

Chapter 1

Short Answer Questions

1. Why computer is known as versatile and diligent device? Explain.
2. What are the application areas of computer? Explain in brief.
3. Why is Charles Babbage known as 'Father of the computer'?
4. Describe at least five ways in which information technology can help students studying Subjects other than computing.
5. Explain the evolution of computer describing the technologies used in different generations.
6. What do you mean by generation of computer? Explain the characteristics of third generation of computers.
7. What is AI? List out the advantages of AI.
8. How Do You Measure The Capacity Of Speed And Memory Of Computer System? Explain.

Long Answer Questions

1. What are the application areas of computer? Explain in detail.
2. What do you mean by generation of computer? Explain the technology used in different generation of computer.
3. Explain any five fields of usage of computer in present days.

Chapter 2

Short Answer Questions

1. Differentiate between analog and digital computer.
2. Describe the major features of super computer.
3. Describe the Mainframe computer in detail.
4. Compare mini and mainframe computers in terms of speed, memory and storage.
5. Classify the computers on the basis of size.
6. What is mobile computing? Explain.
7. Differentiate between microcomputer and super computer.
8. Differentiate between IBM PC and IBM compatible computers.

Chapter 3

Short Answer Questions

1. Define base or radix of number system. Convert $(11011.011)_2$ into decimal number.
2. What is binary number system? Convert $(520)_{10}$ into base 16.
3. What is number system? Convert $(567)_8$ octal number into hexadecimal number.
4. What is binary number? Convert $(1111111)_2$ binary number into octal number.
5. What is octal number system? Convert $(356)_{10}$ into base 8.
6. What is octal number system? Convert $(456)_8$ octal number into base 2 number system.
7. What is octal number system? Convert $(BAC)_{16}$ hexadecimal into binary number system.
8. Convert $(5634)_8$ octal number into binary number.
9. What is hexadecimal number system? Convert $(111011)_2$ into base 16.
10. What is hexadecimal number system? Convert $(B8C)_{16}$ Hexadecimal number into base 8 number system.
11. Subtract $(1100)_2$ from $(1111)_2$ 1's and 2's complement method.
12. Subtract $(1010)_2$ from $(1011)_2$ using 1's and 2's complement method.
13. Subtract $(1000)_2$ from $(1111)_2$ using 1's and 2's complement method.
14. What is number system? Convert $(ABCD)_{16}$ hexadecimal number into octal number system.
15. Binary operations:
 - a) $10101 + 1100$
 - b) $10110 - 110$
 - c) $11100 * 110$
 - d) $10011 / 101$
 - e) $11000 - 1110$
 - f) $10011 + 10 + 1$
 - g) $1001 + 1100 - 110$
 - h) $11111 * 10$
16. Convert the following numbers according to the Instruction given.
 - (a) $(240)_{10}$ into Octal number
 - (b) $(ABC)_{16}$ into Binary number
 - (c) $(A5B)_{16}$ into decimal number
 - (d) $(637)_{10}$ into Hexadecimal
 - (e) $(BBA)_{16}$ into binary
 - (f) $(BCA)_{16}$ into base 8
 - (g) $(BEEF)_{16}$ into binary

Chapter 4

Short Answer Questions

1. Define Boolean functions. Construct truth for AND operation of Boolean algebra.
2. Write truth table for NAND operation of Boolean algebra.
3. Write the truth table of NOR operation of Boolean algebra.
4. What are logical gates? Draw symbols for 'AND' and 'NOT' gates
5. Construct the truth table of XOR and XNOR operations of Boolean algebra.
6. What are logical gates? Differentiate between 'NAND' and 'NOR' gate with truth table.
7. Give the Truth Table and Logical Symbol of AND, OR and NOT Gates of Boolean algebra.
8. State and prove the Demorgan's Law.

Long Answer Questions

1. What is Boolean algebra? Describe AND gate, OR gate, NOT gate and NAND gate with gate symbol and truth table.
2. Describe any five logic gates with Graphical symbol, Algebraic expression, Truth Table and Venn diagram.
3. What is Boolean logic? Describe the AND, OR, XOR and X-NOR logic gates with Graphical symbol, Algebraic expression, Truth Table and Venn diagram.

Chapter 5

Short Answer Questions

1. Distinguish among the terms, 'hardware', and 'software' and 'firmware'.
2. Explain the function of CPU.
3. Explain the work done by control unit and ALU of the computer.
4. What is memory? Differentiate between primary and secondary memory.
5. What is memory? Differentiate between primary and second memory.
6. What do you mean by 'Volatility'? Explain RAM and ROM with the concept and term.
7. Differentiate between RAM and ROM.
8. What is a cache memory? Why is it useful in computer system?
9. What are the computer peripherals? Differentiate between sequential and random access storage media.
10. What is printer? Differentiate between softcopy and hardcopy output.
11. Differentiate between Impact printer and Non-impact printer.
12. What is a BUS in computer architecture? Explain.

13. What do you mean by system software and application software?

14. Write short notes on:

- (a) MICR
- (b) Joystick
- (c) Scanner
- (d) Light pen
- (e) OCR
- (f) Touch Screen
- (h) Cache Memory
- (i) Laser printer
- (j) Modem
- (k) cache memory
- (l) Bus in the computer system
- (m) scanner/light pen
- (n) Touch screen/MICR
- (o) USB

Long Answer Questions

1. What do you mean by computer architecture? Describe each functional components of computer architecture with typical diagram.
2. With the logical structural diagram explain functions of elements of a computer system.
6. What is memory? Describe the types of memory.
7. Define the terms “computer architecture” and “computer organization”. Explain the different Units of computer system with suitable block diagram.

Chapter 6

Short Answer Questions

1. What is an Operating system? Why GUI OS is more popular than text based OS?
2. Differentiate between GUI and CUI operating systems.
3. “Operating system is an interface between user and application software” justify this statement with any one OS then you know.
4. What is virtual memory? What role does it play?
5. What is interrupt? How OS handles interrupt?
6. Write short notes on:
 - (a) Spooling and Buffering
 - (b) Paging
 - (c) Scheduling
 - (d) Process
 - (e) Batch processing

Long Answer Questions

1. What is OS? Explain the different types of OS.
2. What is OS? Explain the major functions of OS.

Chapter 7

Short Questions:

1. Describe algorithm and flowchart with examples.
2. Differentiate between Compiler and Interpreter with examples.
3. What are the different symbols used in flowchart? Explain.
4. Differentiate between 'logical errors' and 'syntax errors'.
5. What is language translator? Explain.
6. Describe the feature of high level programming language.

Long Questions

1. Explain different types of programming languages with their merits and demerits.
2. Describe different types of programming design tools with examples.
3. What is language translator? Explain in detail.

Chapter 8

Short Questions:

1. What is word processing? Explain the features of word processor.
2. State the advantage of word processor in document designing.
3. What is Spreadsheet? Explain its features.
4. What is cell reference? Explain the three types of cell references with examples.
5. Define Workbook and Worksheet.
6. What is presentation? Write some features and examples of presentation software.
7. What do you mean by slide, slide show and slide transition?
8. What is animation?

Chapter 9

Short Answer Questions

1. What is Internet? List the major uses of Internet.
2. What is search engine? List out the major uses of internet.
3. List the advantages and disadvantages of Internet.
4. List the positive and negative impact of Internet in our society.
5. What is internet? List out the importance of internet in our society.
6. What is URL? Describe the search engine. Write short notes on:

- (a) Uses of Internet
- (b) E-mail

Chapter 10

Short Answer Questions

1. What is HTML? Describe the major features of HTML.
2. List out the advantages and disadvantages of HTML.
3. What is HTML? Describe the importance of HTML in web-page designing.
4. What is HTML tag? Explain the different types of tags with Example.
5. Explain the importance of HTML in web-page designing.
6. Explain the <A> and tag with its properties and values.