

Unique Past Papers Chapter Wise

COMPUTER 9

(2018, 2019, 2021, 2022 & 2023)

Lahore Board, Faisalabad Board, Multan Board, Gujranwala Board, Sahiwal Board, D.G. Khan Board, Sargodha Board, Rawalpindi Board & Bahawalpur Board.

Unit 1: Problem Solving

Problem Solving Steps

- | | | |
|-------|---|---------|
| Q.1: | What is important to solve a problem? | 2 Times |
| Q.2: | Why is it important to solve a problem? | 1 Time |
| Q.3: | What steps are necessary to follow in solving a problem? | 3 Times |
| Q.4: | What is meant by problem solving? | 1 Time |
| Q.5: | What is meant by a problem? | 1 Time |
| Q.6: | State the features of a well-defined problem. | 1 Time |
| Q.7: | How can we identify the given state in a problem? | 1 Time |
| Q.8: | What strategies are used to define a problem, if it is not well-defined? | 2 Times |
| Q.9: | Define defining a problem. | 1 Time |
| Q.10: | What is important before jumping into the solution of the problem? Give an example. | 2 Times |
| Q.11: | What is meant by problem analysis? | 1 Time |



- Q.12: List five “Ws” to understand a problem. 1 Time
- Q.13: What do we do after analyzing a problem? 1 Time
- Q.14: Name some of the strategies which are used to plan a solution. 1 Time
- Q.15: What is meant by Divide and Conquer Rule? 4 Times
- Q.16: What is meant by Guess, Check and improve? 1 Time
- Q.17: What is meant by iterative process? 1 Time
- Q.18: What is meant by act it out strategy? 7 Times**
- Q.19: What is meant by prototype? 8 Times**
- Q.20: What is meant by planning a solution? 1 Time
- Q.21: What does the word Candid refer to? 1 Time
- Q.22: Define candid solution. 7 Times**
- Q.23: What is the best solution to a problem? 1 Time

Flowcharts

- Q.24: How flowcharts are helpful in problem solving? 1 Time
- Q.25: Write a flowchart of wearing shoes with socks. 1 Time
- Q.26: Define flowchart. 3 Times
- Q.27: How is flowchart constructed? 1 Time
- Q.28: State the importance of flowcharts in problem solving. 6 Times
- Q.29: What are the requirements for a flowchart? 1 Time
- Q.30: What is meant by input? (OR) Define Input. 1 Time
- Q.31: For what, processing steps are used? 1 Time
- Q.32: What is meant by decision making? 2 Times
- Q.33: Define output. 1 Time
- Q.34: Name the Flowchart Symbols. 2 Times
- Q.35: Describe the use of flow lines. Draw its symbol also. 1 Time
- Q.36: What is terminal? 1 Time
- Q.37: Define process box. 1 Time
- Q.38: For which decision symbol is used? 2 Times



- Q.39: Describe input/output symbol. 1 Time
- Q.40: Define connector symbol. 1 Time
- Q.41: Draw a Flowchart to convert Celsius to Fahrenheit temperature. 1 Time
- Q.42: Draw a flowchart to find acceleration of a moving object with given mass and force applied. 1 Time
- Q.43: Draw a flowchart to find the volume of cube. 1 Time
- Q.44: Draw a flowchart to find plain interest on an amount. 1 Time
- Q.45: Draw a flowchart to find the sum, product and average of five given numbers. 1 Time
- Q.46: Draw a flowchart to find the area of a parallelogram. 1 Time
- Q.47: Draw a flowchart to determine whether a given number is odd or even. 1 Time
- Q.48: Draw a flowchart to display the larger one out of the three given unequal numbers. 1 Time
- Q.49: Draw a flowchart to find a maximum value among three numbers a, b and c. 1 Time
- Q.50: Draw a flowchart to assign grade to a subject based on total marks and obtained marks. 1 Time
- Q.51: Draw a flowchart to determine name of a week day from a given number where weekdays are assumed from Monday to Sunday and their respective numbers from 1 to 7. 1 Time
- Q.52: Draw a flowchart to input 5 values one by one and determine if the given value is odd or even. 1 Time
- Q.53: Draw a flowchart to find a sequence of odd numbers starting from a given number till some limit. 1 Time
- Q.54: Draw flowchart to calculate sum of two variables. 1 Time
- Q.55: Where does the word Algorithm come from? 1 Time



Algorithm

- Q.56: Define algorithm.** **7 Times**
- Q.57: Write an algorithm to solve the problem of preparing tea. 1 Time
- Q.58: Write down the algorithm for simple problem of wearing shoes with socks. 1 Time
- Q.59: What important role does algorithm perform in problem solving? 4 Times
- Q.60: Name the notations of the algorithm. 1 Time
- Q.61: Describe the use of "START" notation. 1 Time
- Q.62: Describe the use of INPUT notation of algorithm. 1 Time
- Q.63: What is the use of SET notation of algorithm. 2 Times
- Q.64: Describe the purpose of IF, ELSE notation of algorithm. 1 Time
- Q.65: Describe the purpose of GOTO notation of algorithm. 2 Times
- Q.66: Describe the use of OUTPUT notation of algorithm. 1 Time
- Q.67: Describe the use of STOP notation of algorithm. 1 Time
- Q.68: Write an algorithm to find the sum, product and average of five given numbers. 1 Time
- Q.69: Write an algorithm to find the acceleration of moving object with given mass and the applied force. 1 Time
- Q.70: Write an algorithm to find the volume of a cube. 1 Time
- Q.71: Write an algorithm to find the area of a parallelogram. 1 Time
- Q.72: Write an algorithm to display the larger one out of the three given numbers. 1 Time
- Q.73: Write an algorithm, to assign grade to a subject based on the achieved marks. 1 Time
- Q.74: Write an algorithm to find the interest on an amount. 1 Time
- Q.75: Write an algorithm to convert Celsius to Fahrenheit temperature and vice versa. 1 Time



- Q.76: Write an algorithm to find even numbers in integers ranging from n_1 to n_2 (where n_2 is greater than n_1). 1 Time
- Q.77: Write an algorithm to find even numbers in integers ranging from n_1 to n_2 . 1 Time
- Q.78: On which metrics, efficiency of an algorithm is measured? 1 Time
- Q.79: What is the difference between an algorithm and a flowchart? 1 Time
- Q.80: Write any two advantages of a flowchart. 1 Time
- Q.81: Write down disadvantages of a flowchart. 1 Time
- Q.82: Write down few advantages of an algorithm. 1 Time

Test Data

- Q.83: What is meant by Test data? 1 Time
- Q.84: What is meant by valid test data? Give an example. 1 Time
- Q.85: Which types of values to be given in boundary test data? 1 Time

Verification & Validation

- Q.86: What is difference between verification and validation? 1 Time
- Q.87: What is meant by Validation? Give an example. 1 Time

Identification & correction of errors

- Q.88: What is meant by Identification and Correction of Errors? 1 Time
- Q.89: What is trace table? 5 Times

Unit 2: Binary System

Introduction to Number Systems

- Q.1: What is meant by the number system. 4 Times
- Q.2: List three types of number system. 1 Time
- Q.3: What do you mean by the Base or Radix of Number System? 1 Time
- Q.4: Write the difference between Decimal and Binary System. 1 Time



Q.5: What s hexadecimal number system?

6 Times

Number Systems Conversion

Q.6: Convert 156_{10} into binary number system.

1 Time

Q.7: Convert $(1000001)_2$ to decimal number system.

4 Times

Q.8: Convert $(7)_{10}$ into binary system.

1 Time

Q.9: Convert $(10011)_2$ into decimal system.

1 Time

Q.10: Convert $(1101101)_2$ into decimal number system.

1 Time

Q.11: Convert $(010111)_2$ into decimal number system.

1 Time

Q.12: Convert $(11011)_2$ into decimal number system.

1 Time

Q.13: State the method to convert Hexadecimal to Decimal number system.

1 Time

Q.14: Convert $(C921)_{16}$ to decimal number system.

1 Time

Q.15: Convert $(999)_{10}$ into Hexadecimal number system.

2 Times

Q.16: Convert $(A23)_{16}$ to binary number system.

2 Times

Memory & Data Storage

Q.17: Define Computer memory.

10 Times

Q.18: Name the types of memory.

9 Times

Q.19: Define Volatile Memory.

1 Time

Q.20: What do you know about non-volatile memory?

2 Times

Q.21: Why RAM is called volatile memory?

1 Time

Q.22: How digital computers store data?

1 Time

Q.23: Define ASCII code.

4 Times

Q.24: Write ASCII codes of any two numbers.

1 Time

Q.25: Differentiate between memory and storage.

2 Times

Q.26: Write four names of Storage Devices.

2 Times

Boolean Algebra

Q.27: What is Boolean Algebra?

3 Times

Q.28: Define Boolean expression.

2 Times



Q.29: Write two examples of proposition.	1 Time
Q.30: Boolean values are mentioned in which book?	1 Time
Q.31: Define truth values.	5 Times
Q.32: What is meant by compound proposition?	2 Times
Q.33: What is meant by logical operator?	1 Time
Q.34: How many types are there of logical operators?	3 Times
Q.35: Define OR Operator with its symbol.	2 Times
Q.36: State the use of truth table.	5 Times
Q.37: Draw the truth table using AND operator.	6 Times
Q.38: Draw the truth table for NOT operator.	4 Times
Q.39: Write the truth table for X and Y?	1 Time
Q.40: Draw a truth table for the preposition. P. Q+P.	1 Time
Q.41: Draw compound proposition table of P+Q+NOT (P).	1 Time
Q.42: State Commutative Law w. r. t. to Boolean Algebra.	2 Times
Q.43: With the help of truth table prove that: A. B = B. A	2 Times
Q.44: State the Associative Law w. r. t. to Boolean Algebra.	1 Time
Q.45: Define distributive law?	2 Times
Q.46: Define Identity Law of Boolean Algebra.	3 Times
Q.47: Prove that A.B.C = C.B. A	1 Time
Q.48: What is meant by logical expression?	1 Time
Q.49: Write down the negative proposition "today is holiday".	1 Time

Unit 3: Networks

Computer Network

Q.1: Define communication channel.	2 Times
Q.2: What is meant by network of networks? Give an example.	1 Time
Q.3: What is hardware sharing?	3 Times



- Q.4: What is meant by video conference? 1 Time
- Q.5: How is a computer network helpful in increasing storage capacity? 3 Times
- Q.6: What is client user interface? 1 Time

Physical Structure of Networks

- Q.7: What is Point-to-point connection? 1 Time
- Q.8: How many types of are of connection? Write names. 1 Time
- Q.9: What is meant by bus topology? 1 Time
- Q.10: What is star topology? 1 Time
- Q.11: What is mesh topology? 1 Time
- Q.12: What is major disadvantages of Star Topology? 1 Time
- Q.13: Write any two advantages of Ring Topology. 1 Time
- Q.14: Write on advantages of Mesh Topology. 1 Time

Basics of Data Communication

- Q.15: Who is a sender? 2 Times
- Q.16: Define control information. 1 Time
- Q.17: What is meant by network protocol? 1 Time
- Q.18: What is meant by the transmission medium? 3 Times
- Q.19: What is difference between sender and receiver? 7 Times
- Q.20: What is header in message? 1 Time
- Q.21: What are different types of transmission medium? 1 Time

Computer Network Models

- Q.22: What is the function of Network Layer. 1 Time
- Q.23: What is TCP/IP Protocol? 4 Times
- Q.24: Write a short note on data link layer. 1 Time
- Q.25: Write the names of two layers of computer network model. 2 Times
- Q.26: What is meant by File Transfer Protocol? 3 Times
- Q.27: What is the function of HTTP (hypertext transfer protocol)? 8 Times**
- Q.28: What is meant by SMTP? 4 Times



The Need for Addressing

- Q.29: What is meant by packet? 1 Time
- Q.30: Why the need for addressing is required while transferring data? 1 Time
- Q.31: Why addressing is important in data communication? 1 Time

Sending HTTP Requests & Receiving HTTP Responses

Over the Internet

- Q.32: How many standards of IP addressing are there? Give example of each standard. 2 Times
- Q.33: Write two examples of IPv4 addressing standard. 1 Time
- Q.34: Write two examples of IPV6 Address. 1 Time

Routing

- Q.35: State the working of a router. 1 Time
- Q.36: What is understand a router? Explain routing process. 1 Time
- Q.37: Define communication channel. 1 Time

Unit 4: Data and Privacy

Ethical Issues Related to Security

- Q.1: Define data privacy. 1 Time
- Q.2: Name some of the data security issues. 1 Time
- Q.3: What is confidentiality of data and information? 1 Time
- Q.4: What is meant by piracy? 1 Time
- Q.5: What is meant by key of software? 2 Times
- Q.6: What is softlifting. 4 Times
- Q.7: Define Client-server overuse. 1 Time
- Q.8: Define hard-disk loading. 6 Times
- Q.9: Define Counterfeiting. 5 Times
- Q.10: Define online piracy. 2 Times



- Q.11: What is meant by copyright law? Give an example. 3 Times
- Q.12: What is meant by trade secrets? 3 Times
- Q.13: Explain the fraud and misuse. 2 Times
- Q.14: What is difference between online piracy and counterfeiting? 1 Time
- Q.15: Compare the copyright and trade secrets. 1 Time

Simple Encryption

- Q.16: What is meant by encryption? 2 Times
- Q.17: Encrypt the word "HTML" with method of ceasar cipher. 1 Time
- Q.18: What is meant by random substitution cipher? 1 Time
- Q.19: State the weaknesses of substitution ciphers. 1 Time

Encryption with Keys & Passwords

- Q.20: What are the characteristics of a good password? 1 Time

Cybercrime

- Q.21: What is meant by cybercrime? 3 Times
- Q.22: Name some of cybercrimes. 2 Times
- Q.23: Define internet. 2 Times
- Q.24: What is difference between hacker and hacking? 2 Times
- Q.25: How does spyware damage? 1 Time
- Q.26: What is meant by phishing? 1 Time
- Q.27: Write any two Characteristics of a Phishing website. 1 Time
- Q.28: What does the scammer websites play role in cybercrime? 1 Time
- Q.29: What is meant by DOS attack? 2 Times

Unit 5: Designing Website

Introduction to HTML

- Q.1: Write the characteristics of HTML. 1 Time
- Q.2: Why web browser is used? 1 Time



Q.3:	What is meant by Hypertext?	2 Times
Q.4:	What is meant by Markup Language?	5 Times
Q.5:	Name the types of tags in an HTML document.	4 Times
Q.6:	Define paired tag.	3 Times
Q.7:	Define Singular Tags.	6 Times
Q.8:	How to add paired tags?	1 Time
Q.9:	What are attributes?	3 Times
Q.10:	Write the name of two attributes of tag.	1 Time
Q.11:	Which element is used to insert line break in paragraph?	7 Times
Q.12:	Briefly explain the concept of inserting space in text?	1 Time
Q.13:	Which characteristics of are specified by tag?	2 Times
Q.14:	Write code in HTML to change the colour to “blue” of the text “I love Pakistan”.	1 Time

Creating Lists

Q.15:	What is meant by Nested Lists?	1 Time
Q.16:	How many types of lists can be created in HTML? Write their names.	1 Time
Q.17:	Why “ul” tag is used?	1 Time
Q.18:	Write down code of the following list in HTML.	1 Time
	i. BISE II. FBIS	

Images & Backgrounds

Q.19:	Which name of tag used in HTML for adding an image?	1 Time
Q.20:	Which tag is used to add picture in HTML page also write its attributes.	1 Time
Q.21:	Write HTML code to insert picture into webpage.	2 Times
Q.22:	What is the difference between width and height attributes of tag?	1 Time
Q.23:	Write HTML Code to apply background colour of webpage.	1 Time
Q.24:	Write tag/code for applying background colour blue and fore ground colour Red to a web page.	1 Time
Q.25:	What is difference between background colour and foreground colour?	1 Time
Q.26:	What is meant by hyperlink?	7 Times
Q.27:	Write a code to insert hyperlink on web page.	1 Time

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