

PC HARDWARE & TROUBLE SHOOTING-10SB61

SECTION-A

I. Answer all questions

(5x1=5)

1. RAM Stands for_____
 - a. Random Access Memory
 - b. Read Access Memory
 - c. Ready Access Memory
 - d. Random Arithmetic Memory
2. Central Processing Unit (CPU) consists of
 - a. control unit
 - b. arithmetic and logic unit
 - c. main store
 - d. all of above
3. Devices that accepts data from outside computer and transfer into CPU are called
 - a. Input device
 - b. Output device
 - c. Analog device
 - d. Digital device
4. Main store' of CPU is also called
 - a. main memory
 - b. temporary memory
 - c. immediate access store
 - d. both A & C
5. ROM' stands for
 - a. read only memory
 - b. random only memory
 - c. readily object memory
 - d. random object memory

SECTION – B

II. Answer Any Two Question

(2x2=4)

6. Define Microprocessor
7. Define BIOS
8. Write 5 Input & Output devices
9. Define CPU

SECTION - C

III. Answer Any One Question

(1x6=6)

10. Explain about the components of Motherboard
11. Briefly discuss about the i) Main Memory ii) Secondary Memory

SECTION – D

IV. Answer Any One Question

(1x10=10)

12. Explain in detail about input & output devices
13. Explain about the basic parts of computer with neat diagram

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Date:

III year B.Sc.,

I Sessional Test
VI Semester
Max. Marks: 25
Time : 1 hr

DTP 10SB62

SECTION-A

Answer all questions

(5X1=5)

1. RGB Stands for

- a) Real Graphic Bit b) Red Green Blue c) Right Green Based d) Radial Graphic Base

2. _____ allows you to select the foreground or background color of an image.

- a) Eyedropper Tool b) Zoom Tool c) Crop Tool d) Move Tool

3. ppi Stands for

- a) Point Point Inch b) Pixel Point Inch c) Pixel Per Inch d) Pixel-Pixel Inch

4. Which tool is used for crop the image?

- a) Crop Tool b) Brush Tool c) Hand Tool d) Paint Tool

5. JPEG Stands for

- a) Joint Photographic Experts Group b) Joint Photography Experts Group
c) Joint Photo pixel Experts Group d) Joint Photographic Experimental Group

SECTION-B

Answer any FIVE questions

(2X2=4)

6. Define Title bar

7. What is page layout tab?

8. What is workspace?

9. Define Palettes.

SECTION-C

Answer any THREE questions

(1X6=6)

10) Explain about exploring file formats in Photoshop.

11) Explain the zoom tool and eyedropper tool.

SECTION-D

Answer any one

(1X10=10)

12) Briefly discuss about exploring the new interface.

13) Explain about working with images.



Network Security and Cryptography -10SB63

SECTION-A

Answer all questions

(5X1=5)

1. In cryptography, the order of the letters in a message is rearranged by
 - a) transpositional ciphers
 - b) substitution ciphers
 - c) both transpositional ciphers and substitution ciphers
 - d) none of the mentioned
2. In asymmetric key cryptography, the private key is kept by
 - a) sender
 - b) receiver
 - c) sender and receiver
 - d) all the connected devices to the network
3. In cryptography, what is cipher?
 - a) algorithm for performing encryption and decryption
 - b) encrypted message
 - c) both algorithm for performing encryption and decryption and encrypted message
 - d) none of the mentioned
4. What is data encryption standard (DES)?
 - a) block cipher
 - b) stream cipher
 - c) bit cipher
 - d) none of the mentioned
5. Voice privacy in GSM cellular telephone protocol is provided by
 - a) A5/2 cipher
 - b) b5/4 cipher
 - c) b5/6 cipher
 - d) b5/8 cipher

SECTION-B

Answer any FIVE questions

(2X2=4)

6. Define Chiper text?
7. What is Network security?
8. What is Masquerade?
9. Define Data Integrity ?.

SECTION-C

Answer any THREE questions

(1X6=6)

- 10) Explain about Security mechanisms of networks.
- 11) Explain the Security Attacks.

SECTION-D

Answer any one

(1X10=10)

- 12) Briefly discuss about Symmetric cipher model.
- 13) Explain about Security services.



STATISTICS & Probability 10AT21

SECTION-A

ANSWER ALL THE QUESTIONS

1*1=10

- 1) There difference between upper limits and lower limits of a distribution is
a) Mode b) Median c) Mean d) Range **CO1**
- 2) The Arithmetic mean of 7, 3, 12, 8, 10 is
a) 8 b) 3 c) 9 d) 5 **CO1**
- 3) A series showing the sets of all values in classes with their corresponding frequencies is known as _____.
a) Grouped frequency distribution. b) Simple frequency distribution.
c) Cumulative frequency distribution. d) None of the above. **CO1**
- 4) Frequency of a variable is always _____.
a) In percentage. b) A fraction. c) An integer. d) None of the above. **CO1**
- 5) Individual data is another wise called as _____.
a) Raw data. b) Discrete data. c) Continuous data. d) Primary data. **CO1**
- 6) The mean of 1, 2, 3, 4, 5 is _____.
a) 1. b) 2. c) 3. d) 4. **CO1**
- 7) Median usually lies between _____.
a) Mean and mode. b) Mean and G.M. c) Mean and H.M. d) G.M and H.M **CO1**
- 8) Statistics considers _____.
a) A single item. b) A set of items. c) Either a single item or a set of items.
d) Neither a single item nor a set of items. **CO1**
- 9) The data collected by questionnaires are _____.
a) Primary data. b) Secondary data. c) Published data. d) Grouped data. **CO1**
- 10) Third Quartile of 40 is
a) 35 b) 30 c) 25 d) 20 **CO1**

SECTION-B

Answer any FIVE questions

(5X2=10)

- 11) Define Median? **CO1**
- 12) Define Frequency? **CO1**
- 13) Write about types of data collections in statistics? **CO1**
- 14) Define Histogram? **CO1**
- 15) Define Class boundaries? **CO1**
- 16) Write types of Charts? **CO1**
- 17) Write the formula of Mean? **CO1**

SECTION-C

Answer any **THREE** questions

(3X6=18)

18) Find the arithmetic mean to the given details

CO1

x	15	16	17	18	19
f	2	1	3	3	1

19) Discuss about the collection of Primary data?

CO1

20) (B) Calculate the median value to the given details

CO1

x	1	2	3	4	5	6
f	5	9	18	12	9	7

21) Find the G.M and H.M for the following distribution

CO1

x	1	2	3	4	5
f	2	4	3	2	1

22) Calculate the Mean value of the given details

CO1

x	0-10	10-20	20-30	30-40	40-50
f	3	5	9	3	2

SECTION-D

Answer any **ONE** Question

(1X12=12)

23) Calculate the Mode value of the given details

CO1

Size of shoes	3	4	5	6	7	8	9	10
Person wearing it	10	28	38	42	45	15	8	7

24) Find Mean Deviation, Third Quartiles, 20th Percentile

CO1

Class	0-9	10-19	20-29	30-39	40-49
Frequency	11	20	16	36	17

NUMERICAL METHODS FOR COMPUTER SCIENCE-10AT41

SECTION-A

Answer all the questions (10x1=10)

- $E^4 - 4E^3 + 6E^2 - 4E + 1 = -$ _____
a) E^4 b) $(E-1)^4$ c) $(E+1)^4$ d) $(E-1)^3$
- $EY_0 =$ _____
a) Y_{-1} b) y_0 c) y_1 d) y_2
- _____ formulae used for equal interval
a) Newton forward b) Newton backward c) Guass forward and backward d) all
- _____ is /are following central interpolation methods
a) Guass forward b) Guass backward c) Laplace Everett d) all
- Guass forward and backward interpolation derived from _____
a) Newton forward b) Guass forward and backward c) Laplace Everett d) Newton's cote
- How we find the missing value use of _____
a) Δ and E b) Δ and F c) Δ and G d) Δ and h
- Guass Elimination method is a _____ based on the elimination of the unknowns by combining equation
a) Iteration method b) interpolating function c) Bisection method d) convergence method
- Guassseidal method method used for _____
a) Iteration method b) interpolating function c) Bisection method d) convergence method
- _____ used to interpolate nearer to starting value of table
a) Newton forward b) Newton backward c) Guass forward and backward d) all
- _____ used to interpolate nearer to starting value of table
a) Newton forward b) Newton backward c) Guassforward and backward d) all

SECTION-B

Answer any FIVE questions (5X2=10)

- Define interpolation
- Define extrapolation
- Is following system of equation possible to apply Guass Jordan method if it's true/false tells the reason
 $10x + y + z = 12$; $2x + 10y + z = 13$; $x + y + 5z = 7$
- Write the procedure of Guassseidal iteration
- Write the formula of Newton forward with u
- Write the formula of Newton backward with v
- Convert the following matrix into upper triangle

A = $\begin{bmatrix} 2 & 1 \\ 7 & -3 \end{bmatrix}$

SECTION-C

Answer any THREE questions (3X6=18)

- Solve the system of equation by Guass elimination method
 $2x + 3y - z = 5$; $4x + 4y - 3z = 3$; $2x - 3y + 2z = 2$
- Solve the system of equation by Guassjordan method
 $X + 2y + z = 3$; $2x + 3y + 3z = 10$; $3x - y + 2z = 13$
- Find the Guassian Elimination the inverse of matrix

A = $\begin{bmatrix} 3 & -1 & 1 \\ -15 & 6 & -5 \\ 5 & -2 & 2 \end{bmatrix}$

21. Find the missing value of the table

X	1917	1918	1919	1920	1921
y	443	384	-----	397	467

22. If $y(75)=246$, $y(80)=202$, $y(85)=118$, $y(90)=40$, find $y(79)$

SECTION-D

Answer any One (1X12=12)

- Solve the system of equation by Guass Seidel iterative method
 $x + y + 54z = 110$; $27x + 6y - z = 85$; $6x + 15y + 2z = 72$
- The populations of a town as follows

X year	1941	1951	1961	1971	1981	1991
Y population in Lakh	20	24	29	36	46	51

And estimate the population increase during the period 1946 to 1976 and also express x terms.

MICROPROCESSOR & INTERFACING TECHNIQUES-10CT22

SECTION-A

Answer all questions

(10x1=10)

1. CISC stands for _____
a. Complex Instruction Set Computer b) Common Instruction Set Computer
c. Command Instruction Set Computer d) Complex Instruction Set Computing **CO1**
2. ALU stands for _____
a. Arithmetic & Logical unit b) Arithmetic list unit c) Both d) none **CO1**
3. IC stands for _____
a) Integrated circuits b) Inter circuits c) Inline circuits d) none **CO1**
4. ROM stands for _____
a) Read only memory b) Read over memory c) Read operate machine d) none **CO1**
5. The PowerPC 601 was introduced in the year _____
a) 1903 b) 1993 c) 1998 d) none **CO1**
6. A microprocessor is a _____ chip integrating all the functions of a CPU of a computer.
a) multiple b) single c) double d) triple **CO1**
7. Microprocessor is a/an _____ circuit that functions as the CPU of the compute
a) electronic b) mechanic c) integrating d) processing **CO1**
8. Microprocessor is the _____ of the computer and it perform all the computational tasks
a) main b) heart c) important d) simple **CO1**
9. The purpose of the microprocessor is to control _____
a) memory b) switches c) processing d) tasks **CO1**
10. The first digital electronic computer was built in the year _____
a) 1950 b) 1960 c) 1940 d) 1930 **CO1**

SECTION-B

Answer any FIVE questions

(5X2=10)

11. What is Microprocessor? **CO1**
12. What is Bit Slice? **CO1**
13. Expand MMX **CO1**
14. Define Microcontroller **CO1**
15. Draw the diagram of DSP **CO1**
16. Difference between commercial and express **CO1**
17. Define embedded System **CO1**

SECTION-C

Answer any THREE questions

(3x6=18)

- 18) Explain about Embedded System **CO1**
- 19) Write about the Single chip microprocessor **CO1**
- 20) Explain about Bit Slice Processor **CO1**
- 21) Write about the features and data type of MMX technology **CO1**
- 22) Explain about Digital Signal Processing **CO1**

SECTION-D

Answer any ONE questions

(1x12=12)

- 23) Explain about RISC and CISC processor **CO1**
- 24) Briefly discuss on Evolution of Microprocessor **CO1**

Operating System 10CT41

SECTION-A

ANSWER ALL THE QUESTIONS

1*1=10

- 1) To access the services of operating system, the interface is provided by the
 - a) System calls
 - b) API
 - c) Library
 - d) Assembly instructions
- 2) Which facility dynamically adds probes to a running system, both in user processes and in the kernel?
 - a) DTrace
 - b) DLocate
 - c) DMap
 - d) DAdd
- 3) The OS X has _____
 - a) monolithic kernel
 - b) hybrid kernel
 - c) microkernel
 - d) monolithic kernel with modules
- 4) The systems which allows only one process execution at a time, are called
 - a) uniprogramming systems
 - b) uniprocessing systems
 - c) unitasking systems
 - d) none of the mentioned
- 5) What is the ready state of a process?
 - a) when process is scheduled to run after some execution
 - b) when process is unable to run until some task has been completed
 - c) when process is using the CPU
 - d) none of the mentioned
- 6) Which system call returns the process identifier of a terminated child?
 - a) get
 - b) exit
 - c) fork
 - d) wait
- 7) The address of the next instruction to be executed by the current process is provided by the
 - a) CPU registers
 - b) Program counter
 - c) Process stack
 - d) Pipe
- 8) The number of processes completed per unit time is known as _____
 - a) Output
 - b) Throughput
 - c) Efficiency
 - d) Capacity
- 9) Which of the following is not the state of a process?
 - a) New
 - b) Old
 - c) Waiting
 - d) Running
- 10) The degree of multiprogramming is:
 - a) the number of processes executed per unit time
 - b) the number of processes in the ready queue
 - c) the number of processes in the I/O queue
 - d) the number of processes in memory

SECTION-B

Answer any FIVE questions

(5X2=10)

- 11) Define Multiprogramming?
- 12) Define Software?
- 13) Draw a diagram for Simple states of a process
- 14) Define Job Scheduler?
- 15) Define Dispatcher?
- 16) Define Partitioned Allocation?
- 17) Write the Advantages of Single Contiguous Allocation ?

SECTION-C

Answer any THREE questions

(3X6=18)

- 18) Write a notes on operating system.
- 19) Write a notes on computer hardware terminology.
- 20) Discuss partitioned memory management briefly.
- 21) Explain the process life cycle ?.
- 22) Explain the Operating system as resource manager ?

SECTION-D

Answer any ONE Question

(1X12=12)

- 23) Explain the operating system in process view point.
- 24) Explain the segmented memory management in detail.

RELATIONAL DATABASE MANAGEMENT SYSTEM- 10CT42

SECTION-A

Answer all questions

(10X1=10)

1. A relational database consists of a collection of
A. Tables B. Fields C. Records D. Keys
2. The term _____ is used to refer to a row.
A. Attribute B. Tuple C. Field D. Instance
3. Which one of the following is a procedural language?
A. Domain relational calculus B. Tuple relational calculus
C. Relational algebra D. Query language
4. Which of the following is the oldest database model?
A. Relational B. Deductive C. Physical D. Network
5. Which of the following terms does refer to the correctness and completeness of the data in a database?
A. Data security B. Data constraint C. Data independence D. Data integrity
6. In a database the file is contained in _____
A. Entire database B. Two area C. One area D. more than one area
7. Which of the following indicates the maximum number of entities that can be involved in a Relationship?
A. Minimum cardinality B. Maximum cardinality C. ERD D. Greater Entity Count
8. It refers to set of one or more columns that designates the _____ key in a referential integrity constraint:
A. Select key B. Foreign key C. Write key D. None of these
9. Which of the following is a low level operator?
A. Insert B. Update C. Delete D. Directory
10. E-R modeling technique is
A. Tree structure B. Top-down method C. Bottom-up method D. Right-left approach

SECTION-B

Answer any FIVE questions

(5X2=10)

- 11) Define DML.
- 12) Define Schema.
- 13) What is primary key?
- 14) What is tuple?
- 15) EXPAND TCL and DDL
- 16) What is referential integrity?
- 17) Define the term 'View'.

SECTION-C

Answer any THREE questions

(3X6=18)

- 18) Explain about the database Concepts.
- 19) Explain the General properties of data models
- 20) Explain definition of database
- 21) Explain about the E-R diagram symbols and Binary Relationships
- 22) Write a program on Student Mark list using DML commands

SECTION-D

Answer any one

(1X12=12)

- 23) Explain about relational algebra?
- 24) Briefly explain about the Database management systems?

DOT NET PROGRAMMING - 10CT43

SECTION-A

Answer all questions

(10X1=10)

1. A GUI:
 - A. uses buttons, menus, and icons.
 - B. should be easy for a user to manipulate.
 - C. stands for Graphic User Interaction.
 - D. Both a and b.
2. Which is not a main component of the Visual Studio IDE?
 - A. Solution Explorer.
 - B. Tool Box.
 - C. Start Menu.
 - D. Designer Window.
3. Which is not a common property of the control class?
 - A. Show.
 - B. BackColor.
 - C. Font.
 - D. ForeColor.
4. The Button control can be activated _____.
 - A. programmatically through the click event.
 - B. by clicking only button with the mouse.
 - C. double clicking the object
 - D. through click event and button.
5. Which is a numeric data type?
 - A. Floating point.
 - B. Integer.
 - C. Float and Integer.
 - D. Boolean.
6. The Date data type does not hold _____ information.
 - A. Seconds.
 - B. Quarters.
 - C. Hours.
 - D. Days.
7. VB.Net identifiers _____.
 - A. are case sensitive.
 - B. can begin with an underscore.
 - C. can begin with a number.
 - D. are not a case sensitive.
8. Which TextBox property should always be changed first?
 - A. AcceptsReturn.
 - B. BorderStyle.
 - C. Font.
 - D. Name.
9. Which selection process is an example of multiple branches from a single expression?
 - A. If Then.
 - B. Select Case.
 - C. Do Loop.
 - D. For Next.
10. Which event is activated when a RadioButton is selected?
 - A. Checked.
 - B. CheckedChanged.
 - C. Selected.
 - D. SelectedChanged.

SECTION-B

Answer any FIVE questions

(5X2=10)

- 11) Define dot net?
- 12) What do you mean by CLR?
- 13) Expand: FCL, WCF, LINQ, and MSIL.
- 14) Define c# variable.
- 15) Different between While and do....While.
- 16) Write a Break statement with example.
- 17) Explain any four advantage of array.

SECTION-C

Answer any THREE questions

(3X6=18)

- 18) Benefits of dot net.
- 19) Write a program in Arithmetic Operation using Interface.
- 20) Explain the visual studio IDE.
- 21) Explain the Selection Statements with example.
- 22) Discuss about the Jagged Array with example.

SECTION-D

Answer any one

(1X12=12)

- 23) Explain about the Dot Net Framework components with diagram.
- 24) Write a program in String Function using sorting names.

* * * * *

MOBILE COMPUTING -10EP2A

SECTION-A

Answer all questions

(10X1=10)

- 1 3G W-CDMA is also known as
 - a. UMTS
 - b. DECT
 - c. DCS-1800
 - d. ETACS
2. Commonly used mode for 3G networks is
 - a. TDMA
 - b. FDMA
 - c. TDD
 - d. FDD
3. The shape for the cellular region for maximum radio coverage is
 - a. Circular
 - b. Square
 - c. Circle
 - d. Hexagon
4. Hexagon shape is used for radio coverage for a cell because
 - a. It uses the maximum area for coverage
 - b. Fewer number of cells are required
 - c. It approximates circular radiation pattern
 - d. all the above
5. The advantage of using frequency reuse is
 - a. Increased capacity
 - b. Limited spectrum is required
 - c. Same spectrum may be allocated to other network
 - d. All of the above
6. In Handoff
 - a. Process of transferring the call to the new base station
 - b. transfers the call
 - c. New channel allocation is done
 - d. All of the above
7. Dwell time is the time for
 - a. A call within the cell
 - b. Hand off
 - c. Waiting for channel allocation
 - d. all the above
8. DECT stands for
 - a. Digital European Cellular Telex
 - b. Digitized Emergency Cellular Telephone
 - c. Digital European Cordless Telephone
 - d. Digital European Cellular Telephone
9. MIN stands for
 - a. Mobile Identification Number
 - b. Mobile Internet
 - c. Mobility In Network
 - d. None of the above
10. PCN is
 - a. Wireless concept of making calls
 - b. For receiving calls
 - c. Irrespective of the location of the user
 - d. All of the above

SECTION-B

Answer any FIVE questions

(5X2=10)

- 11) Define Mobile Computing
- 12) Define Mobility
- 13) What is meant by Nomadic Computing?
- 14) Define Ubiquitous Computing
- 15) Write the application of mobile computing
- 16) Write aware adaptation model
- 17) Write transparent adaptation model

SECTION-C

Answer any THREE questions

(3X6=18)

- 18) Explain about characteristics of Mobile computing.
- 19) Discuss about Dynamic client server model
- 20) Discuss about application of mobile computing
- 21) Why mobile computing models are required
- 22) Write short notes on 1.Mobile 2. Nomadic 3. Ubiquitous

SECTION-D

Answer any one

(1X12=12)

- 23) Briefly explain about Mobile computing architecture
- 24) Explain about different types of models in mobile computing.

UNIX AND SHELL PROGRAMMING - 10SB31

SECTION-A

Answer all questions

(5X1=5)

1. What is a shell script?
 - a. group of commands
 - b. a file containing special symbols
 - c. a file containing a series of commands
 - d. group of functions
2. To spawn a child of our own choice for running the script, we can use ____ command.
 - a.ps
 - b.pr
 - c.sh
 - d. \$\$
3. The complete set of positional parameters is stored in _____ as a single string.
 - a. \$n
 - b. \$#
 - c. \$*
 - d. \$\$
4. Every if is closed with a corresponding ____
 - a. else
 - b. fi
 - c. if
 - d. else if
5. Test works in ____ ways.
 - a. 3
 - b. 2
 - c. 4
 - d. 1

SECTION-B

Answer any TWO questions

(2X2=4)

6. Define Operating System.
7. What is meant by UNIX?
8. Difference between Multiuser and multitasking
9. Expand: bin, lib, dev, tmp.

SECTION-C

Answer any THREE questions

(1X6=6)

- 10) Briefly discuss about UNIX system organization with diagram.
- 11) Explain the creating files.

SECTION-D

Answer any one

(1X10=10)

- 12) Discuss about the salient features of UNIX.
- 13) Explain the Bit of mathematics
