VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

(Autonomous & Residential)

[Affiliated to Madurai Kamaraj University]

B.Sc. Computer Science Degree (Semester) Examinations, April 2018 Part – III : Allied Subject : Second Semester : Paper – I

STATISTICS & PROBABILITY

Under CBCS – Credit 4

Time: 3 Hours

Answer ALL Questions:

Max. Marks: 75

SECTION – A

$(10 \times 1 = 10)$

1.	The table in which the data are	grouped is ref	ferred to as
	a) Poisson distribution	b) Rando	m
	c) Frequency Distribution	d) Mean	
2.	is the difference bety	ween two extre	eme observations
	of the distribution.		
	a) Mean Deviation	b) Standard I	Deviation
	c) Quartiles	d) Range	
3.	What is the probability of getting	ng a sum 9 fro	m two throws of a
	dice ?	0	
	a) 1/6 b) 1/8	c) 1/9	d) 1/12
4.	If X is a continuous random va	riable, then fu	nction f(X) is
	a) Probability Density function	b) Probab	bility Function
	c) Distribution Function	d) None of	of these
5.	What type of data you need for	a chi-square t	est?
	a) Scales b) Categorical	c) Interval	d) None
6.	What are the types of Central T	Sendency?	,
7.	Define Measure of Dispersion.	2	
8.	Define Sample Space.		
9.	Write about the types of Rando	m 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	/	16	24	15	/
		()	OR)			

b) Find the median wage of the following distribution:

Wages	20-30	30-40	40-50	50-60	60-70
(in Rs.)					
No. of	3	5	20	10	5
laborers'					

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 $f(x)=3x^2, 0\le x\le 1$. Find a and b such that 1) $P(x\le a)=P(x>a)$ 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. f(x)=6x(1-x), 0≤ x ≤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, $\sqrt{2X} \sim N(\sqrt{2n},1)$.

(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.

<u>SECTION – C</u>

Answer any THREE Questions:

 $(3 \times 10 = 30)$

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 (in. Rs)	0-10	10-20	20-30	30-40	40-50	50-60	60-70	Total
Frequency	4	16	f ₃	f4	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	3	61	132	153	140	51	2
members							

18. If two dices are thrown, what is the probability that the sum isa) greater than 8 b)neither 7 nor 11.

19. A random variable X has the following probability distribution.

Х	0	1	2	3	4	5	6	7
P(X)	0	K	2K	2K	3K	K ²	2 K^2	7
								K^2+K

i)Find K ii)Evaluate P(X<6),P(X>=6) and P(0<X<5)

iii)If $P(X \le c) > 1 / 2$, 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.

Х	0	1	2	3	4	5	6
f(X)	275	72	30	7	5	2	1





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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

Answer ALL Questions:

Max. Marks: **75**

SECTION – A

$(10 \times 1 = 10)$

1. Newton	Rapshon	Method i	s also	called		•
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- a) Bisection method b) Iteration method
- c) Method of tangents d) False position
- 2. Gauss Elimination Method is a _____ based on the elimination of the unknowns by combining equations.
 - a) Direct method b) Bisection method
 - d) Convergence method c) Iteration method
- 3. The function $\phi(x)$ is called .
 - a) Iteration function b) Interpolating function c) Bisection method
 - d) False position

d) 3

4. Simpson's three – eight rule which is applicable only when n is a multiple of ____

a) 0 b) 1 c) 2

- 5. In solving a first order differential equation by numerical methods, we come across _____ 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?

<u>SECTION – B</u>

Answer ALL Questions:

- $(5 \times 7 = 35)$
- 11.a) Find the positive roots of $x^4 x^3 2x^2 6x 4 = 0$.by bisection method. **(OR)**
 - b) Find the positive roots of $3x \sqrt{1 + \sin x} = 0$ by iteration method.
- 12. a) Solve the system of equation by Gauss Jordan method. x+2y+z=3; 2x+3y+3z=10; 3x-y+2z=13.

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	443	384		397	467
(in tons)					

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

X	2.5	3.0	3.5	4.0	4.5	5.0
f(x)	24.145	22.043	20.225	18.644	17.262	16.047
			(\mathbf{OR})			

b) Find the value of $\cos 51^{0} 42$ ` by using Gauss's backward interpolation formula from the table given below.

Х	50 [°]	51 ⁰	52 [°]	53 ⁰	54 ⁰
y=cos 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 $\frac{dy}{dx} = x + y$ given y(1)=0, and y(1.1), y(1.2) by Taylor

series method. Compare your result with the explicit solution. (OR)

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

Answer any THREE Questions:

 $(3 \times 10 = 30)$

16. Find the positive root of $x^3 = 2x + 5$ by False Position method.

SECTION – C

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 y(9.5) given.

Х	7	8	9	10
У	3	1	1	9

19. Evaluate $\int_0^6 \frac{dx}{1+x^2}$ 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

$$\frac{dy}{dx} = \frac{y^2 - x^2}{y^2 + x^2}$$
 given y(0) = 1 at x=0.2, 0.4.





VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

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

> **COMPUTER GRAPHICS** Under CBCS - Credit 4

Time: 3 Hours

Answer ALL Ouestions:

SECTION - A

 $(10 \times 1 = 10)$

Max. Marks: 75

- 1. The maximum number of points that can be displayed without overlap on a CRT is referred to as _____.
 - 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 _____ is encountered in frame buffer.
- a) 1 b) 0 c) 0 and 1 d) none
- _____ transformation alters the size of an object. 3.
- 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 _____
 - a) All-or none character clipping b) curve clipping
 - c) All-or none string clipping d) Both a & c
- 5. methods are combined with perspective and visiblesurface identification to generate degree of realism in a display scene.
 - a) Surface Rendering

b) Depth Cueing d) Cutaway

- c) Parallel Projection
- 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.

(\mathbf{OR})

- b) Explain about Matrix representation and Homogenous coordinates in 2D Geometric Transformations.
- 14. a) Discuss about Viewing Pipeline.

(\mathbf{OR})

- b) Explain about Input Functions
- 15.a) Discuss about Three-Dimensional Graphics Packages.

(\mathbf{OR})

b) Explain about Translation and Scaling in 3D Transformation.

SECTION – C

Answer any THREE Questions:

 $(3 \times 10 = 30)$

 $(5 \times 7 = 35)$

- 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.





VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST (Autonomous & Residential) [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 Max. Marks: **75**

SECTION - A

Answer ALL Ouestions:

 $(10 \times 1 = 10)$

1. A microprocessor is a chip integrating all the

functions of a CPU of a computer.

- b) single c) double d) triple a) Multiple
- 2. The Instruction MOV AX, 0005H belongs to the address modes _____.
 - a) Register b) Direct c) Immediate d) Register relative
- 3. The microprocessor can read/write 16 bit data from or to _____ a) Memory b) I/O devices c) processor d) register
- 4. Intel 8259 can accept interrupt request and allow one by one to processor INTR pin.
 - a) 8 c) 10 b) 6 d) 12
- 5. Sun has made SPARC an ______ 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:

 $(5 \times 7 = 35)$

11.a) Write short notes on Embedded Microprocessor.

(\mathbf{OR})

b) Discuss about Bit Slice processor.

12. a) Discuss about Registers in 8086 Microprocessor.

(\mathbf{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.

(\mathbf{OR})

b) Discuss about SUN's SPARC.

SECTION – C

Answer any THREE Questions:

 $(3 \times 10 = 30)$

- 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.





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

 Part – III : Core Subject : Fourth Semester : Paper – I

OPERATING SYSTEM

Under CBCS – Credit 4

SECTION - A

Time: 3 Hours

Answer ALL Questions:

 $(10 \times 1 = 10)$

Max. Marks: **75**

1. The software that contains the core components of the

operating system is called the _____.

a) Hardware b) Kernel c) Processor d) File

2. A _____ is a program in execution.

a) Memory b) Process c) Interrupt d) Hardware

- 3. _____ 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

a) ready. b) blocked/waiting. c) idle. d) running.

5. A process is said to be in ______ 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?

<u>SECTION – B</u>

Answer ALL Questions: $(5 \times 7 = 35)$ 11.a) Write down importance of operating system. (\mathbf{OR}) b) What are the terminologies of operating system? Explain. 12. a) Describe single contiguous allocation. (\mathbf{OR}) b) Explain relocatable partitioned memory management. 13.a) Write a short note on microprocessor systems. (\mathbf{OR}) b) Explain about process synchronization. 14.a) Write down the device characteristics. (\mathbf{OR}) b) Describe I/O traffic controller. 15.a) What is a simple file system? Explain. (\mathbf{OR}) b) What are the advantages of symbolic file name? Describe. **SECTION – C Answer any THREE Questions:** $(3 \times 10 = 30)$ 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.

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VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST (Autonomous & Residential) [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 Time: 3 Hours Max. Marks: 75 **SECTION – A Answer ALL Questions:** $(10 \times 1 = 10)$ 1. Relational Algebra does not have a) Selection operator b) Projection operator c) Aggregation operators d) Division 2. Key to represent relationship between tables is called . 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 . c) Create b) Update d) Select a) Alter 4. A ______ is a query that has another query embedded within it. a) Query By Example b) nested query d) Cooperative query c) Correlated query 5. A relation is in ______ normal form if every field contains only atomic values. c) Third d) Fourth a) First b) Second 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.

SECTION – B

Answer ALL Questions:	$(5 \times 7 = 35)$
11.a) Define: Data Model. Describe the four categories model classification (OR)	ories of data
b) What are the major components of E-R diag	am? Explain.
12. a) Explain normalization process.	
(OR)	form
b) Describe the concept of Boyce-Codd normal	Iorin.
13. a) What is the meaning of data integrity? Why i data important? (OR)	s the integrity of
b) Explain serialization of transactions in databa	ase.
14. a) How to create and modify tables in oracle? E (OR)	xplain.
b) What are the aggregate functions of SQL? G	ive examples.
15.a) How do you retrieve data with cursor? Expla	in.
(OR)	
b) Illustrate different categories of triggers.	
<u>SECTION – C</u>	
Answer any THREE Questions:	$(3 \times 10 = 30)$
16. What is relational algebra? What are the fundamentation	nental
operations of relational algebra? Explain with e	xamples.
17. Discuss about DDL and DML commands in SQ	ρL.
18. What are privileges in data base? Explain with	example.
19. What are nested queries in SQL? Describe.	
20. Explain basic structure of PL/SQL.	





VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

(Autonomous & Residential) [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

Answer ALL Questions:

 $(10 \times 1 = 10)$

1. ______ is the term used in visual basic for what appears in the title bar of the form.

SECTION – A

- b) Toolbar c) Form d) Menu a) Caption
- 2. Variable names in visual basic can be up to _____ characters. a) 251 b) 253 c) 255 d) 257
- 3. The fundamental structure for organizing information in visual basic is called a
 - a) Structure b) Array c) Function d) Procedure
- 4. .NET is Microsoft's platform for building ______ Services. a) XML web b) IIS web c) Platform web d) Internet web
- 5. CLR stands for
 - b) Common Language Runtime a) Correct Language Run
 - 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:

 $(5 \times 7 = 35)$

11.a) What are all the properties of Command Buttons?

(\mathbf{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.

(\mathbf{OR})

b) Explain Type Conversion.

SECTION – C **Answer any THREE Ouestions:**

 $(3 \times 10 = 30)$

- 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.





<u>SECTION – B</u>

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.

<u>SECTION – C</u>

Answer any THREE Questions:

 $(3 \times 10 = 30)$

- 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.



$(5 \times 7 = 35)$

10EP2A

d) WSP



VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

(Autonomous & Residential) [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: 3 Hours Max. Marks: **75 SECTION - A Answer ALL Ouestions:** $(10 \times 1 = 10)$ 1. Nomadic computing means computing. a) Portable b) on the go c) no mobility while connected d) Technology 2. _____ can be used to transmit analog data over analog signal. b) FM c) PM d) All of these a) AM 3. What is the basic service unit of cellular telephony? b) PLMN service area a) Location area c) MSC/VLR service area d) Cell 4. In the current IEEE 802.11 version physical media are involved. b) 4 c) 3 d) 2 a) 5 5. Which of the following is not a layer in the WAP gateway stack? a) TCP b) WDP c) Context manager 6. Define mobile computing. 7. Expand FDMA. 8. Expand GSM. 9. Define Bluetooth.

10. What is tunneling?

SECTION – B

Answer ALL Questions:

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.

(\mathbf{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:

 $(3 \times 10 = 30)$

- 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.



$(5 \times 7 = 35)$

10NE21 VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST (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 **Answer ALL Questions:** WEB PROGRAMMING Under CBCS – Credit: 2 11.a) Write a short note on Browser and Server? Time: 2 Hours Max. Marks: 75 **SECTION - A** b) Explain about HTTP? **Answer ALL Questions:** $(10 \times 1 = 10)$ 12. a) Briefly discuss on structure of HTML with an example? 1. Choose the correct HTML tag for the largest heading. a) <head> b) <heading> c) < h1 >d) < h6> b) Explain about the font tag with an example? 2. <P> tag indicates _____. 13.a) Write a notes on <heading> tag? a) Paragraph d) Bold b) Text c) Font 3. Which one of the following is order list tag? b) Write a notes on **<marquee>** tag? a) b) $\langle UL \rangle$ c) <List> d) $\langle TR \rangle$ 14. a) Briefly discuss about image tag with attributes? 4. Choose the correct HTML tag to make text italic. a) <italic> b) $\langle i \rangle$ c) lid) b) Briefly discuss about the font tag with an example? 5. Which tag is used for linking document? a) < A href>b) <Body> c) <Head> d <html> **Answer any TWO Questions: Give Short Answer:** 15. Explain table tags and its attributes with an example? 6. Expand WWW? 16. Explain about commonly used two types of list tag with an 7. Write any two browser name. 8. What is internet? example? 9. Expand HTTP? 17. Explain about working with colors? 10. Write a Paragraph tag with an example?

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SECTION – B

(**OR**)

 (\mathbf{OR})

 (\mathbf{OR})

(**OR**)

SECTION - C

 $(4 \times 10 = 40)$

 $(2 \times 12^{1/2} = 25)$

VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST (Autonomous & Residential) [Affiliated to Madurai Kamaraj University] B.Sc. Computer Science Degree (Semester) Examinations, April 2018 Part - IV : Skill based subject : Sixth Semester : Paper - I PC HARDWARE AND TROUBLE SHOOTING Under CBCS – Credit: 2 Time: 2 Hours Max. Marks: 75 **SECTION – A Answer ALL Questions:** $(10 \times 1 = 10)$ 1. Post means b) Power on Self Test a) Power on Switch Tracker c) plug on Self mode d) Power on Self tracking system 2. A hard disk is divided into tracks which are further subdivided into controller? b) Sector c) Vectors a) Cluster 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? b) +5va) +12vc) + 8vd) +3.3v5. 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.

10SB61

- 8. List out the type of operating system?
- 9. Expand MODEM?
- 10. What are the advantages of using PC card?

SECTION – B

Answer ALL Ouestions:

 $(4 \times 10 = 40)$

11.a) List out the IBM pc hardware components?

(\mathbf{OR})

b) Explain LAN extension device?

12. a) Explain the cooling system in a PC system?

(\mathbf{OR})

- b) Mention the differently types of device controller and interrupt
- 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:

 $(2 \times 12^{1/2} = 25)$

- 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

b) Portable Drive Format

d) Photographic Document Format

SECTION - A

Answer ALL Questions:

 $(10 \times 1 = 10)$

is used to move an image or a portion of an image from 1. 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 displays the various shades of the color you have 3. 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

a) Text tool b) Crop tool c) Move tool d) Zoom tool

5. PDF Stands for

a) Portable Document Format c) Portable Disk 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.

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.

(\mathbf{OR})

b) How to making color adjustment in Photoshop.

13.a) Describe about the Type masking & Shape masking.

(\mathbf{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:

 $(2 \times 12^{1/2} = 25)$

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?





VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST



(Autonomous & Residential) [Affiliated to Madurai Kamaraj University]

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: 2

Time: 2 Hours

Max. Marks: 75

SECTION - A

- $(10 \times 1 = 10)$ **Answer ALL Questions:** exploits service flaws in computers to inhibit use by 1. legitimate users
 - a) Service threats b) attacks c) viruses d) none
- key is also input to the encryption algorithm 2.
- a) Plain text b) Secret c) decryption d) Encryption
- 3. Insertion of messages into the network from a fraudulent source is
 - b) Content d) Key a) Masquerade c) DOS
- _____ is an open source freely available software package for 4. E-mail security
 - a) PGP b) S/MIME c) DSS d) DES
- are designed to collect information about the attacker's 5. 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.

SECTION – B

 $(4 \times 10 = 40)$

11.a) Explain about the security attacks

(**OR**)

- b) Discuss about (i) Authentication (ii) Data Integrity
 - iii) Masquerade

Answer ALL Questions:

12. a) Write about Substitution techniques

(**OR**)

- b) Discuss on Steganography
- 13.a) Describe about the Authentication requirements.

(\mathbf{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:

- $(2 \times 12^{1/2} = 25)$
- 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.

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