERING)

Answer ALL Questions: (10 X 1 = 10)is used in designing of buildings, automobiles, aircrafts, textiles, computers and 1. spacecrafts a) Presentation graphics b) computer art c) CAD d) image Processing 2. _____ environments used to determine how the operators of a vehicle are affected by certain motions a) Wireframe display b) Virtual Reality c) operating system d) Architectural CAD 3. The property of emitting light for a period of time after the CRT beam stops emission is called_____a) Phosphorescence b) Resolution c) Persistence d) Aspect Ratio 4. Calculators uses _____ type of display for output a) Plasma panel b) LED c) LCD d) CRT 5. The cartesian slope -intercept equation for a straight line is a) y = m.x + bb) y = b.x + mc) $y = x \cdot x + m$ d) y = b + m.m6. Expansion of DDA algorithm is a) Digital Difference Analyzer b) Direct Differntial Analyzer c) Digital Differential Analyzer d) Data Differential Analyzer 7. ______ is defined as a set of points that are all at a given distance r from a center position (x, y) b) Curve c) Circle a) Rectangle d) Spline 8. The translation distances (dx, dy) is called as _____ a) Translation vector b) shift vector c) both a and b d) Repositioning of vector 9. is a rigid body transformation that moves objects without deformation a) Rotation b) Scaling c) Translation d) all the above 10. A procedure that identifies those portions of a picture that are either inside or outside of specified region of space is called _ a) Composite transformation b) Clipping c) Area fill d) Flood fill algorithm **SECTION – B (REMEMBERING) ANSWER ANY FIVE QUESTIONS:** (5 X 2 = 10)11. List any two types of visualization techniques?

- 12. Give any two examples for Presentation softwares?
- 13. Give any two advantages of DDA Line algorithm?
- 14. Define Reflection?
- 15. What is meant by translation distance?

16. Define shear?

17. Give the uses of clipping?

SECTION – C (UNDERSTANDING)

ANSWER ALL QUESTIONS:

(5 X 5 = 25)

18. a) Brief a note on any three applications of computer graphics in various field in the industry? (OR)

- b) Summarize the working of a Refresh CRT with a neat diagram?
- 19. a) Brief a note on the working of a Line Drawing algorithms?

(OR)

- b) Brief a note on Midpoint Circle Drawing algorithm?
- 20. a) Critically analyse Scaling and its types?

(OR)

- b) Write a note on Reflection transformation in 2D?
- 21. a) Brief a note on Window-To-Viewport coordinate Transformation? (OR)
 - b) Classify the types of input modes?
- 22. a) Brief a note on Depth Queing ?

(OR)

b) Write a short note on Surface Rendereing ?

SECTION – D (APPLYING)

ANSWER ANY THREE QUESTIONS:

(3 X 10 = 30)

- 23. Explain in detail the working of Color CRT Monitors?24. Compare and criticize the working of DDA algorithm?
- 25. Describe in detail on types of 2D transformations?
- 26. Explain the types of Clipping?
- 27. Enumerate on the types of Projection techniques?



Time: 3 Hours

Course Code: 10CT51 VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

Residential & Autonomous – A Gurukula Institute of Life-Training Re-accredited (3rd Cycle) with 'A' Grade (CGPA 3.59 out of 4.00) by NAAC [Affiliated to Madurai Kamaraj University]

B.Sc., Comp. Sci. Degree (Semester) Examinations, November 2020

Part – III : Core Subject : Fifth Semester

COMPUTER NETWORK

Under CBCS and OBE – Credit 4

Max. Marks: 75

SECTION – A (REMEMBERING)

SECTION - A (REMEMBERING)	
Answer ALL Questions:	(10 X 1 = 10)
1. Sending packets to a group of stations is known as	
a) broadcasting b) multicasting c) unicasting d) point-to –	-point
2mechanism is used to resolve conflicts between two or more computer	s to send data
a) LIFO b) Arbitration c) centralized d) decentralized	
3 are set of operations performed by the user process to a access a service	3
	coding
4mechanism is used to resolve conflicts between two or more computer	s to send data
a) LIFO b) Arbitration c) centralized d) decentralized	
5 cables are used for analog transmission and cable television network	
a) 30 ohms b) 10 ohms c) 75 ohms d) 95 ohms	
6. 6. Expand PSTN.	
a) Private Switched Telephone Network b) Public Switched Telephone Netw	
c) Packet switched Telephone Network d) Portable switching telephone netw	
7 is a process of forwarding the packets from the source to the destination	using a
routing table.	
a) Switching b) Framing c) Routing d) Fr	agmentation
8. TCP is a layer protocol. a) Network b) Transport c) Data Link	d)
Application	
9. Each node uses shortest path tree protocol to construct it's	
a) Connections b) Routing table c) Graphs d) Network	
10. FQDN stands for	
a) Filled Quality Domain Name b) False Quality Domain Name d) First Qualified Damain Name	
c) Fully Qualified Domain Name SECTION B (BEMEMBERING)	
SECTION – B (REMEMBERING)	(5 X 2 = 10)
<u>Answer Any Five Questions:</u> 11. Classify the types of networks based on the transmission technology?	$(5 \mathbf{A} 2 = 10)$
12. Distinguish between connection-oriented and connectionless service?	
13. Give any two types of fiber optic cables?	
14. List the types of flow control mechanism adopted Datalink Layer?	
15. List the type of services provided by the Network Layer?	
13. List the type of services provided by the Network Layer:	

16. Give the types of services provided by the Transport Layer?

17. Give the uses of DNS?

Answer ALL Questions:

- 18. a) Brief a note on the characteristics and types of coaxial cables? OR)
 - b) Write a brief note on the uses of computer networks in modern industry?
- 19. a) Identify and write a note on problems in Transmission Lines?

(OR)

- b) Brief a note on FHSS?
- 20. a) Discuss about any three types of Framing techniques? (OR)
 - b) Write a summary Simplex Stop-and Wait Protocol?
- 21. a) Identify and brief a note on types of Error Detection Codes? (OR)
 - b) Explain the characteristics IP Addresses and its types?
- 22. a) Brief a note on types of adaptive routing algorithms? (OR)
 - b) Write a note on working of an Email?

SECTION – D (APPLYING)

Answer Any Three Questions:

(3 X 10 = 30)

- 23. Explain in detail types of networks and their characteristics ?
- 24. Enumerate on the type of Guided Transmission Media?
- 25. Compare and criticize characteristics of TCP and UDP ?
- 26. Explain any four Routing algorithms ?
- 27. Enumerate on the characteristics of DNS?



Course Code: 10CT52 VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

Residential & Autonomous – A Gurukula Institute of Life-Training Re-accredited (3rd Cycle) with 'A' Grade (CGPA 3.59 out of 4.00) by NAAC [Affiliated to Madurai Kamaraj University]

B.Sc., Comp. Sci. Degree (Semester) Examinations, November 2020 Part – III : Core Subject : Fifth Semester

JAVA PROGRAMMING

Under CBCS and OBE – Credit 4

Max. Marks: 75

SECTION – A (REMEMBERING)

ANSWER ALL THE QUESTIONS:

1 A _____ object cannot be modified after it is created. A. double. B. int. C. string. D. main. 2. _____ is the mechanism that binds together the code and the data. A. polymorphism. B. encapsulation. C. inheritance. D. together. 3. The connects classes and objects. A. dot. B. super. C. new. D. variable. 4. Methods having same name, same type signature are called _____ methods. D. overreading. A. overriding. B. overloading. C. overwriting. 5. Which of these access specifiers can be used for an interface?. D. All of the mentioned. A. public. B. protected. C. private. 6. Which of these keywords are used to define an abstract class?. B. abstract C. Abstract D. abstract class A. abst 7. is a small unit of a process. A. method. B. thread. C. applet. D. stream. 8. Runnable is _____ B. Method A. Class C. Variable D. Interface 9. What method is used to specify a container's layout? A. setLayout(). B. setSize(). C. area(). D. resize(). _ is a special kind of Java program that is designed to be transmitted over 10. An the internet. A. viewlet. B. applet. C. servlet. D. object.

SECTION – B (REMEMBERING)

ANSWER ANY FIVE OF THE FOLLOWING:

 $(5 \times 2 = 10)$

- 11. Any two difference between C++ and Java.
- 12. Write about Identifiers
- 13. Define Method.
- 14. What is meant by constructor?
- 15. Difference between Class and Interface
- 16. Write any 4 tag in HTML and its usage
- 17. Define Thread

Time: 3 Hours

(10 x 1 = 10)

ANSWER ANY THREE OF THE FOLLOWING:

18. a) Discuss about the data types

(**OR**)

b) Explain the types of Operators?

19. a) Write about object and class

(**OR**)

b) Explain about the Constructors

20. a) Explain about the Single inheritance

(\mathbf{OR})

b) Discuss about the implementation of Interface.

21 a) Difference between Multithreading and Multitasking (**OR**)

b) Discuss about the compile time and runtime error.

22. a) Explain about the HTML tag in APPLET

(OR)

b) Explain about the RMI

SECTION – D (APPLYING) ANSWER ANY ONE OF THE FOLLOWING

 $(3 \times 10 = 30)$

23. Explain about the object oriented programming concept in Java.

24. Write a Java program to create a student mark list using class and object

25. Discuss about the Interface with example.

26. Explain the lifecycle of Thread

27. Explain the lifecycle of Applet

 $(5 \times 5 = 25)$



Course Code: 10CT53 VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

Residential & Autonomous – A Gurukula Institute of Life-Training Re-accredited (3rd Cycle) with 'A' Grade (CGPA 3.59 out of 4.00) by NAAC [Affiliated to Madurai Kamaraj University]

B.Sc., Comp. Sci. Degree (Semester) Examinations, November 2020 Part – III : Core Subject : Fifth Semester

Part – III : Core Subject : Filth Semeste

SOFTWARE EMGINEERING

Under CBCS and OBE – Credit 4

Max. Marks: 75

(5 X 2 = 10 Marks)

SECTION – A (REMEMBERING) Answer ALL Questions: (10 X 1 = 10)Marks) 1. Software can be defined as B) Data structures A) Instructions C) Documents D) All of these 2. Water fall model is sometimes called as _ B) V-process model C) Ordered model D) Classic life A) Lifecycle cycle 3. Transformations are represented by A) Circle B) Triangle C) Arrows D) Line 4. The diagram involves transitions from one object to another object. A) Action B) Sequence C) State D) DFD 5. Design phase is followed by A) Coding B) Debugging C) Testing D) Maintenance 6. White box testing is also called testing. A) Class-box B) Black-box C) Glass-box D) Basis-path 7. Testing begins at level. A) Interface B) Analysis C) Design D) Component activities. 8. Testing and debugging are_ A) Same B) Parallel C) Different D) Opposite 9. Black-box testing finds B) Syntax errors A) Interface errors C) Coding errors D) Design errors _is an important element of validation process. 10. ____ A) Configuration review B) Testing C) Specification D) Deficiency list **SECTION – B (REMEMBERING)**

Answer Any FIVE Questions:

11. Who is the Software Engineer?

- 12. List out the types of Software.
- 13. Define Project Cost Estimation.
- 14. What are the uses of COCOMO?
- 15. Define SSA.

16. Write the goals of Software Design.

17. What is Software Testing?

Time: 3 Hours

Answer ALL Questions:

18. A) Explain about the Project Size Categories.

(**OR**)

B) Discuss about the Phased Life Cycle Model.

19. A) Explain the Software Cost Factors in Detail.

(**OR**)

B) Discuss about the Staffing Level Estimation.

20. A) Give a Note on Relational Notations.

(**OR**)

B) Explain the Formal Specification Techniques.

21. A) What are the fundamental design concepts in Software? Explain.

(**OR**)

B) Discuss about Coupling and Cohesion.

22. A) How to an Enhance Maintainability during Software Development? Explain.

(**OR**)

B) Discuss about the Configuration Management.

SECTION – D (APPLYING)

Answer Any THREE Questions:

23. Explain about Planning an Organization Structure.

24. Explain and Illustrate the Work Break-down Structure.

25. Explain the Format of SRS.

26. Discuss about Design Notations in Software.

27. Explain about Unit Testing and Debugging.

*****BEST OF LUCK*****

(5 X 5 = 25 Marks)

(3 X 10 = 30 Marks)



Time: 3 Hours

Course Code: 10EP1A VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

Residential & Autonomous – A Gurukula Institute of Life-Training Re-accredited (3rd Cycle) with 'A' Grade (CGPA 3.59 out of 4.00) by NAAC [Affiliated to Madurai Kamaraj University]

B.Sc., Comp. Sci. Degree (Semester) Examinations, November 2020

Part - III : Elective Subject : Fifth Semester

CLOUD COMPUING

Under CBCS and OBE - Credit 5

Max. Marks: 75

SECTION – A (REMEMBERING)

ANSWER ALL THE QUESTIONS:

(10 x 1 = 10)

1.	Which of the following is owned by an organization selling cloud services?
	a) Public b) Private c) Community d) Hybrid
2.	provides virtual machines, virtual storage, virtual infrastructure, and other hardware
	assets.
	a) IaaS b) SaaS c) PaaS d) All of the mentioned
3.	Which of the following is best known service model?
	a) SaaS b) IaaS c) PaaS d) All of the mentioned
4.	Which cloud is deployed when there is a budget constraint but business autonomy is most
	essential?
	a) Private cloud b) Public cloud c) Hybrid cloud d) Community cloud
5.	
	purpose by many organization.
	a) Public b) Private c) Community d) All of the mentioned
6.	
	another vendor's application.
_	a) PaaS b) IaaS c) CaaS d) All of the mentioned
7.	Which is not a major cloud computing platform?
0	a) Google 101 b) IBM Deep blue c) Microsoft Azure d) Amazon EC2
8.	"Cloud" in cloud computing represents what?
0	a) Wireless b) Hard drives c) People d) Internet
9.	What widely used service is built on cloud-computing technology?
10	a) Twitter b) Skype c) Gmail d) All of the above
10	. Which of these techniques is vital for creating cloud- computing centers?
	a) Virtualization b) Transubstantiation c) Cannibalization d) Insubordination
	SECTION – B (REMEMBERING)
	ANSWER ANY FIVE OF THE FOLLOWING: $(5 \times 2 = 10)$
11	. Define cloud computing
12	. Give any four advantages of cloud computing?
13	. What are the difference between private cloud and public cloud?
14	. What is meant by cloud security?
15	. Give some application of cloud computing.
16	. Define SaaS?
17	Define smoke testing?

17. Define smoke testing?

SECTION – C (UNDERSTANDING) ANSWER ALL OF THE FOLLOWING

- 18. a) Brief a note on cloud computing with examples? (OR)
 - b) Explain the cloud computing infrastructure?
- 19. a) Explain the types of clouds? (OR)
 - b) Compare the characteristics of IaaS, PaaS, SaaS?
- 20. a) Brief a note on the seven step in Cloud computing? (OR)
 - b) Selecting the right scalable application in cloud.
- 21. a) Explain about the Cloud Interoperability. (OR)
 - b) Discuss about the Cloud Integration.
- 22. a) Explain the Cloud Contracting models. (OR)
 - b) Explain about Key Management and Encryption.

SECTION – D (APPLYING) ANSWER ANY THREE OF THE FOLLOWING

 $(3 \times 10 = 30)$

- 23. Enumerate on the cloud computing architecture?
- 24. Discuss about the obstacles for cloud technology..
- 25. Explain the concept of system testing cloud.
- 26. Briefly discuss on cloud Portability.
- 27. Explain about Best Practices used in selection of Cloud.

 $(5 \times 5 = 25)$



Course Code: 10NE11 VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

Residential & Autonomous – A Gurukula Institute of Life-Training Re-accredited (3rd Cycle) with 'A' Grade (CGPA 3.59 out of 4.00) by NAAC [Affiliated to Madurai Kamaraj University]

B.Sc., Comp. Sci. Degree (Semester) Examinations, November 2020 Part – IV : Non Major Elective Subject : First Semester

INTRIDUCTION TO INFORMATION TECHNOLOGY

Under CBCS and OBE – Credit 2

Time: 2 Hours

SECTION – A (REMEMBERING)

ANSWER ALL QUESTIONS

1) Information is. A. a collection of data B. a processed data C. a text data D. an audio/video data 2) WWW means A. World Wide Wan B. World Wide Web. C. World Wan Web D. World van Web. 3) Website is a collection of. A. audio files. B. video file C. image file. D. html file. 4) 82. WAN stands for A. wire and network B. wire accessible network C. widely accessible network D. wide area network. 5) DOM is an acronym for A. document object model. B. document object metrics. C. digital object model. D. digital object metrics. 6) WWW uses the following protocol? D. SMTP. B. ftp. C. www A. http. 7) A source program is written in. A. high level language B. English language C. machine language. D. symbolic language 8) Computer performs calculations A. in accurately B. accurately. C. 1 million decimals D. 2 decimals. 9) The actual machinery in a computer is called the A. machinery. B. hardware C. software D. instruments. 10) First generation computers uses. A. cathode ray tube. B. typewriter C. printers. D. paper tapes. **SECTION – B (REMEMBERING) ANSWER ANY FIVE QUESTIONS** 5*2=10 11. Expand HDD and USB. 12. Expand TCP and IP. 13. List out the any two web browsers? 14. What is peripherals? 15. What is CPU 16. Define internet.

17. Type of memory in computer.

Max. Marks: 75

10*1=10

ANSWER ALL QUESTIONS

- 18) A) write the input device and output device (OR)
 - B) Explain the followings
 - (i) Web page
 - (ii) website
 - (iii) browser
- 19) A) Explain about the computer network with types. (OR)

B) Briefly explain about the computer with types.

20) A) Explain about the memory unit with types. (OR)B) Discuss briefly about the storage media in a computer system?

SECTION – D (APPLYING) ANSWER ANY TWO QUESTIONS

2*14=28

- 21) Briefly explain the keyboard in a computer system.
- 22) Discuss briefly about the OS and its Types.
- 23) Explain about the main usage of IT in Different fields.
- 24) What are the functional unit computer and explain.

*******ALL THE BEST******



Course Code: 10SB31 VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

Residential & Autonomous – A Gurukula Institute of Life-Training Re-accredited (3rd Cycle) with 'A' Grade (CGPA 3.59 out of 4.00) by NAAC [Affiliated to Madurai Kamaraj University]

B.Sc., Comp. Sci. Degree (Semester) Examinations, November 2020

Part - IV : Skill Based Subject : First Semester

OPERATING SYSTEM

Under CBCS and OBE – Credit 2

SECTION – A (REMEMBERING)

Time: 2 Hours

Max. Marks: 75

Answer ALL Questions:			(10 X 1 = 10)
1. A Program is a sequence of	of a		
a) Instruction		c) Data	d) Task
2. Operating System is a/an			
	b) System S/W		d) None of these.
3. Main memory is divided i	1		
a) Memory Regions	b) Memory Partitions	c) Memory Devices	d) Both a &b
4. Instruction and data are st			
	b) Memory		d) All of these
5. The process scheduler is a			
	b) Dispatcher	c) Processor	d) None
6 process some w			
	b) Wait		d) Execute
7. Devices, channels and cor			
	b) Traffic controller	c) Process controller	d) I/O Traffic
controller			
8. Job scheduling is also call			
a) Coupled Processin	0	b) Multiprogramming	7
c) Coupled Multiproc		d) Multiprocessing	
9. Information management			
, 1	b) Database	c) File system	d) Contemporary
System			
10. The system is			
a) Symbolic fine	b) Physical file	c) Basic file	d) Logical file
	SECTION – B (REM)	EMBERING)	$(\mathbf{E} \mathbf{V} \mathbf{A} 10)$
Answer Any Five Question			(5 X 2 = 10)
11. What is Operating System			
12. Define System Software		are.	
13. What is meant by Multip	0		
14. What is Memory & types			
15. Expand FCFS and SRTF	•		

16. Define I/O Devices.

17. Define Information Management.

Answer ALL Ouestions: (3 X 9 = 27)18. a) Explain about the Importance of Operating System. (**OR**) b) Discuss about the State Model. 19. a) Explain about the Re-Locatable Partitioned Memory Allocation. (**OR**) b) Discuss about the I/O Traffic Controller. 20. a) Explain about the Simple File System. (**OR**) b) Discuss about the Logical File System and Access Control Verification.

SECTION – D (APPLYING)

Answer Any Two Questions:

21. Explain about the Different types of OS.

22. Discuss about the Single Contiguous Memory Allocation & Partitioned Memory Illustrate with Neat Memory Structure. Allocation

23. Each Questions are Equal (7) Marks:

(i) Find the average waiting time and turnaround time for the following process using FCFS Algorithm.

Process	Burst Time (Seconds)
P1	14
P2	12
P3	5
P4	3

(ii) Find the average waiting time and turnaround time for the following process using SRTF Algorithm.

Process	Arrival Time	Burst Time
	(Seconds)	(Seconds)
P1	0	10
P2	1	6
P3	2	12
P4	3	15

24. Discuss about the Channels and Control Units.

****BEST OF LUCK*****

(2 X 14 = 28)



Time: 2 Hours

Course Code: 10SB51 VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

Residential & Autonomous – A Gurukula Institute of Life-Training Re-accredited (3rd Cycle) with 'A' Grade (CGPA 3.59 out of 4.00) by NAAC [Affiliated to Madurai Kamaraj University]

B.Sc. Comp. Sci. Degree (Semester) Examinations, November 2020 Part – IV : SBS : Fifth Semester : Paper – I

COMPETITIVE EXAMINATION FOR IT

Under CBCS – Credit 2

Max. Marks: 75

SECTION – A (REMEMBERING)

Answer ALL Ouestions: (75 X 1 = 75)Marks) 1) One digit number sometimes called A) Once B) Units C) Single Digit D) Number 2) 637849 this is a number Face value (8) = ?A) 800 B) 80 C) 8 D) 88 3) CB=5, DISCH=43 NEVER= A) 64 B) 65 C) 14 D) 48 4) A/2, B/4, C/6, D/8.??, ?? A) E/8, F/10 B) E/12, F/14 C) E/10, F/12 D) D/10, E/10 5) 637849 this is a number Place value (3) = ?A) 30000 B) 3000 C) 300 D) 30 6) 2, 5, 10, 17, 26, ??, 50, ?? A) 36, 65 B) 36, 63 C) 37, 66 D) 37, 65 7) HEART= @8531; FEAST= #8541; FARTHEST=? A) #541@831 B)@541#831C) #831@541 D)#531@841 8)9587-? =7429-4358 A) 6516 B) 6563 D) 6514 C) 6662 9) In a certain code language, WINDOW is coded as 452364, SHADE as 17839. Then HIDDEN is coded as? A) 763392 B) 753392 C) 765595 D) 756696 10) If C=3 and POLISH=79, then POINTER=? A) 98 B) 97 C) 96 D) 95 11) If \times stands for 'addition', \div stands for 'subtraction', + stands for 'multiplication' and-stands for 'division', then $20 \times 8 \div 8 - 4 + 2 = ?$ A) 80 B) 25 C) 24 D) 19 12) Given interchanges: Signs + and - , numbers 4 and 8. A) 4 + 8 - 12 = 12B) 4 - 8 + 12 = 0C) 8 + 4 - 12 = 2D) 8 - 4 + 12 = 813) If O means 'add to', J means 'multiply by', T means 'subtract from' and K means 'divide by' then 30 K 2 Q 3 J 6 T 5 = ?B) 18 D) 103 A) 28 C) 31 14) Find out the two signs to be interchanged for making following equation correct $5 + 3 \times 8 - 12 / 4 = 3$ A) + and -B) + and /C) + and x D) - and /15) Given interchanges: Signs + and x and numbers 4 and 5 A) $5 \times 4 + 20 = 40$ B) 5 x 4 + 20 = 85 C) $5 \times 4 + 20 = 104$ D) $5 \times 4 + 20 = 95$ 16) The L.C.M of number is 2, 4, 32, 8 find the value A) 32 B) 65 C) 60 D) 63 17) The L.C.M of two number is 12,30=?

A) 58 B) 60 D) 64 C) 62 18) The L.C.M of two number is 4, 16, 32=? A) 64 B) 60 C) 32 D) 30 19) The L.C.M of two variable is $3x^2yz$, $4x^3y^2z=?$ B) $3x^2y 4x^3y^2$ C) $7x^3yy^2z$ A) $34x^2zx^3z$ D) $12x^{3}y^{2}z$ 20) The L.C.M of two variable is $a^{m+1}, a^{m+2}, a^{m+4} = ?$ C) a^{m+1} D) $a^{m+2}a^{m+4}$ A) a^{m+4} **B**) a^{m+2} 21) $(489+375)^2 - (489-375)^2 = ?$ (489*375)A) 4 B) 5 C) 40 D) 52 22) $(963+476)^2 + (963-476)^2 = ?$ (963*476) A) 4 B) 5 C) 6 D) 2 23) The Multiplication of two number is 117*113=? A) 12321 B) 12231 C) 13221 D) 13220 24) The Multiplication of two number is 69*61=?B) 4201 C) 4205 A) 4207 D) 4209 25) What is $7 + 7 \div 7 + 7 \times 7 - 7 = ?$ A) 50 **B**) 42 C) 0 D) 57 26) 2√9025=? A) 85 B) 75 C) 95 D) 90 27) 2√1225=? A) 35 B) 30 C) 45 D) 25 28) $2\sqrt{2025}=?$ B) 30 C) 45 A) 35 D) 25 29) 7:12 is equivalent to A) 28:40 B) 42:71 C) 42:72 D) 72:42 30) A ratio equivalent to 3:7 is A) 9:21 B) 6:10 D) 18:49 C) 3:9 31) In a class there are 20 boys & 15 girls. The ratio of boys to girls are A) 4:3 B) 4:5 C) 3:9 D) 18:49 32) 77% of 64=? A) 47.28 C) 48.29 D) 49.27 B) 49.28 33) 28% of 450+45%280 A) 256 **B**) 252 C) 305 D) 352 34) 5% of 5% of Rs. 100 is A) Rs. 25 B) Rs. 0.50 C) Rs. 10 D) Rs. 0.25 35) What is 25% of 25% = B) 0.0625 D) 0.00625 A) 0.625 C) 0.6250 36) A man walks 5km east, turns left & walks another 5 km. Again he takes a left turn & walks 5km. Which direction on is he facing now? A) West B) East C) South D) North 37) If 'blue' means 'green', 'green' means 'white', 'white' means 'yellow', 'yellow' means 'black', 'black' means 'red' and 'red' means 'brown', that what is color of 'Board'? A) Yellow B) Green C) Red D) Black 38) Ram is the brother of Arjun. Sana is the sister of Tina. Arjun is the son of Sana. How is Ram related to Sana? A) Brother B) Uncle C) Son D) Father 39) Exercise is to gym as eating is to A) Food B) Dieting C) Fitness D) Restaurant 40) Daisy:: Flower:: Plant

Bungalow:: House:: ?? A) Building B) Cottage C) Apartment D) City 41) Three numbers are in the ratio of 3:4:5 and their LCM is 2400, Their HCF is, A) 60 B) 80 C) 20 D) 40 42) The ratio of two numbers is 3:4 and their HCF is 4, their LCM is: C) 30 D) 38 A) 40 **B)** 48 43) Find the HCF of 36 and 84 A) 12 B) 36 C) 252 D) 20 44) Which of the following fraction is the largest? A) 7/8 B) 13/16 C) 31/40 D) 63/80 45) If 125% of X if 100, then X is: A) 8 B) 80 C) 2 D) 20 46) The square root of $(7+3\sqrt{5})$ $(7-3\sqrt{5})$ is: C) -2 A) 2 **B**) 4 D) -4 47) In the following question, select the odd word from the given alternatives. B) Buffalo C) Horse D) Goat A) Cow 48) In the following question, select the odd word pair from the given alternatives. A) Pen B) Marker C) Highlighter D) Paper 49) Select the odd number from the given alternatives. A) 15 B) 25 C) 30 D) 45 50) Select the one which is different from the other three responses: A) Cancer B) Health C) Cholera D) AIDS 51) In the question, two statements are given, followed by two conclusions, I and II. You have to decide which of the given conclusions, if any, follows from the given statements. Statement: 1: All clocks are watches. 2: Some clocks are alarm. Conclusion: I: Some alarm are watches. II: All watches are alarm. A) Only conclusion (I) follows B) Only conclusion (II) follows C) Both conclusion follows D) Neither conclusion (I) nor conclusion (II) follows 52) In the question, two statements are given, followed by two conclusions, I and II. You have to decide which of the given conclusions, if any, follows from the given statements. Statements: No cities are countries. No countries are villages. Conclusions: I. some countries are city. II. No villages are city. A) Only conclusion (I) follows B) Only conclusion (II) follows C) Both conclusion follows D) Neither conclusion (I) nor conclusion (II) follows 53) In the question, two statements are given, followed by two conclusions, I, II and III. You have to decide which of the given conclusions, if any, follows from the given statements. Statements: All cups are pencils. Some pencils are pens. Conclusions: I. some pencils are cups.

II. No pencil are cups. III. Some cups are pens. A) Only conclusion (I) follows B) Only conclusion (III) follows C) Only conclusion I and II follows D) Only conclusion II and III follows 54) In the question, two statements are given, followed by two conclusions, I to IV. You have to decide which of the given conclusions, if any, follows from the given statements. Statements: Some Trees are Papers. All Paper are Inks Some Ink are Blue. Conclusion: I. Some Inks are Tress II. Some Papers are Trees. III. Some blue are Paper IV. Some blue are Ink. A) Only conclusion I follows B) Only conclusion I and II and III follows C) Only conclusion I and II follows D) Only conclusion I and II and IV follows 55) Arrange the words given below in a meaningful sequence. II. Essay III. Sentence IV. Paragraph I. Word V. Letter A) 3,1,5,2,4 B) 1.5.3.4.2 C) 1.2.5.3.4 D) 3,5,1,2,4 56) Data in a computer can be represented as A) Hexa-Decimal B) Decimal D) All of these C) Binary 57) The Second generation computers manufactured by B) Transistors A) Vacuum tubes C) Microprocessor D) IC 58) Arranging of data in a logical sequence called is A) Sorting B) Classifying C) Reporting D) Summarizing 59) M-S word is an example of _____ B) Application S/W A) System S/W C) OS D) Translating program 60) Operating System is a ____ A) System S/W B) Application S/W C) N/W S/W D) Translating program 61) The Octal number 23 convert to binary number is A) 111110 B) 110011 C) 010011 D) 110001 62) The Hexa number 5E2 convert to binary number is B) 100110111110 A) 100110101111 C) 101111101010 D) 001111100010 63) The Decimal number system consists of the A) 0-7 B) 0-8 C) 0-9 D) 0-10 64) Which of the following are the two main components of the CPU? A) Control unit and Registers B) Registers and Main memory C) Control unit and ALU D) ALU and Bus 65) Who is the creator of the PASCAL language? A) Nicklaus Wirth C) Donald Knuth B) Dijkstra D) Basic Pascal 66) Which of the following is not currently a topic in computer science? A) Speech recognition B) Artificial intelligence C) Thermodynamics D) Multiprocessing 67) A computer program that converts assembly language to machine language is A) Compiler B) Comparator C) Interpreter D) Assembler 68) We can draw a PAR CHART in a A) Excel B) Power point C) Access D) Word 69) Who is father of C Language? A) Bjarne Stroustrup B) James A. Gosling C) Dennis Ritchie D) Dr. E.F.Codd

70) Which of the following is not the user file extension? A).ppt B).xls C).sys D).doc 71) What is the default file extension created by notepad? A).doc B).html C).txt D).tiff 72) Arrange the following words in a logical sequence. 1. Application 2. Selection 3. Exam 4. Interview 5. Advertisement A) 1, 2, 3, 5, 4 B) 5, 1, 3, 4, 2 C) 5, 3, 1, 4, 2 D) 4, 5, 1, 2, 3 73) A man walks 1 km to East and then he turns to South and walks 5 km. Again he turns to East and walks 2 km. After this he turns to North and walks 9 km. Now, how far is he from his starting point? A) 3 km B) 4 km C) 5 km D) 7 km 74) Mohan was facing east. He walked 4 km forward and then after turning to his right walked 3 km. Again he turned to his right and walked 4 km. After this he turned back. Which direction was he facing at that time? A) East B) West C) North D) South 75) Four words are given, out of which three are same in a certain way while the rest one is different. Find out the different one. B) Triangle C) Area D) Rectangle A) Square

*****BEST OF LUCK*****