VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234

DEPARTMENT OF COMPUTER SCIENCE			
Course Code: 10NE11	**Programme:**	**B.A., & B.Sc.,**	**CIA:** I Test
Date: 10.10.2019			**Semester:** I
Time: 2Hrs	**Year:**	**I**	**Maximum:** 50 Marks
Course Title:	**INTRODUCTION TO INFORMATION TECHNOLOGY**		

SECTION-A

ANSWER ALL QUESTIONS **1*10=10**

1) WWW means CO1
A. World Wide Wan B. World Wide Web. C. World Wan Web D. World van Web.

2) Website is a collection of. CO1
A. audio files. B. video file C. image file. D. html file.

3) 82. WAN stands for CO2
A. wire and network B. wire accessible network
C. widely accessible network D. wide area network.

4) DOM is an acronym for _____. CO2
A. document object model. B. document object metrics.
C. digital object model. D. digital object metrics.

5) WWW uses the following protocol? CO3
A. http. B. ftp. C. www D. SMTP.

6) WAN stands for CO3
A. wire and network B. wire accessible network
C. widely accessible network D. wide area network.

7) The URL means CO4
A. use resource locator. B. undefined resource locator
C. uniform resource locator. D. user defined locator.

8) The web page means CO4
A. plain page. B. hyperlink C. designed page D. pictures

9) WLAN stands for. CO5
A. Wrap Area Network. B. Wide Area Network
C. Wide Array Net. D. Wireless Local Area Network

10. Website is a collection of. CO5
A. audio files. B. video file C. image file. D. html file.

SECTION-B

Answer any FIVE questions **(5X2=10)**

11. Expand HDD and USB. CO1
12. Type of memory in computer. CO1
13. List out the any two web browsers? CO2
14. What is peripherals? CO3
15. What is Computer? CO4
16. Define hardware and software. CO4
17. Expand TCP and IP. CO5

SECTION-C

Answer any THREE questions **(3X6=18)**

18) Briefly discuss about the input device and output device CO1
19) Explain about the computer with types. CO2
20) Briefly explain about computer network with types. CO3
21) Explain about the memory with types. CO4
22) Discuss briefly about storage media in a computer system? CO5

SECTION-D

Answer any one **(1X12=12)**

23) Explain the different types of operating system? CO1
24) Explain the usage of IT in Different fields. CO3

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VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234

DEPARTMENT OF COMPUTER SCIENCE			
Course Code: 10SB31	**Programme:**	**B.Sc.,**	**CIA:** III Test
Date: 08.10.2019	**Major:**	**COMP.SCIENCE**	**Semester:** III
Time: 1Hr	**Year:**	**II**	**Maximum:** 25 Marks
Course Title:	**OPERATING SYSTEM**		

SECTION-A

Answer ALL questions: **(5X1=5)**

1. UCB expand for _____ **CO4**

a) Unit Control Block b) Unix cell Block c) Uniform Control Block d) None

2. Arm position is called as a _____ **CO4**

a) Cylinder b) Disk c) Tape d) Record

3. Devices,channels and control units are typically called the_____ **CO4**

A)Controller B)Traffic controller C)Process controller D)I/O Traffic controller

4. The _____ system is concerned with mapping the structure **CO5**

a) Symbolic fine b) Physical file c) Basic file d) Logical file

5. Information management sometimes referred to the ____ **CO5**

a) OS b) Database c) File system d) Contemporary System

SECTION-B

Answer any TWO questions **(2X2=4)**

6. What is mean by storage device? **CO4**

7. Define I/O Traffic controller**?** **CO4**

8. Define a file system? **CO5**

9. What is a sequence single key record? **CO5**

SECTION-C

Answer any ONE question **(1X6=6)**

10. Explain the device management system. **CO4**

11. Write a short notes an simple file system. **CO5**

SECTION-D

Answer any ONE question **(1X10=10)**

12. Discuss about the channels and control units. **CO4**

13. Explain about the logical file system. **CO5**

VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234

DEPARTMENT OF COMPUTER SCIENCE			
Course Code: 10SB51	**Programme:**	**B.Sc.,**	**CIA:** III Test
Date: 08.10.2019	**Major:**	**COMP.SCIENCE**	**Semester:** V
Time: 1Hr	**Year:**	**III**	**Maximum:** 50 Marks
Course Title:	**COMPETITIVE EXAM FOR IT**		

Answer the all questions

1. Arrange the following words in a meaningful order:
1. Reading 2. Composing
3. Writing 4. Printing
a) 1, 3, 4, 2 b) 2, 3, 4, 1
c) 3, 1, 2, 4 d) 3, 2, 4, 1

2. 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

3. Arrange the following words in a meaningful order.
1. Family 2. Community 3. Member
4. Locality 5. Country
a) 3, 1, 2, 4, 5 b) 3, 1, 2, 5, 4
c) 3, 1, 4, 2, 5 d) 3, 1, 4, 5, 2

4. Arrange the following words in a meaningful order.
1. Andhra Pradesh 2. Universe 3.Tirupati
4. World 5. India
a) 3, 1, 4, 5, 2 b) 1, 3, 5, 4, 2
c) 3, 1, 5, 4, 2 d) 3, 1, 2, 4, 5

5. Arrange the following words in a logical sequence.
1. Gold 2. Iron 3. Sand
4. Platinum 5. Diamond
a) 2, 4, 3, 5, 1 b) 3, 2, 1, 5, 4
c) 4, 5, 1, 3, 2 d) 5, 4, 3, 2, 1

6. Arrange the following words in a logical sequence.
1. Trillion 2. Thousand 3. Billion
4. Hundred 5. Million
a) 1, 2, 4, 3, 5 b) 1, 5, 3, 2, 4
c) 4, 2, 3, 5, 1 d) 4, 2, 5, 3, 1

7.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

8. If South-East becomes north and south becomes North-East and all the rest directions are changed in the same manner, the will be the direction for West?
a) North-East b) North-West
c) South-East d) South-West

9. 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

10. A direction pole was situated on the crossing. Due to an accident the pole turned in such a manner that the pointer which was showing East, started showing South. One traveler went to wrong direction thinking to be west. In what direction actually he was traveling?
a) East b) South-West c) North d) South

11. One morning Udai and Vishal were talking to each other face to face at a crossing. If Vishal's shadow was exactly to the left of Udai, which direction was Udai facing?
a) East b) West c) North d) South

12. You should save your computer from?
a) Viruses b) Time bombs
c) Worms d) All of the above

13. Which is the layer of a computer system between the hardware and the user program
a) Operating environment b) Operating system
c) System environment d) None

14. The operating system is the most common type of _____Software
a) Communication b) Application
c) System d) Word processing software

15. What is the default file extension created by notepad?
a) .doc b) .html c) .txt d) .tiff

16. Which of the following is not the user file extension?
a) .ppt b) .xls c) .sys d) .doc

17. What is right way to initialize array?
a) int num[6] = { 2, 4, 12, 5, 45, 5 };
b) int n{} = { 2, 4, 12, 5, 45, 5 };
c) int n{6} = { 2, 4, 12 };
d) int n(6) = { 2, 4, 12, 5, 45, 5 };

18. Who is father of C Language?
a) Bjarne Stroustrup b)James A. Gosling
c)Dennis Ritchie d)Dr. E.F. Codd

19. In Java arrays are
a) objects b)object references
c)primitive data type d)None of the above

20. Which one of the following is a valid statement?
a) char[] c = new char();
b) char[] c = new char[5];
c) char[] c = new char(4);
d) char[] c = new char[];

21. The output of the following fraction of code is:
```
public class Test{
public static void main(String args[]){
String s1 = new String("Hello");
String s2 = new String("Hellow");
System.out.println(s1 = s2);}}
```
a) Hello b) Hellow
c)Compilation error d)Throws an exception

22. Select from among the following character escape code which is not available in Java.
a)\t b)\a c)\\b d)\\v

23. What will be the output?
```
if(1 + 1 + 1 + 1 + 1 == 5){
System.out.print("TRUE");}
else{
System.out.print("FLASE");}
```
a)TRUE b)FALSE
c)Compiler Error d)None of these

24. System class is defined in _____
a) java.util package b)java.lang package
c)java.io package d)java.awt package

25. Interest : Money lender :: Salary : ?
a) Employees b)Zamindar
c)Workers d)Prisoners

26. 6 : 36 :: 9 : ?
a)81 b)98 c)42 d)56

27. 6 : 72 :: 8 : ?
a)94 b)96 c)74 d)92

28. Mother : Daughter :: Father : ?
a)Son b)Brother c)Boy d)Sister

29.Moon : Satellite :: Earth : ?
a)Sun b)Solar System
c)Planet d)Asteroid

30.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.
a)Teacher b)Principal c)student d)Lecturer

31.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.
a)Square b)Triangle c)Area d)Rectangle

32.4, 7, 12, 19, 28, ?
a)49 b)36 c)30 d)39

33. 28% of 450+45%280
a)256 b)252 c)305 d)352

34.The L.C.M of two number is 4,16,32=?
A) 64 B) 60 C) 32 D)30

35. The L.C.M of two variable is x^3y^2 ,xyz=?
a) xy^2z b) x^3y^2zc c) x^3y^2 d) x^3yz

36. The hexa number 9AF convert to binary number is
a)100110101111 b) 100111101101
c) 100010001011 d) 100100111100

37.The L.C.M of two number is 26,26,26=?
a) 64 b) 26 c) 32 d)30

38.The Multiplication of two number is 117*113=?
a) 12321 b) 12231 c) 13221 d)13220

39.The L.C.M of two variable is a^{m+1},a^{m+2},a^{m+4}=?
a) a^{m+4} b) a^{m+2}
c) a^{m+1} d) $a^{m+2}a^{m+4}$

40. 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

41. Exception generated in try block is caught in _____ block.
a)catch b)throw c)throws d)finally

42. Java is a _____ language.
a)weakly typed b)strongly typed
c)moderate typed d)None of these

43.How many primitive data types are there in Java?
a)6 b)7 c)8 d)9

44.Size of int in Java is
a)16 bit b)32 bit c)64 bit
d)Depends on execution environment

45.What would be the output of the following fraction of code ?
```
int Integer = 34 ;
char String = 'S' ;
System.out.print( Integer ) ;
System.out.print ( String ) ;
```
a)Throws exception. b)34
c)S d)34 S

46. Pointing to a photograph of a boy Suresh said, "He is the son of the only son of my mother." How is Suresh related to that boy?
a)Brother b)Uncle c)Cousin d)Father

47. If A is the brother of B; B is the sister of C; and C is the father of D, how D is related to A?
a)Brother b)Sister
c)Nephew d)Cannot be determined

48. Introducing a boy , a girl said, "He is the son of the daughter of the father of my uncle." How is the boy related to the girl?
a)Brother b)Nephew
c)Uncle d)Son in law

49. Pointing to a Photograph Latha says, "He is the son of the only son of my grandfather." How is the man in the Photograph related to Latha?
a)Brother b)Uncle c)Cousin d)Data is inadequate

50. Pointing a Photograph X said to his friend Y, "She is the only daughter of the father of my mother." How X is related to the person of Photograph?
a) Daughter b)Son
c)Nephew d)Cannot be decided

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DEPARTMENT OF COMPUTER SCIENCE			
Course Code: 10AT11	**Programme:**	**B.Sc.,**	**CIA:** III Test
Date: 14.10.2019	**Major:**	**COMP.SCIENCE**	**Semester:** I
Time: 2Hrs	**Year:**	**I**	**Maximum:** 50 Marks
Course Title:	**DISCRETE MATHEMATICS**		

SECTION-A

Answer all questions **(10X1=10)**

1. _____ definitions can be used to solve counting problems **CO4**
A. Recursion B. Recursive C. Recurrence D. Function
2. _____ relations occur constantly in practical applications, analysis of algorithms, error correcting code. **CO4**
A. Recursion B. Recursive C. Recurrence D. Function
3. _____is the process of inferring the truth form a general statement for particular cases. **CO4**
A. Mathematical Induction B. Recursive C. Recurrence D. Function
4. 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_____ **CO4**
A. Factorial B. Fibonacci C. Recurrence D. Function
5. Find the generating function for the sequence 1, 1, 1,1,1,1 is **CO4**
A. $z^6 – 1/z-1$ B. $z^5 – 1/z-1$ C. $z^2 – 1/z-1$ D. $z – 1/z^6-1$
6. Find the generating function for the infinite sequence 1, 3, 9, 27….Where 3 is a fixed constant **CO4**
A. 1/1-3z B.1/1-2z C. 1-3z D.3z-1
7. Each loop counting has _____ edges. **CO5**
A. 1 B. 2 C. 3 D. 4
8. An edge with identical ends is called _____. **CO5**
A. complete graph B. bipartite graph C. loops D. link
9. An edge with same 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

Answer any FIVE questions **(5X2=10)**

11) Define Function & relation **CO1**
12) Define Matrix **CO2**
13) Define Complete Graph **CO5**
14) Write the types of connectedness in directed graph **CO5**
15) Write about Fibonacci number **CO4**
16) Define Mathematical Induction **CO4**
17) Write about truth tables with example **CO3**

SECTION-C

Answer any THREE questions **(3X6=18)**

18) Show that the matrix $A\begin{pmatrix} 2 & -1 & 1 \\ -1 & 2 & -1 \\ 1 & -1 & 2 \end{pmatrix}$ satisfies the equation $A^3 – 6A^2+9A-4I =0$ and hence find A^{-1} **CO2**
19) Obtain PDNF and PCNF for the following $Q \wedge (PV7Q)$. **CO3**
20) Find the recurrence relation, satisfying $y^n = A(3)^n+B(-2)^n$ **CO4**
21) Find the generating function for the infinite sequence 1, α, α^2, α^3……. Where α is a fixed constant **CO4**
22) 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. **CO1**

SECTION-D

Answer any one **(1X12=12)**

23) Explain about Infix, prefix and postfix notation & Tree Traversals with example **CO5**
24) Using generating function, solve the difference equation $Y_{n+2} -6Y_{n+1} + 8Y_n=0$, $Y_0 =1$, $Y_1=4$. **CO4**

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DEPARTMENT OF COMPUTER SCIENCE			
Course Code: 10AT31	**Programme:**	**B.Sc.,**	**CIA:** III Test
Date: 14.10.2019	**Major:**	**COMP.SCIENCE**	**Semester:** III
Time: 2Hrs	**Year:**	**II**	**Maximum:** 50 Marks
Course Title:	**OPERATIONS RESEARCH**		

SECTION-A

Answer all questions **(10X1=10)**

1. The objective function for a L.P model is $3X_1+2X_2$, if $X_1=20$ and $X_2=30$, what is the value of the objective function? **CO4**

A) 0 B) 50 C) 60 D) 120

2. The basic solution is said to be _____ if no one of basic variable is zero **CO4**

A) Non-degenerate B) feasible C) degenerate D) non-feasible

3. In simplex optimal table zj-cj=0 then the solution is **CO4**

a) Optimal b) alternative solution c) unbounded solution d) none

4. To formulate simplex problem we introduce slack and surplus variables for **CO4**

a) Only equality b) only inequality c) both d) none

5. Linear programming involves more than two variables can be solved by **CO4**

a) Simplex method b) Big-M method c) both d) graphical Method

6. A variable which does not appear in the basis variable (B) column of simplex table is

A. never equal to zero B. always equal to zero C. called basic variable

D. None of these **CO5**

7. To formulate a problem for solution by the simplex method, we must add artificial Variable to **CO5**

A. only equality constraints B. only > constraints C. both A & B D. None of these

8. If all xij values in the incoming variable column of the simplex table are negative, then

A. solution is unbounded B. there are multiple solution C. there exist no solution

D. None of these **CO5**

9. If an artificial variable is present in the basic variable column of optimal simplex table,

Then the solution is **CO5**

A. unbounded B. infeasible C. optimal D. None of these

10. The maximization or minimization of a quantity is the **CO5**

a. goal of management science. b. decision for decision analysis.

c. constraint of operations research. d. objective of linear programming.

SECTION-B

Answer any FIVE questions **(5X2=10)**

11. Define LPP **CO5**

12. Define feasible region **CO4**

13. Define unbounded solution **CO4**

14. Define infeasible solution **CO4**

15. Write Simplex Table **CO5**

16. How many variables are need to find graphical solution? **CO4**

17. Define slack and surplus variables **CO5**

SECTION-C

Answer any THREE questions **(3X6=18)**

18. Express the following LPP standard form and matrix form **CO5**

Maximum $Z= 25x_1 + 20x_2$

Subject to

$16x_1 + 12x_2 \leq 100$

$8x_1 + 16x_2 \leq 800$

And $x_1, x_2 \geq 0$

19. Write graphical method procedure **CO4**

20. Express the following LPP canonical form and standard form **CO5**

Maximize $Z=4x_1+2x_2+6x_3$

Subject to

$2x_1+3x_2+2x_3>=6$

$3x_1+4x_2=8$

$6x_1-4x_2+x_3<=10$ and $x_1, x_2>=0$

21. Use graphical methods to solve the LPP **CO4**

Maximum $Z= 5x_1 + 8x2$

Subject to

$15x_1 +10 x_2 \leq 180$

$10x_1 + 20x_2 \leq 200$

$15x_1 + 20x_2 \leq 210$

And $x_1, x_2 \geq 0$

22. Explain simplex algorithm **CO5**

SECTION-D

Answer any ONE **(1X12=12)**

23. Use Simplex method to solve following LPP **CO5**

Max $z= 4x_1+10x_2$

Subject to

$2x_1+x_2 \leq 50$

$2x_1+5x_2 \leq 100$

$2x_1+3x_2 \leq 90$ and $x_1, x_2 \geq 0$

24. Solve the following transportation **CO3**

	destination				
source	**a**	**b**	**c**	**d**	**supply**
1	21	16	25	13	11
2	17	18	14	23	13
3	32	27	18	41	19
Demand	6	10	12	15	

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DEPARTMENT OF COMPUTER SCIENCE			
Course Code: 10CT11	**Programme:**	**B.Sc.,**	**CIA:** III Test
Date: 09.10.2019	**Major:**	**COMP.SCIENCE**	**Semester:** I
Time: 2Hrs	**Year:**	**I**	**Maximum:** 50 Marks
Course Title:	**PROGRAMMING IN C**		

SECTION-A

Answer all questions **(10X1=10)**

1. An external variable is one_____. **CO4**

A. which is globally accessible by all functions. B. which is declared outside the body of any function.
C. which resides in the memory till the end of the program. D. which is locally accessible by all functions.

2. If a storage class is not mentioned in the declaration then default storage class is_____.

A. automatic. B. static. C. external. D. register. **CO4**

3. Identify the most appropriate sentence to describe the unions_____. **CO5**

A. unions contain members of different data types which share the same storage area in memory.
B. unions are like structures. C. unions are less frequently used in the program.
D. unions are used for set operations

4. The member variable of structure is accessed by using_____. **CO4**

A. dot (.) operator. B. arrow (->) operator. C. asterisk * operator. D. ampersand & operator.

5. The structure combines variables of_____. **CO4**

A. similar data types. B. dissimilar data types. C. unsigned data types. D. signed data types.

6. The number of digits present after decimal in float is_____. **CO5**

A. 4. B. 1. C. 16. D. 6.

7. The EOF is equivalent to_____. **CO5**

A. -1. B. 0. C. 1. D. {}.

8. The goto statement transfers the control _____. **CO5**

A. any place in the program. B. exit C. counter loop D. file.

9. Break statement encountered _____ **CO5**

A. immediate exit. B. continue the process. C. counter loop D. all.

10. All standard C library <math.h> functions return what data type? **CO5**

A. decimal. B. float. C. double. D. int.

SECTION-B

Answer any FIVE questions **(5X2=10)**

11. Define storage class **CO3**
12. How to access structure's data members **CO4**
13. What are the types of function? **CO4**
14. Define Pointers **CO5**
15. Define File **CO5**
16. Define Recursion **CO4**
17. What are the rules of creating structure? **CO4**

SECTION-C

Answer any THREE questions **(3X6=18)**

18. Explain function with arguments but no return value with example **CO3**
19. Define union Explain how to create union and access union members with example **CO3**
20. Explain pointers, how to declare pointer variable and access the variable of address **CO5**
21. Explain File Functions any 6 **CO5**
22. Differentiate call by value and call by reference with example **CO4**

SECTION-D

Answer any ONE **(1X12=12)**

23. Write a factorial program using recursive function **CO5**
24. Differentiate array, structure and union with example **CO4**

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DEPARTMENT OF COMPUTER SCIENCE			
Course Code: 10CT12	**Programme:**	**B.Sc.,**	**CIA:** III Test
Date: 12.10.2019	**Major:**	**COMP.SCIENCE**	**Semester:** I
Time: 2Hrs	**Year:**	**I**	**Maximum:** 50 Marks
Course Title:	**DIGITAL PRICNCIPLES AND COMPUTER ORGANIZATION**		

SECTION-A

Answer all questions **(10X1=10)**

1. _____ operand is the contents of a CPU register. **CO4**
   a)Address mode b)Register mode c)Absolute mode d)Immediate mode
2. The control signals sent to the memory are_____ **CO4**
   a)Memory read request b)Memory write request
   c)Memory control request d)Both a&b
3. PLA consists of an array of ____ gates followed by an array of _____ gates. **CO4**
   a)OR,AND b)NOR,NAND c)AND,OR d)NAND,NOR
4. DMA expand for _____ **CO4**
   a)Direct Memory Address b)Direct Memory Access
   c)Direct Message Access d)Direct Message Address
5. The DMA devices that is allowed to initiate data transfer on the bus is called the____ **CO4**
   a)Bus driver b) Bus arbiter c)Bus grant d) Bus master
6 . The 8085 architecture device has _____ pins. **CO5**
   a)40 b)41 c)42 d)43
7. The accumulator is also identified as _____ **CO5**
   a)Register AC b)Register c)AC d)Register A
8 Increment the contents of a register equivalent instruction. **CO5**
   a)INR I b)INR R c)INC I d)INC R
9. Which of the following is not a BRANCH instruction. ` **CO5**
   a)CMP 16 BIT ADDRESS b)JMP 16 BIT ADDRESS
   c)JC 16 BIT ADDRESS d)CALL 16 BIT ADDRESS
10. LED stands for _____ **CO5**
   a)Lighting Emitted Display b)Light Embedded Diodes
   c)Light Emitted Diodes d)Lighted Emitted Display

SECTION-B

Answer any FIVE questions **(5X2=10)**

11. Write a Indirect Addressing Mode. **CO4**
12. Expands for the (i) MAR (ii)MDR (iii) MFC **CO4**
13. What is Micro Program Control? **CO4**
14. What is Bus Master? **CO4**
15. What is Microprocessor? **CO5**
16. Define 8085 Programming Model. **CO5**
17. Define Microprocessor Functions. **CO5**

SECTION-C

Answer any THREE questions **(3X6=18)**

18. Write a short notes on Addressing Modes. **CO4**
19. Explain about the Hardwired Control with neat sketch. **CO4**
20. Discuss about the Architecture of Microprocessor. **CO5**
21. Explain the 8085 Pin Function. **CO5**
22. Write short notes on 8085 Instruction Set. **CO5**

SECTION-D

Answer any ONE question. **(1X12=12)**

23. Explain about the DMA with neat diagram. **CO4**
24. Discuss about the 8085 Architecture. **CO5**

VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234

DEPARTMENT OF COMPUTER SCIENCE			
Course Code: 10CT31	**Programme:**	**B.Sc.,**	**CIA:** III Test
Date: 09.10.2019	**Major:**	**COMP.SCIENCE**	**Semester:** III
Time: 2Hrs	**Year:**	**II**	**Maximum:** 50 Marks
Course Title:	**COMPUTER ORGANISATION WITH PARALLEL PROCESSING**		

SECTION-A **(10X1=10)**

Answer all questions

1. The _____ of the computer consists of physical entity of the device. CO1
A. software. B. middleware. C. hardware. D. firmware.

2. ____ directive is used to specify and assign the memory required for the block of code. CO1
A. Allocate B. Assign C. Set D. Reserve

3. A _____ circuit is an interconnection of flip-flops and gates. CO2
A. combinational. B. arithmetic. C. shift. D. sequential.

4. The assembler stores all the names and their corresponding values in _____ CO2
A. Special purpose Register B. Symbol Table
C. Value map Set D. None of the mentioned

5. _____ is a binary code of a group of elements consisting of 10 decimal digits, the 26 letters of the alphabet and a certain number of special symbols such as $. CO3
A. Alphanumeric code. B. Decimal code. C. Error detection code. D. Reflected code.

6. RAM is _____ its contents are destroyed when power is turned off. CO3
A. non volatile. B. permanent. C. volatile. D. initial.

7. Each stage in pipelining should be completed within ____ cycle. CO4
A. 1 B. 2 C. 3 D. 4

8. In super-scalar processors, _____ mode of execution is used. CO4
a) In-order b) Post order c) Out of order d) None of the mentioned

9. Out of the following which is not a CISC machine. CO5
a) IBM 370/168 b) VAX 11/780 c) Intel 80486 d) Motorola A56710. _____ method is used in centralized systems to perform out of order execution. CO5
a) Scorecard b) Score boarding c) Optimizing d) Redundancy

SECTION-B

Answer any FIVE questions **(5X2=10)**

11. What is parallel processing? CO4
12. Define pipeline computers? CO4
13. Writeabout the multi-processor system? CO4
14. Write the any four parallel processing application? CO4
15. Explain SIMD. CO5
16. Definemasking. CO5
17. What is network? CO5

SECTION-C

Answer any THREE questions **(3X6=18)**

18. Discuss about the Parallel computer structures? CO4
19. Explain the parallel processing applications? CO4
20. Discuss about the SIMD computer organization? CO5
21. Briefly explain mesh connected iliac network. CO5
22. Explain the parallel sorting on array processors? CO5

SECTION-D

Answer any ONE **(1X12=12)**

23. Discuss the parallel processing mechanism? CO4
24. Explain the SIMD interconnection networks CO5
(i) Cub interconnection network
(ii)Shuffle exchange and omega network

VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST - 625234

DEPARTMENT OF COMPUTER SCIENCE			
Course Code: 10CT32	**Programme:**	**B.Sc.,**	**CIA:** III Test
Date: 12.10.2019	**Major:**	**COMP.SCIENCE**	**Semester:** III
Time: 2Hrs	**Year:**	**II**	**Maximum:** 50 Marks
Course Title:	**COMPUTER GRAPHICS**		

SECTION – A (10 x 1 = 10)

ANSWER THE FOLLOWING:

1. A translation is applied to an object by ____ **CO3**
   a) Repositioning object along a straight line path b) Repositioningobject along a circular path
   c) both a and b d) none of these
2. Translation of a two dimensional point can be done by adding ____
   a) Translation distancesb) translation difference c) translation points d) repositioning **CO3**
3. The translation distances (dx, dy) is called as ____
   a) Translation vector b) shift vectorc) both a and b d) Repositioning of vector **CO3**
4. In 2D-translation, a point (x,y) can move to the new position (x^1,y^1) by using the equation____
   a) x^1= x + dx and y^1= y + dx b) x^1= x + dx and y^1= y + dy
   c)X^1= x + dy and Y^1= y + dx d) X^1= x + dx and Y^1= y + dy **CO3**
5. ____ is a rigid body transformation that moves objects without deformation
   a) Rotation b) Scaling c) Translation d) all the above **CO3**
6. A straight line segment is translated by applying the transformation equation _____
   a) P^1= P + T b) Dx and Dy c) P^1= P + P d) both a and c **CO3**
7. A world coordinate are is selected for display is called _____
   a) Viewport b) transformation c) Rasterization d) window point **CO4**
8. An area on a display device to which a window is a mapped is called a _____
   a) Window b) graphics c) Animation d) View port **CO4**
9. Mapping selected ports of a scene in normalized coordinates to different video monitors is called_____
   a) Rotation b) Reflection c) workstation transformation d) Shear transformation **CO4**
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 **CO4**

SECTION – B (5 x 2 = 10)

ANSWER ANY FIVE OF THE FOLLOWING:

11. Give an example for rigid body transformation? **CO3**
12. What is meant by translation distance? **CO3**
13. Define differential scaling? **CO3**
14. Define Reflection? **CO3**
15. Distinguish between fixed point scaling and differential scaling? **CO4**
16. Define shear? **CO4**
17. Give the uses of clipping? **CO4**

SECTION – C (3 x 6 = 18)

ANSWER ANY THREE OF THE FOLLOWING:

18. Brief a note on conic sections? **CO3**
19. Summarize a note Raster method transformations? **CO3**
20. Critically analyze Scaling and its types? **CO3**
21. Brief a note on2D viewing pipeline? **CO4**
22. Brief a note on Window-To-Viewport coordinate Transformation? **CO4**

SECTION – D (1 x 12 = 12)

ANSWER ANY ONE OF THE FOLLOWING:

23. Compare and criticize the types of 2D transformations? **CO3**
24. Explain the working Clipping and its typeswith illustrations **CO4**

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DEPARTMENT OF COMPUTER SCIENCE			
Course Code: 10CT51	**Programme:**	**B.Sc.,**	**CIA:** III Test
Date: 10.10.2019	**Major:**	**COMP.SCIENCE**	**Semester:** V
Time: 2Hrs	**Year:**	**III**	**Maximum:** 50 Marks
Course Title:	**COMPUTER NETWORKS**		

SECTION – A (10 x 1 = 10)

ANSWER ALL THE QUESTIONS:

1. 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
2. In signaling scheme, the bit error rate can be reduced by _____
   a) Increasing the bandwidth b) Decreasing the bandwidth c) increasing data rate d) increasing baudrate
3. In a real life network, datalink protocols are implemented as ___
   a) Unidirectional b) bi directional c) omni directional d) directional
4. Function of datalink layer control includes ____
   a) Framing b) Flow control c) Error Control d) All of these
5. Whenever a sender's datalink layer encounters five consecutive 1s in the data, it automatically stuffs__
   a) 0 bit b) 2 bits c) 4 bytes d) 1 byte
6. An n-bit unit containing data and check bits is referred as ___
   a) Frame b) Packet c) Codeword d) Parity bit
7. The number of bit position in which two codewords differ is called the _____
   a) Parity bit b) Frame headerc) Packet Id d) Hamming distance
8. Which protocolthe sender sends one frame and waits for an acknowledgement before sending is called _ a) Unrestricted simplex protocol b) simplex stop-and-wait protocol c) Sliding protocold) Sliding window protocol
9. The technique of temporarily delaying outgoing acknowledgements and hooking onto the next outgoing frame is called ___ a) Sliding window b) Piggybacking c) Framing d) Switching
10. ____ is a process of forwarding the packets from the source to the destination using a routing table
    a) Switching b) Framing c) Routing d) Fragmentation

SECTION – B (5 x 2 = 10)

ANSWER ANY FIVE OF THE FOLLOWING:

11. Define framing?
12. List the types of services provided by the data link layer?
13. What is meant by Byte Stuffing?
14. Define Piggybacking?
15. What is meant by Cyclic Redundancy Check?
16. Define Hamming Distance?
17. List the type of services provided by the Network Layer?

SECTION – C (3 x 6 = 18)

ANSWER ANY THREE OF THE FOLLOWING

18. Brief a note on the design issues in Data link layer?
19. Write a summary Simplex Stop-and Wait Protocol?
20. Identify the types of Error Detection Codes?
21. Compare the characteristics of Data link layer and Network layer?
22. Explain the characteristics IP Addresses and its types?

SECTION – D (1 x 12 = 12)

ANSWER ANY ONE OF THE FOLLOWING

23. Enumerate on the characteristics elementary datalink protocols?
24. Analyze the working of Sliding window protocol?

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DEPARTMENT OF COMPUTER SCIENCE			
Course Code: 10CT52	**Programme:**	**B.Sc.,**	**CIA:** III Test
Date: 11.10.2019	**Major:**	**COMP.SCIENCE**	**Semester:** V
Time: 2Hrs	**Year:**	**III**	**Maximum:** 50 Marks
Course Title:	**JAVA PROGRAMMING**		

SECTION- A

(Answer all the Questions) **(1*10=10)**

1. _____ is at the top of the exception class hierarchy.
   A. try. B. throwable. C. exception class. D. catch.
2. In java thread to thread communication is called _____.
   A. passing. B. sending. C. messaging. D. calling.
3. _____ is a small unit of a process.
   A. method. B. thread. C. applet. D. stream.
4. What is the base class for all Exception?
   A. java.lang.Exception B. java.lang.Throwable
   C. java.lang.RuntimeException D. java.lang.Error
5. Which of these keywords is not a part of exception handling?
   A. finally. B. catch. C. thrown. D. try.
6. Threads can be created by implementing _____ interface.
   A. new. B. creator. C. main. D. runnable.
7. Which method will contain the body of the thread?
   A. run () B. start () C. stop () D. main ()
8. _____ is an applet tag.
   A. (applet). B. >applet<. C. <applet>. D. <applet tag>.
9. AWT stands for_____.
   A. abstract window toolkit. B. abstract window toolbar.
   C. access window toolkit. D. access window toolbar.
10. An _____ is a special kind of Java program that is designed to be transmitted over the internet.
    A. viewlet. B. applet. C. servlet. D. object.

SECTION- B

(Answer all the Questions) (5*2=10)

11. Write 4 important mechanisms in exception Handling.
12. Define Compile time
13. Define Single Thread
14. Write about Local applet
15. Write any 4 HTML Tag
16. Write about Thread Priority
17. Write about Start () and run () Command.

SECTION- C

(Answer any THREE) (3*6=18)

18. What are they common error in Compile time and Run time
19. Write about the Exception Handling
20. Difference between Multithreading and Multitasking?
21. Briefly discuss on Thread Priority
22. Explain about the Applet and how it run?

SECTION- D

(Answer any ONE) (1*12=12)

23. Briefly explain about the Life cycle of a thread.
24. Explain about the Life cycle of Applet.

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DEPARTMENT OF COMPUTER SCIENCE			
Course Code: 10EP1A	**Programme:**	**B.Sc.,**	**CIA:** III Test
Date: 12.10.2019	**Major:**	**COMP.SCIENCE**	**Semester:** V
Time: 2Hrs	**Year:**	**III**	**Maximum:** 50 Marks
Course Title:	**SOFTWARE ENGINEERING**		

SECTION – A **(1 X 1 = 10)**

Answer ALL Questions:

1. Water fall model is sometimes called as a _____.
   a. Lifecycle. b. V-process model.
   c. Ordered model. d. Classic life cycle.
2. A _____ is a representation of almost any composite information that must be understood by software.
   a. entity. b. data. c. data object. d. attribute.
3. The _____ model indicates how software will respond to external events.
   a. functional. b. scenario-based. c. data flow. d. behavioral.
4. _____ is termed as software divided into named and addressable components.
   a. Pattern. b. Modularity. c. Information hiding. d. Entity
5. Waterfall model is also called _____.
   a. classic life cycle model. b. customer model. c. RAD. d. spiral model.
6. Tests that demonstrates each function is fully operational is _____ testing.
   a. white-box. b. black-box. c. integration. d. stress.
7. _____ testing is one of the white box testing.
   a. basis path. b. data flow. c. loop. d. stress.
8. Testing and debugging are_____ activities.
   a. same. b. parallel. c. different. d. opposite.
9. _____ is an integration testing approach.
   a. Validation. b. Exhaustive. c. Smoke. d. Unit.
10. _____ modules are identified at integration testing.
    a. Basic. b. Critical. c. Lengthy. d. Interface.

SECTION – B **(5*2=10)**

11. What is software Design?
12. Define Abstraction?
13. Write a types of coupling.
14. Define software maintenance.
15. Expand: DFD, HIPO
16. What is testing?
17. Define verification and validation.

SECTION – C

Answer Any THREE Questions: **(3*6=18)**

18. Explain the structure of design notations.
19. Discuss about the coupling and cohesion.
20. Explain the structure design techniques.
21. Writes short notes on configuration management?
22. Explain unit testing and integration testing.

SECTION – D **(1 X 12 = 12)**

Answer Any ONE Questions:

23. Explain fundamental design concepts in software engineering.
24. Discuss about the system testing.