VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

(Autonomous & Residential)

[Affiliated to Madurai Kamaraj University]

B.Sc. Comp. Sci. Degree (Semester) Examinations, April 2016

Part – III : Allied Subject : Second Semester : Paper – I

STATISTICS & PROBABILITY

Under CBCS – Credit 4

Time: **3** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. Weighted mean = _____.

   a) $\sum_i \frac{w_i x_i}{\sum_i w_i}$ b) $\sum_i w_i x_i$ c) $\sum_i \frac{1}{w_i x_i}$ d) $\sum_i \frac{\sum_i w_i}{w_i x_i}$

2. Harmonic mean = _____.

   a) $\frac{1}{n}$ b) $\frac{1}{\frac{1}{n}\sum_1^n \frac{1}{x_i}}$ c) $\frac{1}{\sum_1^n \frac{1}{x_i}}$ d) $\frac{1}{\frac{1}{n}}$

3. The difference between two extreme observations of the distribution is _____.

   a) Mean b) Median c) Mode d) Range

4. Coefficient of variation is _____.

   a) $C.V = \frac{\sigma}{mean}$ b) $\frac{Q_3 - Q_1}{Q_3 + Q_1}$

   c) $\frac{Mean\ deviation}{Calculated\ average}$ d) $C.V = 100 * \frac{\sigma}{mean}$

5. *If* $P(E) = 1$, E is called _____ event.

   a) Impossible b) certain c) non-happening d) none of these

6. $P(A \cup B) =$ _____.

   a) $P(A) + P(B)$ b) $P(A \cap B)$ c) 0 d) $P(A) + P(B) - P(A \cap B)$

7. A random variable X is said to be _____if it can be all possible values between certain limits.

a) Discrete b) Continuous c) Real d) None

8. The 2 variables are not stochastically independent are said to be

a) Independent b) dependent

c) stochastically independent d) stochastically dependent

9. M.G.F of x^2 distribution is _____, $|2t|<1$.

a) $(1-2t)^{-\frac{n}{2}}$ b) $(x)^{-\frac{n}{2}}$ c) $(1-2t)$ d) none of these

10. Skewness of x^2 distribution is _____.

a) $\sqrt{\frac{2}{\Pi}}$ b) $\frac{n}{2}$ c) $\sqrt{\Pi}$ d) $\sqrt{\frac{\Pi}{2}}$

SECTION – B

Answer ALL Questions : **(5 × 7 = 35)**

11. a) Calculate the arithmetic mean of the marks from the following table:

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No of students	12	18	27	20	17	6

(OR)

b) Find the median wage of the following distribution:

Wages (RS)	20-30	30-40	40-50	50-60	60-70
No of labourers	3	5	20	10	5

12. a) Prove that for any discrete distribution standard deviation is not less than mean deviation from mean.

(OR)

b) A student obtained the mean and standard deviation of 100 observation as 40 and 5.1 respectively. It was later discovered that he had wrongly copied down an observation as 50 instead of 40. Calculate the correct mean and standard deviation.

13. a) A bag contains 3 red, 6white and 7 blue balls. What is the probability that 2 balls drawn are white and blue?

(OR)

b) A card is drawn from a well-shuffled pack of playing cards. What is the probability that it is either a spade or an ace?

14. a) Find the frequency distribution

$$f(x)dx = \frac{2x}{9}dx, 0 \le x \le 3$$

(OR)

b) Prove that the geometric mean G of the distribution

$$dF = 6(2-x)(x-1)dx, 1 \le x \le 2.$$

15. a) A machinist is making engine parts with axle diameters of 0.700 inch. A random sample of 10 parts shows a mean diameter of 0.742 inch with a SD of 0.040 inch. Compute the statistic you would use to test whether the work is meeting the specification. Also state how you would proceed further?

(OR)

b) The theory predicts the proportion of beans in the 4 groups A, B, C and D should be 9:3:3:1. In an experiment among 1600 beans, the numbers in the 4 groups were 882, 313, 287 and 118. Does the experimental result support the theory?

SECTION – C

Answer any THREE Questions : **(3 × 10 = 30)**

16. Obtain the median for the following frequency distribution.

X	1	2	3	4	5	6	7	8	9
F	8	10	11	16	20	25	15	9	6

17. The first of the 2 samples has 100 items with mean 15 and standard deviation 3. If the whole group has 250 items with mean 156 and standard deviation $\sqrt{13.44}$, find the SD of the second group.

18. A coin is tossed3 times. Find the chances of throwing

    i) 3 heads ii) 2 heads and 1 tail iii) head and tail alternatively

19. The probability density function of a random variable X is

$$f(x) = \begin{cases} 0 & for\ x \le -a \\ \frac{1}{a^2}(a+x) & for -a < x \le 0 \\ \frac{1}{a^2}(a-x) & for\ 0 < x \le a \\ 0 & for\ x \ge a \end{cases}$$

20. A random sample of 10 boys had the following IQ's 70, 120, 110, 101, 88, 83, 95, 98, 107, 100. Do these data support the assumption of a population mean IQ of 100? Find a reasonable range in which most of the mean IQ. Values of samples of 10 boys lie.

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B.Sc. Comp. Sci. Degree (Semester) Examinations, April 2016

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

NUMERICAL METHODS FOR COMPUTER SCIENCE

Under CBCS – Credit 5

Time: **3** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. The order of convergence of the Newton – Raphson method is

   a) At least 2 b) 2 c) 3 d) 4

2. Another name of Regula – Falsi method is

   a) Bisection b) Bolzano's c) false position d) none

3. _____ formula is used to equal interval.

   a) Newton's forward b) Newton's backward

   c) Gauss's formula d) All

4. $Ey_0 =$ _____.

   a) y_{-1} b) y_0 c) y_1 d) y_2

5. _____ is/are the central difference interpolation methods.

   a) Gauss forward b) gauss backward

   c) Laplace – Everett d) all

6. Lagrange's interpolation formula is used for _____ intervals.

   a) Equal b) unequal c) middle value d) none

7. Putting $n = 2$ in Newton cote's Quadrature formula, we get

   _____ rule.

   a) *Simpson* $\frac{1}{3}$ *rule* b) *Simpson* $\frac{1}{8}$ *rule* c) Weddle d) Trapezoidal

8. Putting $n = 3$ in Newton cote's Quadrature formula, we get _____ rule.

a) *Simpson* $\frac{1}{3}$ *rule* b) *Simpson* $\frac{1}{8}$ *rule* c) Weddle d) Trapezoidal

9. Euler's method is the Runge – Kutta method of _____order.

a) first b) second c) third d) fourth

10. Modified Euler's method is the Runge-Kutta method of _____order.

a) First b) Second c) Third d) Fourth

SECTION – B

Answer ALL Questions : **(5 × 7 = 35)**

11. a) Find by Regula – Falsi method the positive root of

$$x^2 - \log_{10} x - 12 = 0.$$

(OR)

b) Find the real root of $x\,e^x - 2 = 0$ correct to three places of decimals using Newton – Raphson method.

12. a) Solve the following equations by Gauss Jordan method.

$$2x + 3y = 5; \quad x + y = 2.$$

(OR)

b) *If* $y(75) = 246,\ y(80) = 202,\ y(85) = 118,\ y(90) = 40$

Find $y(79)$.

13. a) Apply Gauss forward interpolation formula to find $y(25)$ for the following data

X	20	24	28	32
Y	2854	3162	3544	3992

(OR)

b) Apply Laplace –Everett's formula to find $y(337.5)$ for the following data

X	310	320	330	340	350	360
Y	2.491	2.505	2.518	2.531	2.544	2.556

14. a) Find $\frac{dy}{dx}$, at $x = 51$ from the following data

X	50	60	70	80	90
Y	19.96	36.65	58.81	77.21	94.61

(OR)

b) Evaluate $\int_0^1 \frac{dx}{1+x^2}$ using trapezoidal rule with $h = 0.2$.

15. a) Using Taylor's method solve $\frac{dy}{dx} = 1 + xy$ with $y_0 = 2$.

Find $y(0.1)$.

(OR)

b) Solve $\frac{dy}{dx} = 1 - y,\ y(0) = 0$ using Euler's method.

Find $y\ at\ x = 0.1\ and\ x = 0.2$.

SECTION – C

Answer any THREE Questions : **(3 × 10 = 30)**

16. Find the real root of the equation $x^3 - 3x + 1 = 0$ lying between 1 and 2 correct to three places of decimal by using bisection method.

17. Solve the following system of equations using Gaussian elimination method $x + y + z = 9;\quad 2x - 3y + 4z = 13;\quad 3x + 4y + 5z = 40.$

18. Use Lagrange's formula to find the value of $y \ at \ x = 6$ from the following data

X	3	7	9	10
Y	168	120	72	63

19. Evaluate $\int_0^1 \frac{dx}{1+x^2}$ by using Romberg's method correct to 4 decimal places.

20. Use Runge – Kutta method of the fourth order to find $y(0.1)$, given that $\frac{dy}{dx} = \frac{1}{x+y}, \quad y(0) = 1.$

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B.Sc. Comp. Sci. Degree (Semester) Examinations, April 2016

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

COMPUTER GRAPHICS

Under CBCS – Credit 4

Time: **3** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. CAD stands for _____.
   a) Computer aided design b) Computer area design
   c) both d) none
2. _____ methods are widely used in both fine art and commercial art application.
   a) Program b) computer graphics
   c) hardware d) network
3. _____ symbol is a single character that can be displayed in different colors and different sizes.
   a) arrow b) point c) marker d) none
4. Areas are displayed with _____ basic fill styles.
   a) one b) two c) three d) four
5. A _____ is a rectangular array of quantities.
   a) matrix b) square c) string d) none
6. A matrix with a single row or a single column represents a _____.
   a) function b) number c) vector d) style
7. Line and _____ clipping routines are standard components of graphics packages.
   a) Polygon b) point c) area d) curve
8. _____ are the properties of the output primitives.
   a) Attributes b) geometry c) both d) none
9. _____ multiplication is associative.
   a) Object b) matrix c) both d) none
10. An object is translated in _____ dimensions by transforming each of the defining points of the object.
    a) four b) three c) two d) one

SECTION – B

Answer ALL Questions : **(5 × 7 = 35)**

11. a) Explain Computer art.

    (OR)

    b) Discuss about display processor.
12. a) Write in detail about points.

    (OR)

    b) Write in detail about lines.
13. a) Explain composite transformation.

    (OR)

    b) Discuss about modeling and coordinate transformation.
14. a) Write in detail about segments concepts.

    (OR)

    b) Write in detail about segment files.
15. a) Explain scaling, rotation.

    (OR)

    b) Discuss about basic three dimensional concepts.

SECTION – C

Answer any THREE Questions : **(3 × 10 = 30)**

16. Explain charts and models.
17. Discuss about image processing.
18. Discuss about Raster methods for transformations.
19. Explain input functions.
20. Explain three dimensional graphics packages.

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B.Sc. Comp. Sci. Degree (Semester) Examinations, April 2016

Part – III : Core Subject : Second Semester : Paper – II

MICROPROCESSOR & INTERFACING TECHNIQUES

Under CBCS – Credit 4

Time: **3** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. CISC stands for _____.
   a) Complex Instruction Set Computer
   b) Common Instruction Set Computer
   c) Command Information Set Computer
   d) Complex Instruction Set Computing
2. BIU stands for
   a) Bus Interface Unit b) Basic interface unit
   c) Bit Interface Unit d) None of these
3. Microprocessor programs can be written in _____ code.
   a) machine b) mnemonic c) ASCII d) Uni
4. PCI stands for
   a) Peripheral Component Interconnect
   b) Personal computer Interconnect
   c) Port Component Interconnect d) None of these
5. Which processor is older one?
   a) Pentium b) Pentium Pro c) SUN's SPARC d) AMD
6. What is microprocessor?
7. What is bus?
8. What is assembly language?
9. What is DMA?
10. What is PC?

SECTION – B

Answer ALL Questions : **(5 × 7 = 35)**

11. a) Explain RISC processor in detail.

(OR)

b) Discuss embedded Microprocessor.

12. a) Explain various addressing mode of 8086.

(OR)

b) Explain the register organization of 8086.

13. a) Write an assembly language program to add two numbers.

(OR)

b) Describe 8086 Instruction set.

14. a) Write about 8279 keyboard display Interface.

(OR)

b) Write about Intel 8259 PIC.

15. a) Compare alpha and cyrix processor.

(OR)

b) Explain about Power PC 601.

SECTION – C

Answer any THREE Questions : **(3 × 10 = 30)**

16. Describe microprocessor with MMX technology.
17. Explain the pin description of 8086.
18. Explain 8086 Instruction Groups.
19. Describe about 8237 DMA.
20. Describe pentium and Pentium pro processor.

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B.Sc. Comp. Sci. Degree (Semester) Examinations, April 2016

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

OPERATING SYSTEM

Under CBCS – Credit 4

Time: **3** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. What is operating system?
   a) Memory manager b) device manager
   c) processor manager d) all of the mentioned
2. Process is
   a) job at rest b) Resource
   c) a program in execution d) a dead job
3. The address of a page table in memory is pointed by
   a) page register b) page table base register
   c) block d) process
4. What is compaction?
   a) segmentation b) deadlock
   c) a technique for overcoming external fragmentation
   d) a technique for overcoming internal fragmentation
5. The Process Control Block is :
   a) Process b) Data Structure c) Job d) register
6. For multiprogramming operating system
   a) special support from processor is essential
   b) special support from processor is not essential
   c) real system is needed d) none of the above
7. A keyboard is an example of a device that is accessed through a _____ interface.
   a) data b) audio c) character stream d) multimedia
8. Which of the following is Sequential Access Storage Media?
   a) Magnetic tape b) CD ROM c) USB d) Joy stick
9. Group of related bytes that can be identified by user with name, type, and size is called as
   a) File b) Record c) List d) literals
10. _____ is a unique tag, usually a number, identifies the file within the file system.
   a) file identifier b) file manager
   c) file pointer d) file end indicator

SECTION – B

Answer ALL Questions : **(5 × 7 = 35)**

11. a) Discuss about the components of Operating system. **(OR)**
    b) Explain about various types of Operating system.
12. a) Write short notes on single continuous allocation. **(OR)**
    b) Explain about first fit and best fit allocation schemes.
13. a) What is a job scheduler state its functions? **(OR)**
    b) Discuss about process control block.
14. a) Discuss about I/O Channel. **(OR)**
    b) Explain about Interrupts.
15. a) Explain about File Manager. **(OR)**
    b) Discuss about File descriptor.

SECTION – C

Answer any THREE Questions : **(3 × 10 = 30)**

16. Explain how operating system acts as a Resource Manager.
17. Discuss about paging concept in detail.
18. Explain about various process status in detail.
19. Discuss about Device communication and Direct Memory Access.
20. Explain about various file access mechanisms.

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B.Sc. Comp. Sci. Degree (Semester) Examinations, April 2016

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 × 1 = 10)**

1. A relational database consists of a collection of
   a) Tables b) Fields c) Records d) Keys
2. The _____ refers to the way data is organized in and accessible from DBMS.
   a) database hierarchy b) data organization
   c) data sharing d) data model
3. In the _____ normal form, a composite attribute is converted to individual attributes.
   a) First b) Second c) Third d) Fourth
4. Which forms are based on the concept of functional dependency:
   a) 1NF b) 2NF c) 3NF d) 4NF
5. The deadlock state can be changed back to stable state by using _____ statement.
   a) Commit b) Rollback c) Savepoint d) Deadlock
6. What are the ways of dealing with deadlock?
   a) Deadlock prevention b) Deadlock recovery
   c) Deadlock detection d) All of the mentioned
7. Create table employee (name varchar, id integer)
   What type of statement is this?
   a) DML b) DDL c) View d) Integrity constraint
8. To remove a relation from an SQL database, we use the _____ command.
   a) Delete b) Purge c) Remove d) Drop table
9. Which of the following is NOT VALID is PL/SQL
   a) Bool boolean; b) NUM1, NUM2 number;
   c) deptname dept.dname%type; d) date1 date := sysdate
10. PL/SQL supports datatype(s)
   a) Scalar datatype b) Composite datatype
   c) All of the above d) None of the above

SECTION – B

Answer ALL Questions : **(5 × 7 = 35)**

11. a) Explain the distinctions among the terms primary key, candidate key, and superkey.

(OR)

b) List out components of ER model and explain each.

12. a) Write short notes on 2NF. **(OR)**
b) Explain about Data Control Language.

13. a) Write short notes on Data integrity. **(OR)**
b) Discuss about problems of concurrency.

14. a) Write in detail about create table command. **(OR)**
b) Explain about nested queries in SQL.

15. a) Discuss about date and time related data types in PL/SQL.

(OR)

b) Explain on creating triggers.

SECTION – C

Answer any THREE Questions : **(3 × 10 = 30)**

16. Explain about the database architecture.
17. Elaborately explain the normalization concepts.
18. Discuss about security mechanisms in detail.
19. Explain various aggregate functions used in SQL with examples.
20. Discuss in detail about operators in PL/SQL.

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B.Sc. Comp. Sci. Degree (Semester) Examinations, April 2016

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 × 1 = 10)**

1. _____ Remembers your last screen arrangement and reuses it.
   a) visual basic b) oracle c) c++ d) java
2. The _____ bar is the horizontal bar located at the top of the screen.
   a) tool bar b) title bar c) menu bar d) none
3. _____ in visual basic rarely use line numbers.
   a) Statements b) comment c) both d) none
4. lines are limited to _____ characters.
   a) 1024 b) 1023 c) 1022 d) 1020
5. There are _____ kinds of general procedures in visual basic.
   a) one b) two c) three d) four
6. The keyword _____ is called access specifier.
   a) public b) private c) both d) none
7. RAD stands for _____.
   a) Rapid application device b) rapid application development
   c) both d) none
8. ASP stands for _____.
   a) Actual service page b) accurate service page
   c) active service page d) none
9. In VB.net decimal is _____ bytes.
   a) 8 b) 16 c) 32 d) 64
10. In VB.net Double is _____ bytes.
    a) 64 b) 32 c) 16 d) 8

SECTION – B

Answer ALL Questions : **(5 × 7 = 35)**

11. a) Explain text boxes.

    (OR)

    b) Explain image controls.
12. a) Discuss about numeric functions.

    (OR)

    b) Discuss about constants.
13. a) Write in detail about sub procedure.

    (OR)

    b) Explain Error trapping.
14. a) Discuss about RAD features.

    (OR)

    b) Explain Base class libraries in VB.Net.
15. a) Explain arithmetic operators.

    (OR)

    b) Explain Concatenation operators.

SECTION – C

Answer any THREE Questions : **(3 × 10 = 30)**

16. Discuss about scale properties and color properties.
17. Explain financial functions.
18. Write a VB program using array.
19. Explain web form.
20. Explain dynamic arrays in VB.Net.

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B.Sc. Comp. Sci. Degree (Semester) Examinations, April 2016

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

WEB TECHNOLOGY

Under CBCS – Credit 4

Time: **3** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. The Internet Protocol is responsible for basic network _____.
   a) Protocol b) Security c) Communication d) Connectivity
2. HTML is the language interpreted by a _____.
   a) Browser b) Provider c) Server d) All the above
3. The Netscap client browser product is called _____.
   a) Netscape Provider b) Netscape Communicator
   c) Netscape Server d) All the above
4. Java Script arrays are implemented as _____.
   a) Objects b) Methods c) Properties d) All the above
5. Individual form elements are found under the _____ object.
   a) Document b) Anchor c) Link d) Form
6. Javascript is an _____ Programming language.
   a) Object Oriented b) Object based
   c) Fully OOPS d) Partially OOPS
7. HTML Input file control to allow the visitor to _____.
   a) Upload a File b) Download a File
   c) Copy a File d) All the above
8. _____ similar to check box control.
   a) Image Button Control b) Radio Button Control
   c) Link Button Control d) All the above
9. The OLEDB Connection Object provides the means to control to a _____.
   a) File b) Forms c) Database d) Table
10. A _____ is ASP.Net terminology.
   a) Session b) Form c) Object d) All the above

SECTION – B

Answer ALL Questions : **(5 × 7 = 35)**

11. a) Explain basics of Internet.

(OR)

b) Explain tables in HTML.

12. a) List out Javascript merits.

(OR)

b) Explain Dialogbox in Javascript.

13. a) Write a note on Event handlers in Javascript.

(OR)

b) Explain Browser Objects.

14. a) Explain HTML Anchor Control in ASP.Net.

(OR)

b) Explain List Box Control in ASP.Net.

15. a) Explain OLEDB Connection Class in ASP.Net.

(OR)

b) Explain SMTP mail and mail message classes.

SECTION – C

Answer any THREE Questions : **(3 × 10 = 30)**

16. Discuss Frames in HTML.
17. Briefly explained functions in Javascript.
18. Describe Projects in Javascript.
19. Write a note on Basic Web server controls in ASP.Net.
20. Write a note on Request and Response object in ASP.Net.

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10EP2A

VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

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B.Sc. Comp. Sci. Degree (Semester) Examinations, April 2016

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

MOBILE COMPUTING

Under CBCS – Credit 5

Time: **3** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. Expansion of PDA _____.
   a) Personal Device Adaptor b) Personal Digital Assistants
   c) Personal Drive Assistants d) All of these
2. Mobile Communication Limited bandwidth is _____.
   a) 9 Kbps b) 11 Kbps c) 5 Kbps d) None of the above
3. Expand PBS _____.
   a) Public Broadcasting Satellite
   b) Programming Broadcasting Supplies
   c) Public Broadcasting Service d) None of the above
4. The bandwidth requirement is approximated by carson's rule.
   a) $BW = 2(fm + \Delta f)$ b) $BW = 2(\Delta f + fm)$
   c) $BW = 4(\Delta f + fm)$ d) None of the above
5. A Cell is the basic geographic unit of cellular system. (True / False)
6. GSM is a digital system with an over the air bit rate of _____ Kbps.
   a) 210 b) 270 c) 330 d) All of these
7. In a _____ LAN, transmission is limited to a room.
   a) Infrared b) Microwave c) Wireless d) Radio
8. An adhoc network means _____.
   a) Peer to Peer network b) has no centralized server
   c) is usually setup temporarily d) All the above
9. The WAP forum is controlled by the founding companies. (True / False)
10. WSP WDP stock layers are port is _____.
    a) 9202 b) 9203 c) 9201 d) 9200

SECTION – B

Answer ALL Questions : **(5 × 7 = 35)**

11. a) Write a short notes on Mobile Computing Architecture.

    (OR)

    b) Explain the Challenges in Mobile Computing.
12. a) Explain Wireless Communication System.

    (OR)

    b) Write any one of the Access Techniques.
13. a) Explain Cellular System components.

    (OR)

    b) List out Principles of Mobile Communications.
14. a) Write a short note on Wireless LANS Applications.

    (OR)

    b) Explain IEEE 802.11 standard.
15. a) Explain Protocol stack.

    (OR)

    b) Write a notes on "WML".

SECTION – C

Answer any THREE Questions : **(3 × 10 = 30)**

16. Discuss Types of adaptations and Mobile Computing Models.
17. Describe Multiplexing.
18. Discuss about Global System for Mobile Communications.
19. Briefly explain Bluetooth.
20. Write a notes on "MOBILE INTERNET".

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VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

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B.A. / B.Sc. Degree (Semester) Examinations, April 2016

Part – IV : Non-Major Elective Subject : Second Semester : Paper – I

WEB PROGRAMMING

Under CBCS – Credit 2

Time: **2** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. <P> Tag indicates _____.

   a) Paragraph b) Text c) Font d) Bold

2. Which tag is used to represent column of the table?

   a) <TD> b) <TH> c) <TR> d) <DD>

3. Which one of the following is order list tag?

   a) <OL> b) <UL> c) <LIST> d) <TR>

4. Which Tag is used for linking documents?

   a) <A href> b) Body c) <Head> d) <HTML>

5. Which tag is used to split a single window into many?

   a) <Form> b) <Frame> c) <Tittle> d) <Body>

6. Website is a collection of web pages (True / False)

7. WWW stands for _____.

8. HTML stands for _____.

9. Write any two browser name.

10. <IMG Src=“ ”> tag used for_____.

    a) Add Image b) Add background color

    c) Create table d) Create Text box

SECTION – B

Answer ALL Questions : **(4 × 10 = 40)**

11. a) Answer the following questions. i) What is web page?

    ii) What is website? Iii) What is Browser?

    (OR)

    b) Briefly discuss about the structure of HTML with an example.

12. a) Write a short notes an <FORM> tag.

    (OR)

    b) Write a short notes on <FRAME> tag.

13. a) Explain about the anchor tag <a href> with example.

    (OR)

    b) Briefly discuss about image tag with attributes.

14. a) Write a sample program to illustrate definition list.

    (OR)

    b) Briefly discuss about the font tag with an example.

SECTION – C

Answer any TWO Questions : **(2 × 12½ = 25)**

15. Explain about commonly used three types of list tag with an example.
16. Explain table tag with its various attributes.
17. Write a html program to prepare student admission form (the form should be contained the following fields name, address, date of birth, religion, community, select department name, select course and education details etc.).

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10SB61

VIVEKANANDA COLLEGE, TIRUVEDAKAM WEST

(Autonomous & Residential)

[Affiliated to Madurai Kamaraj University]

B.Sc. Comp. Sci. Degree (Semester) Examinations, April 2016

Part – IV : Skill Based Subject : Sixth Semester : Paper – I

PC HARDWARE & TROUBLE SHOOTING

Under CBCS – Credit 2

Time: **2** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. A hard disk is divided into tracks which are further subdivided into

   a) Clusters b) Sectors c) Vectors d) heads

2. Which Motherboard form factor uses one 20 pin connector?

   a) ATX b) AT c) BABY AT d) All of the above

3. When voltage does a Pentium System use

   a) +12V b) +5V c) +8V d) +3.3V

4. DVD Stands for _____.

5. Plotter is a _____ device.

6. What is SMPS?

7. Expand MODEM.

8. List out types of HDD?

9. Define USB?

10. Mention the different types of ROM.

SECTION – B

Answer ALL Questions : **(4 × 10 = 40)**

11. a) Explain the basic parts of the Computer?

(OR)

b) Explain the Cooling System in a PC System?

12. a) Discuss briefly about CD and DVD Technology?

(OR)

b) Write a Short note on i) PATA ii) SATA

13. a) List out the different types of Mouse and Keyboards?

(OR)

b) Mention the Components in the Motherboard?

14. a) Discuss about Pen drive and Tape Drive?

(OR)

b) Explain Floppy Disk and Drive?

SECTION – C

Answer any TWO Questions : **(2 × 12½ = 25)**

15. Explain the Storage devices of the PC in details?

16. List out Input and Output Devices and its functions?

17. Trouble shoots the problems in CRT Monitors and Printers?

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B.Sc. Comp. Sci. Degree (Semester) Examinations, April 2016

Part – IV : Skill Based Subject : Sixth Semester : Paper – II

BIOMETRICS

Under CBCS – Credit 2

Time: **2** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. The term "Biometrics" is derived from _____.

   a) Greek b) French c) English d) Spanish

2. Find the odd one.

   a) Face b) Voice c) Iris d) Password

3. In optical sensors, _____ is used.

   a) reflection b) refraction c) diffraction d) polarization

4. The Iris pattern results from _____.

   a) ligaments b) pupil c) pigmentation d) all of these

5. Which one of the following is not included in Iris acquisition devices?

   a) LG b) OKI c) Panasonic d) Sony

6. What are the processing techniques used to process finger print images?

7. What are the finger print sensors?

8. Which signal is used to inject into the finger?

9. CCD stands for _____.

10. Iris is mapped into a rectangle in normalized _____ coordinate system.

SECTION – B

Answer ALL Questions : **(4 × 10 = 40)**

11. a) What is Biometrics? Write note on it.

(OR)

b) Briefly discuss the Biometric system errors.

12. a) State the security and privacy issue of a Biometric system.

(OR)

b) Draw and explain the neat diagram of the Biometric system.

13. a) How will you recognize an object using correlation technique?

(OR)

b) State the challenges in face recognition system.

14. a) What is Iris? Write down its advantages.

(OR)

b) Briefly discuss the Iris acquisition devices.

SECTION – C

Answer any TWO Questions : **(2 × 12½ = 25)**

15. Discuss the functionalities of the Biometric system in detail.

16. Discuss about the working principle of finger print technology.

17. Explain the different kinds of attacks in Biometric security system.

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B.Sc. Comp. Sci. Degree (Semester) Examinations, April 2016

Part – IV : Skill Based Subject : Sixth Semester : Paper – III

EMBEDDED SYSTEMS

Under CBCS – Credit 2

Time: **2** Hours Max. Marks: **75**

SECTION – A

Answer ALL Questions : **(10 × 1 = 10)**

1. _____ can be considered as self-contained systems with a processor, memory and peripherals.
   a) Microprocessor b) Microcontroller
   c) Monitor Processor d) All of these
2. CX Stands for _____.
   a) Accumulator b) Counter Register
   c) Base Register d) Data Register
3. _____ are frequently an elegant hardware solution to a recurring software problem of providing an efficient method of transferring data from peripheral to memory.
   a) DSP b) DMA c) ADC d) DAC
4. _____ statement takes the content of file name and includes it as a part of the program code.
   a) Include b) define c) ifdef d) define MACRO ()
5. ADC denote as _____.
6. Define System with example.
7. Define Embedded System.
8. What makes embedded system differ?
9. Write the application of Embedded System.
10. Define Linking and Loading.

SECTION – B

Answer ALL Questions : **(4 × 10 = 40)**

11. a) Discuss about the application, Characteristics & categories of embedded system.

(OR)

b) What is Embedded System? Write the components and Constraints.

12. a) Explain about the DSP.

(OR)

b) Explain about the Microcontroller.

13. a) Write about the models of DMA Controller.

(OR)

b) Calculate the 16-bit Multiplication 7593*6845 and Write the Coding.

14. a) Explain about i) Task level debugging ii) Symbolic debugging

(OR)

b) Write about pre-processor, Compilation and Assembler.

SECTION – C

Answer any TWO Questions : **(2 × 12½ = 25)**

15. Discuss about the Microprocessor and Microcontroller.
16. Explain about the Digital Signal Processing.
17. Brief discuss about the debugging Techniques in detail.

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