## SECTION - A

## Answer ALL Questions:

$(10 \times 1=10)$

1. The table in which the data are grouped is referred to as $\qquad$
a) Poisson distribution
b) Random
c) Frequency Distribution
d) Mean
2. $\qquad$ is the difference between two extreme observations of the distribution.
a) Mean Deviation
b) Standard Deviation
c) Quartiles
d) Range
3. What is the probability of getting a sum 9 from two throws of a dice $\qquad$
a) $1 / 6$
b) $1 / 8$
c) $1 / 9$
d) $1 / 12$
4. If $X$ is a continuous random variable, then function $f(X)$ is $\qquad$
a) Probability Density function
b) Probability Function
c) Distribution Function
d) None of these
5. What type of data you need for a chi-square test?
a) Scales
b) Categorical
c) Interval
d) None
6. What are the types of Central Tendency?
7. Define Measure of Dispersion.
8. Define Sample Space.
9. Write about the types of Random Variables.
10. Define Chi-square.

## SECTION - B

## Answer ALL Questions:

(5 $\times 7=35$ )
11. a) Calculate the mean for the following frequency distribution.

| Class-Interval | $0-8$ | $8-16$ | $16-24$ | $24-32$ | $32-40$ | $40-48$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 8 | 7 | 16 | 24 | 15 | 7 |

(OR)
b) Find the median wage of the following distribution:

| Wages <br> (in Rs.) | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| No. of <br> laborers' | 3 | 5 | 20 | 10 | 5 |

12.a) Explain about Measure of Dispersion.

## (OR)

b) For a group of 200 candidates, the mean and standard deviation of scores were found to be 40 and 15 respectively. Later on, it was discovered that scores 43 and 35 were misread as 34 and 53 respectively. Find the corrected mean and standard deviation corresponding to the corrected figures.
13.a) i) Two cards are drawn at random from a well shuffled pack of 52 cards. Show that chance of drawing two aces is $1 / 221$.
ii) From a pack of 52 cards, three are drawn at random. Find the chance that they are king, queen and a knave. iii) Four cards are drawn from a pack of cards .Find the probability that

1) all are diamond
2) there is one card of each suit
3) there are two spades and two hearts

## (OR)

b) State and Prove the Bay's Theorem.
14.a) A continuous random variable $X$ has a p.d.f $f(x)=3 x^{2}, 0 \leq x \leq 1$.

Find $a$ and $b$ such that

$$
\text { 1) } P(x \leq a)=P(x>a) \text { and } 2) P(x>b)=0.05
$$

## (OR)

b) The diameter of an electric cable say X is assumed to be a continuous random variable with p.d.f. $\mathrm{f}(\mathrm{x})=6 \mathrm{x}(1-\mathrm{x}), 0 \leq \mathrm{x} \leq 1$.
i) Check the above is p.d.f
ii) Determine a number $b$ such that $P(X<b)=P(X>b)$.
15.a) If $X$ is a chi-square variate with n.d.f then prove that for large $n, \sqrt{2} X \sim N(\sqrt{2} n, 1)$.

## (OR)

b) A machinist is making engine parts with axle diameters of 0.700 inch. A random sample of 10 parts, show a mean diameter of 0.742 inch with standard deviation of 0.040 inch. Compute the statistics you would use to test whether the work is meeting the specification. Also state how you would proceed further.

## SECTION - C

## Answer any THREE Questions:

( $\mathbf{3} \times \mathbf{1 0}=\mathbf{3 0}$ )
16. The Median and Mode of the following wage distribution are known to be Rs. 33.50 and Rs. 34 respectively. Find the values of $f_{3}, f_{4}, f_{5}$.

| Wages <br> (in. Rs) | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Frequency | 4 | 16 | $\mathrm{f}_{3}$ | $\mathrm{f}_{4}$ | $\mathrm{f}_{5}$ | 6 | 4 | 230 |

17. Calculate the mean and standard deviation for the following table giving the age distribution of 542 members

| Age | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ | $70-80$ | $80-90$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No.of <br> members | 3 | 61 | 132 | 153 | 140 | 51 | 2 |

18. If two dices are thrown, what is the probability that the sum is a) greater than $8 \quad$ b)neither 7 nor 11 .
19. A random variable X has the following probability
distribution.

| X | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{P}(\mathrm{X})$ | 0 | K | 2 K | 2 K | 3 K | $\mathrm{~K}^{2}$ | $2 \mathrm{~K}^{2}$ | 7 <br> $\mathrm{~K}^{2}+\mathrm{K}$ |

i) Find K ii) Evaluate $\mathrm{P}(\mathrm{X}<6), \mathrm{P}(\mathrm{X}>=6)$ and $\mathrm{P}(0<\mathrm{X}<5)$
iii)If $\mathrm{P}(\mathrm{X}<=\mathrm{c})>1 / 2$, find the minimum value of c
iv) Determine the distribution function of $X$.
20. Fit a Poisson distribution to the following data and test the goodness of fit.

| X | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{f}(\mathrm{X})$ | 275 | 72 | 30 | 7 | 5 | 2 | 1 |

ODODO

## VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

(Autonomous \& Residential)
[Affiliated to Madurai Kamaraj University]
B.Sc. Computer Science Degree (Semester) Examinations, April 2018 Part - III : Allied Subject : Fourth Semester : Paper - I

NUMERICAL METHODS FOR COMPUTER SCIENCE
Under CBCS - Credit 5
Time: 3 Hours

## SECTION - A

## Answer ALL Questions:

$(10 \times 1=10)$

1. Newton Rapshon Method is also called $\qquad$ .
a) Bisection method
b) Iteration method
c) Method of tangents
d) False position
2. Gauss - Elimination Method is a $\qquad$ based on the elimination of the unknowns by combining equations.
a) Direct method
b) Bisection method
c) Iteration method
d) Convergence method
3. The function $\varnothing(x)$ is called $\qquad$ _.
a) Iteration function
b) Interpolating function
c) Bisection method
d) False position
4. Simpson's three - eight rule which is applicable only when n is a multiple of $\qquad$ _.
a) 0
b) 1
c) 2
d) 3
5. In solving a first order differential equation by numerical methods, we come across $\qquad$ of solutions.
a) One type
b) Two types
c) Three types
d) Four types
6. Write the aim of Bisection method.
7. What is an Interpolation?
8. What is Lagrange's interpolation formula?
9. Explain Romberg's Method.
10.What is Runge-Kutta method?

## SECTION - B

## Answer ALL Questions:

11.a) Find the positive roots of $x^{4}-x^{3}-2 x^{2}-6 x-4=0$.by bisection method.
(OR)
b) Find the positive roots of $3 x-\sqrt{1+\sin x=0}$ by iteration method.
12. a) Solve the system of equation by Gauss - Jordan method. $x+2 y+z=3 ; 2 x+3 y+3 z=10 ; 3 x-y+2 z=13$
(OR)
b) Find the missing value of the table given below. What assumption have you made to find it?

| Year | 1917 | 1918 | 1919 | 1920 | 1921 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Export <br> (in tons) | 443 | 384 | ---- | 397 | 467 |

13. a) Using the following table, apply Gauss's forward formula to get $f(3.75)$.

| $\mathbf{x}$ | 2.5 | 3.0 | 3.5 | 4.0 | 4.5 | 5.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{f ( x )}$ | 24.145 | 22.043 | 20.225 | 18.644 | 17.262 | 16.047 |

(OR)
b) Find the value of $\cos 51^{\circ} 42^{\circ}$ by using Gauss's backward interpolation formula from the table given below.

| x | $50^{0}$ | $51^{0}$ | $52^{0}$ | $53^{0}$ | $54^{0}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{y}=\cos \mathrm{x}$ | 0.6428 | 0.6293 | 0.6157 | 0.6018 | 0.5878 |

14.a) How do you derive Trapezoidal rule?
(OR)
b) Explain and derive Simpson's one - third rule.
15. a) Solve $\frac{d y}{d x}=x+y$ given $\mathrm{y}(1)=0$, and $\mathrm{y}(1.1), \mathrm{y}(1.2)$ by Taylor series method. Compare your result with the explicit solution.

## (OR)

b) Solve $y^{\prime}=y-x^{2}, y(0)=1$, by Picard's method upto the third approximation. Hence, find the value of $\mathrm{y}(0.1), \mathrm{y}(0.2)$.

## SECTION - C

## Answer any THREE Questions:

$(3 \times 10=30)$
16. Find the positive root of $x^{3}=2 x+5$ by False Position method.
17. From the following table of half-yearly premium for policies maturing at different ages, estimate the premium for policies maturing at age 46 and 63 .

| Age $x$ | 45 | 50 | 55 | 60 | 65 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Premium y | 114.84 | 96.16 | 83.32 | 74.48 | 68.48 |

18. Using Lagrange's formula of interpolation find $\mathrm{y}(9.5)$ given.

| x | 7 | 8 | 9 | 10 |
| :--- | :---: | :---: | :---: | :---: |
| y | 3 | 1 | 1 | 9 |

19. Evaluate $\int_{0}^{6} \frac{d x}{1+x^{2}}$ by (i) Trapezoidal rule (ii) Simpson's rule.

Also check up the results by actual integration.
20. Using Runge - Kutta method of fourth order, solve
$\frac{d y}{d x}=\frac{y^{2}-x^{2}}{y^{2}+x^{2}}$ given $\mathrm{y}(0)=1$ at $\mathrm{x}=0.2,0.4$.
[Affiliated to Madurai Kamaraj University]
B.Sc. Computer Science Degree (Semester) Examinations, April 2018 Part - III : Core Subject : Second Semester : Paper - I

## SECTION - A

Answer ALL Questions:
$(10 \times 1=10)$

1. The maximum number of points that can be displayed without overlap on a CRT is referred to as $\qquad$ —.
a) Bit Map
b) Persistence
c)Frame buffer d)Resolution
2. The electron beam sweeps across each horizontal scan line, it emits a burst of electron a value of $\qquad$ is encountered in frame buffer.
a) 1
b) 0
c) 0 and 1
d) none
3. $\qquad$ transformation alters the size of an object.
a) Rotation
b) Translation
c) Scaling
d) Viewing
4. The text clipping strategy to reject an entire character string that overlap a clip window is called $\qquad$ $-1$
a) All-or none character clipping
b) curve clipping
c) All-or none string clipping
d) Both a \& c
5. $\qquad$ methods are combined with perspective and visiblesurface identification to generate degree of realism in a display scene.
a) Surface Rendering
b) Depth Cueing
c) Parallel Projection
d) Cutaway
6. Write the types of Graphics Software.
7. Write the equation for Straight Line.
8. Define Translation.
9. What is meant by Viewport?

10 . What is meant by Shear?

## SECTION - B

## Answer ALL Questions:

11.a) Discuss about Computer-Aided Design.
(OR)
b) Explain about Video Display Devices.
12.a) Explain about Line Drawing Algorithms.
(OR)
b) Discuss about Line Attribute.
13.a) Discuss about Other Transformation.
(OR)
b) Explain about Matrix representation and Homogenous coordinates in 2D Geometric Transformations.
14.a) Discuss about Viewing Pipeline.
(OR)
b) Explain about Input Functions
15.a) Discuss about Three-Dimensional Graphics Packages.
(OR)
b) Explain about Translation and Scaling in 3D Transformation.

## SECTION - C

## Answer any THREE Questions:

$(3 \times 10=30)$
16. Discuss about various Input Devices.
17. Explain about Circle Generating Algorithm.
18. Explain about Basic Transformations.
19. Explain about any three Clipping Operations.
20. Explain about Three Dimensional Display Methods.
[Affiliated to Madurai Kamaraj University]
B.Sc. Computer Science Degree (Semester) Examinations, April 2018 Part - III : Core Subject : Second Semester : Paper - II

## MICROPROCESOR \& INTERFACING TECHNIQUES

Under CBCS - Credit 4

Time: 3 Hours

## SECTION - A

## Answer ALL Questions:

$\qquad$ chip integrating all the

1. A microprocessor is a functions of a CPU of a computer.
a) Multiple
b) single
c) double
d) triple
2. The Instruction MOV AX, 0005 H belongs to the address modes $\qquad$ _.
a) Register
b) Direct
c) Immediate
d) Register relative
3. The microprocessor can read/write 16 bit data from or to $\qquad$
a) Memory
b) I/O devices
c) processor
d) register
4. Intel 8259 can accept $\qquad$ interrupt request and allow one by one to processor INTR pin.
a) 8
b) 6
c) 10
d) 12
5. Sun has made SPARC an $\qquad$ architecture that is available for licensing to microprocessor manufacturers.
a) close
b) open
c) neither $a$ and b
d) None
6. Define DSP.
7. What is meant by Interrupt?
8. Define Assembly Language.
9. Write the types of operation modes in 8279.
10. Define AMD.

## SECTION - B

## Answer ALL Questions:

11.a) Write short notes on Embedded Microprocessor.
(OR)
b) Discuss about Bit Slice processor.
12. a) Discuss about Registers in 8086 Microprocessor.
(OR)
b) Discuss about Addressing modes of 8086 .
13. a) Discuss about 8086 Read and Write bus cycle.
(OR)
b) Discuss about 8086 based computer system.
14.a) Discuss about 8237 DMA.
(OR)
b) How does 8279 keyboard works?
15.a) Discuss about Power PC 601.

## (OR)

b) Discuss about SUN's SPARC.

## SECTION - C

Answer any THREE Questions:
16. Explain about RICS and CISC Architecture.
17. Explain bout Intel 8086 Pin description.
18. Explain about 8086 Instruction.
19. Explain about Intel 8259 PIC.
20. Explain about Pentium.
[Affiliated to Madurai Kamaraj University]
B.Sc. Computer Science Degree (Semester) Examinations, April 2018

Part - III : Core Subject : Fourth Semester : Paper - I
OPERATING SYSTEM
Under CBCS - Credit 4
Time: $\mathbf{3}$ Hours
Max. Marks: 75

## SECTION - A

Answer ALL Questions: $\quad(\mathbf{1 0} \times \mathbf{1 = 1 0})$

1. The software that contains the core components of the operating system is called the $\qquad$ _.
a) Hardware
b) Kernel
c) Processor
d) File
2. A $\qquad$ is a program in execution.
a) Memory
b) Process
c) Interrupt
d) Hardware
3. $\qquad$ are software interrupts that notify a process that an event has occurred.
a) Signals
b) Semaphore
c) Message passing
d) Pipe
4. The state of a process after it encounters an I/O instruction is
$\qquad$ —.
a) ready.
b) blocked/waiting.
c) idle.
d) running.
5. A process is said to be in $\qquad$ state if it is waiting for an event that will never occur.
a) Safe
b) Unsafe
c) Starvation
d) Deadlock
6. What is an operating system?
7. Define the term "Process".
8. What is Demand paging?
9. Define: Multiprogramming.
10. What is a file?

## Answer ALL Questions:

11.a) Write down importance of operating system.

## (OR)

b) What are the terminologies of operating system? Explain.
12.a) Describe single contiguous allocation.
(OR)
b) Explain relocatable partitioned memory management.
13.a) Write a short note on microprocessor systems.
(OR)
b) Explain about process synchronization.
14.a) Write down the device characteristics.
(OR)
b) Describe I/O traffic controller.
15.a) What is a simple file system? Explain.
(OR)
b) What are the advantages of symbolic file name? Describe.

## SECTION - C

## Answer any THREE Questions:

( $\mathbf{3} \times \mathbf{1 0}=\mathbf{3 0})$
16. Explain essential features of system resource managers.
17. Discuss about paged memory management.
18. What are the different types of job scheduling? Explain.
19. Explain different techniques for device management.
20. Discuss about physical file system in detail.
[Affiliated to Madurai Kamaraj University]
B.Sc. Computer Science Degree (Semester) Examinations, April 2018 Part - III : Core Subject : Fourth Semester : Paper - II RELATIONAL DATABASE MANAGEMENT SYSTEM Under CBCS - Credit 4

## SECTION - A

## Answer ALL Questions:

$(10 \times 1=10)$

1. Relational Algebra does not have $\qquad$ -
a) Selection operator
b) Projection operator
c) Aggregation operators
d) Division
2. Key to represent relationship between tables is called $\qquad$ _.
a) Primary key
b) Secondary Key
c) Foreign Key
d) None of these
3. The statement in SQL which allows to change the definition of a table is $\qquad$ _.
a) Alter
b) Update
c) Create
d) Select
4. A $\qquad$ is a query that has another query embedded within it.
a) Query By Example
b) nested query
c) Correlated query
d) Cooperative query
5. A relation is in $\qquad$ normal form if every field contains only atomic values.
a) First
b) Second
c) Third
d) Fourth
6. Define the term "DBMS".
7. What do you mean by relationship?
8. Write the general form of CREATE TABLE command in SQL.
9. What are the attributes of information?
10. Write the syntax of Delete command.

## Answer ALL Questions:

$(5 \times 7=35)$
11.a) Define: Data Model. Describe the four categories of data model classification.
(OR)
b) What are the major components of E-R diagram? Explain.
12.a) Explain normalization process.
(OR)
b) Describe the concept of Boyce-Codd normal form.
13.a) What is the meaning of data integrity? Why is the integrity of data important?
(OR)
b) Explain serialization of transactions in database.
14.a) How to create and modify tables in oracle? Explain.
(OR)
b) What are the aggregate functions of SQL? Give examples.
15.a) How do you retrieve data with cursor? Explain.
(OR)
b) Illustrate different categories of triggers.

## SECTION - C

## Answer any THREE Questions:

$(3 \times 10=30)$
16. What is relational algebra? What are the fundamental operations of relational algebra? Explain with examples.
17. Discuss about DDL and DML commands in SQL.
18. What are privileges in data base? Explain with example.
19. What are nested queries in $S Q L$ ? Describe.
20. Explain basic structure of $\mathrm{PL} / \mathrm{SQL}$.

# VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST 

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[Affiliated to Madurai Kamaraj University]
B.Sc. Computer Science Degree (Semester) Examinations, April 2018

Part - III : Core Subject : Fourth Semester : Paper - III
VISUAL BASIC AND VB .NET
Under CBCS - Credit 4
Time: 3 Hours
Max. Marks: 75

## SECTION - A

Answer ALL Questions:
( $10 \times 1=10)$

1. $\qquad$ is the term used in visual basic for what appears in the title bar of the form.
a) Caption
b) Toolbar
c) Form
d) Menu
2. Variable names in visual basic can be up to $\qquad$ characters.
a) 251
b) 253
c) 255
d) 257
3. The fundamental structure for organizing information in visual basic is called a $\qquad$
a) Structure
b) Array
c) Function
d) Procedure
4. .NET is Microsoft's platform for building $\qquad$ Services.
a) XML web
b) IIS web
c) Platform web
d) Internet web
5. CLR stands for
a) Correct Language Run
b) Common Language Runtime
c) Conform Language Run timer
d) Common Language Reverse
6. Define String.
7. Write a short note on GUI.
8. What is an IDE?
9. Define a function.
10. What is Database?

## SECTION - B

Answer ALL Questions:
11.a) What are all the properties of Command Buttons?
(OR)
b) Explain Color Properties of the Form.
12.a) Explain various Statements in Visual Basic.
(OR)
b) Discuss about important properties for Rich Text Box.
13.a) What is an array? Explain control Array.
(OR)
b) What is a file? Explain.
14.a) Elucidate Base Class Libraries.
(OR)
b) Explain Windows Forms.
15.a) Write Reference types versus Value types.
(OR)
b) Explain Type Conversion.

## SECTION - C

## Answer any THREE Questions:

$(\mathbf{3} \times \mathbf{1 0}=\mathbf{3 0})$
16. Explain about Creating Controls in Visual Basic.
17. What are the Data Types available in Visual Basic? Explain.
18. What is Flex Grid Control? How it functions in Visual Basic?
19. Discuss about .NET Framework.
20. What is an operator? Write different types of Operators in VB.

(Autonomous \& Residential)
[Affiliated to Madurai Kamaraj University]
B.Sc. Computer Science Degree (Semester) Examinations, April 2018 Part - III : Core Subject : Sixth Semester : Paper - I

WEB TECHNOLOGY
Under CBCS - Credit 4
Time: $\mathbf{3}$ Hours
Max. Marks: 75

## SECTION - A

Answer ALL Questions: $\quad(\mathbf{1 0} \times \mathbf{1 = 1 0 )}$

1. The $\qquad$ is the global system of interconnected computer networks.
a) Network
b) LAN
c) Internet
d) Intranet
2. $\qquad$ is a dynamic computer programming language.
a) Script
b) Java script
c) Vb script
d) Html script
3. $\qquad$ are data, stored in small text files, on computer.
a) Data
b) Session
c) Port
d) Cookies
4. The $\qquad$ control is used to create a text box where the user can input text.
a) Anchor
b) Image
c) Link
d) Textbox
5. $\qquad$ is designed to provide universal access to several relational and non-relational data sources.
a) OLEDB
b) OLEBB
c) OLEDC
d) ODBC
6. Define frames.
7. What is array?
8. Define cookies.
9. What is file?

10 . What is request object?

## SECTION - B

## Answer ALL Questions:

11.a) What is HTML? Explain.
(OR)
b) How do you create list? Explain.
12.a) What are the advantages of javascript?
(OR)
b) List out the data types in javascript.
13.a) Discuss about javascript document object model.
(OR)
b) Explain navigator object.
14.a) What is anchor control? Explain.
(OR)
b) Discuss radio button with example.
15.a) Write short notes on response object.
(OR)
b) Explain about transaction class.

## SECTION - C

## Answer any THREE Questions:

16. Discuss on internet.
17. Explain operators and expressions in javascript.
18. Discuss about event handling.
19. Write down the following:
a) Drop down list
b) List out data grid fields
20. List out OLEDB connection class.
[Affiliated to Madurai Kamaraj University]
B.Sc. Computer Science Degree (Semester) Examinations, April 2018

Part - III : Elective Subject : Sixth Semester: Paper - I

## MOBILE COMPUTING

Under CBCS - Credit 4
Time: $\mathbf{3}$ Hours
Max. Marks: 75

## SECTION - A

## Answer ALL Questions: <br> $$
(10 \times 1=10)
$$

1. Nomadic computing means $\qquad$ computing.
a) Portable
b) on the go
c) no mobility while connected
d) Technology
2. $\qquad$ can be used to transmit analog data over analog signal.
a) AM
b) FM
c) PM
d) All of these
3. What is the basic service unit of cellular telephony?
a) Location area
b) PLMN service area
c) MSC/VLR service area
d) Cell
4. In the current IEEE 802.11 version $\qquad$ physical media are involved.
a) 5
b) 4
c) 3
d) 2
5. Which of the following is not a layer in the WAP gateway stack?
a) TCP
b) WDP
c) Context manager
d) WSP
6. Define mobile computing.
7. Expand FDMA.
8. Expand GSM.
9. Define Bluetooth.
10. What is tunneling?

## Answer ALL Questions:

$(5 \times 7=35)$
11.a) What is mobility? Explain.

## (OR)

b) Write down benefits of mobile computing.
12.a) Write short notes on infrared and light waves.
(OR)
b) Explain time division multiplexing.
13.a) What is cluster? Explain.
(OR)
b) Explain about CDMA.
14.a) List out wireless LAN types.
(OR)
b) What is SDP? Explain.
15.a) Write short notes on WAP.

## (OR)

b) Explain about World Wide Web model.

## SECTION - C

Answer any THREE Questions: $\quad(\mathbf{3} \times \mathbf{1 0}=\mathbf{3 0})$
16. Discuss mobile computing challenges.
17. Explain modulation.
18. Discuss about cellular system components.
19. Explain wireless LAN requirements.
20. Write detailed note on wireless application environment.
(Autonomous \& Residential)
[Affiliated to Madurai Kamaraj University]
B.A./B.Sc./B. Com. Degree (Semester) Examinations, April 2018 Part - IV : NME subject : Second Semester : Paper - I

## WEB PROGRAMMING

Under CBCS - Credit: 2
Time: 2 Hours
Max. Marks: 75

## SECTION - A

## Answer ALL Questions:

$(10 \times 1=10)$

1. Choose the correct HTML tag for the largest heading.
a) <head>
b) <heading>
c) $\langle\mathrm{h} 1\rangle$
d) <h6>
2. $\langle\mathrm{P}\rangle$ tag indicates $\qquad$ _.
a) Paragraph
b) Text
c) Font
d) Bold
3. Which one of the following is order list tag?
a) 〈OL>
b) $\langle\mathrm{UL}\rangle$
c) <List>
d) <TR>
4. Choose the correct HTML tag to make text italic.
a) <italic>
b) $\langle i\rangle$
c) $\langle$ li>
d) $\langle\mathrm{b}\rangle$
5. Which tag is used for linking document?
a) < A href>
b) <Body>
c) <Head>
$\mathrm{d}<\mathrm{html}>$

## Give Short Answer:

6. Expand WWW?
7. Write any two browser name.
8. What is internet?
9. Expand HTTP?
10. Write a Paragraph tag with an example?

## $\underline{\text { SECTION - B }}$

## Answer ALL Questions:

11.a) Write a short note on Browser and Server?
(OR)
b) Explain about HTTP?
12. a) Briefly discuss on structure of HTML with an example?
(OR)
b) Explain about the font tag with an example?
13. a) Write a notes on <heading> tag?
(OR)
b) Write a notes on <marquee> tag?
14. a) Briefly discuss about image tag with attributes?
(OR)
b) Briefly discuss about the font tag with an example?

## SECTION - C

## Answer any TWO Questions: <br> $\left(2 \times 12^{1 / 2}=25\right)$

15. Explain table<table> tags and its attributes with an example?
16. Explain about commonly used two types of list tag with an example?
17. Explain about working with colors?
B.Sc. Computer Science Degree (Semester) Examinations, April 2018

Part - IV : Skill based subject : Sixth Semester: Paper - I

## PC HARDWARE AND TROUBLE SHOOTING

Time: 2 Hours
Max. Marks: 75

## SECTION - A

## Answer ALL Questions:

$(10 \times 1=10)$

1. Post means
a) Power on Switch Tracker
b) Power on Self Test
c) plug on Self mode
d) Power on Self tracking system
2. A hard disk is divided into tracks which are further subdivided into
a) Cluster
b) Sector
c) Vectors
d) Heads
3. In a semi custom chip, array of gates are provided without completing the circuit inter connection?
a) PAL
b) PLA
c) Both (a) \& (b)
d) VGA
4. What voltage does a Pentium system use?
a) +12 v
b) +5 v
c) +8 v
d) +3.3 v
5. Which motherboard from factor uses one 20 pin connector?
a) ATX
b) AT
c) BABY AT
d) All the above

## Give Short Answer:

6. What is daughter board?
7. Define USB.
8. List out the type of operating system?
9. Expand MODEM?
10. What are the advantages of using PC card?

## SECTION - B

## Answer ALL Questions:

11.a) List out the IBM pc hardware components?
(OR)
b) Explain LAN extension device?
12. a) Explain the cooling system in a PC system?

## (OR)

b) Mention the differently types of device controller and interrupt controller?
13.a) Write a short note on (i) PATA (ii) SATA
(OR)
b) Discuss about the CD \& DVD technology?
14.a) Explain Floopydisk and drive?
(OR)
b) Discuss about Pen drive and Tape drive?

## SECTION - C

## Answer any TWO Questions:

$(2 \times 121 / 2=25)$
15. Explain Hard disk drive in details?
16. Explain SCSI \& PC card details?
17. Trouble shoots the problems in CRT Monitors and Printers?

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B.Sc. Computer Science Degree (Semester) Examinations, April 2018

Part - IV : Skill based subject : Sixth Semester : Paper - II

## DTP

Under CBCS - Credit: 2
Time: 2 Hours
Max. Marks: 75

## SECTION - A

## Answer ALL Questions:

$(10 \times 1=10)$

1. $\qquad$ is used to move an image or a portion of an image from one location to another
a) Eyedropper Tool
b) Zoom Tool
c) Crop Tool
d) Move Tool
2. ppi Stands for
a) Point Point Inch
b) Pixel Point Inch
c) Pixel Per Inch
d) Pixel-Pixel Inch
3. $\qquad$ displays the various shades of the color you have selected in the color slider bar.
a) Color picker
b) Slide Bar
c) Alert
d) Crop
4. The built in support across different applications is known as
$\qquad$
a) Text tool
b) Crop tool
c) Move tool
d) Zoom tool
5. PDF Stands for
a) Portable Document Format
b) Portable Drive Format
c) Portable Disk Format
d) Photographic Document Format

## Give Short Answer:

6. Define Page layout.
7. Write any five Photoshop tools.
8. Write the toolbar of layer palette.
9. How to save and opening an existing document.

10 . Write the types of text.

## $\underline{\text { SECTION - B }}$

## Answer ALL Questions:

$(4 \times 10=40)$
11.a) Write the guidelines for working with palettes and its type?
(OR)
b) Explain about File format in Photoshop.
12. a) Explain about Background Eraser Tool and Healing Brush tool.
(OR)
b) How to making color adjustment in Photoshop.
13. a) Describe about the Type masking \& Shape masking.

## (OR)

b) Discuss about the working with text in CorelDraw.
14. a) How to creating a new layer in Photoshop.
(OR)
b) Write about the Line in CorelDraw

## SECTION - C

Answer any TWO Questions: $\quad\left(2 \times 12^{1} / 2=25\right)$
15. Briefly explain about Toolbox and List out one by one?
16. Explain about the drawing basic geometric figures in CorelDraw
17. Give a brief explains about the palettes in Photoshop?

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B.Sc. Computer Science Degree (Semester) Examinations, April 2018 Part - IV : Skill based subject : Sixth Semester : Paper - III

## NETWORK SECURITY AND CRYPTOGRAPHY

 Under CBCS - Credit: 2Time: 2 Hours
Max. Marks: 75

## SECTION - A

## Answer ALL Questions:

$(10 \times 1=10)$

1. $\qquad$ exploits service flaws in computers to inhibit use by legitimate users
a) Service threats
b) attacks
c) viruses
d) none
2. $\qquad$ key is also input to the encryption algorithm
a) Plain text
b) Secret
c) decryption
d) Encryption
3. Insertion of messages into the network from a fraudulent source is
a) Masquerade
b) Content
c) DOS
d) Key
4. $\qquad$ is an open source freely available software package for E-mail security
a) PGP
b) S/MIME
c) DSS
d) DES
5. $\qquad$ are designed to collect information about the attacker's activity.
a) Honey pot
b) Firewall
c) Intrusion
d) malware

## Give Short Answer:

6. Write the types of attack.
7. Define plain text \& cipher text.
8. Define content modification.
9. Expand AOL.
10. Define firewall.

## $\underline{\text { SECTION - B }}$

## Answer ALL Questions:

11.a) Explain about the security attacks
(OR)
b) Discuss about (i) Authentication (ii) Data Integrity
iii) Masquerade
12.a) Write about Substitution techniques
(OR)
b) Discuss on Steganography
13.a) Describe about the Authentication requirements.
(OR)
b) Write about Digital Signature.
14.a) What are the five principle services provided by PGP
(OR)
b) What are the roles of the Oakley key determination protocol?

## SECTION - C

## Answer any TWO Questions: <br> $\left(2 \times 12^{1 / 2}=25\right)$

15. Briefly discuss about the Digital Signature Standard.
16. What are typical phases of operation of Virus \& Worm?
17. List and briefly define categories of Security Services.

