Model Questions-2073

Grade: XI **Subject: Computer Science (130)** **F.M.: 75**

Set I

Group A
(Long Answer Questions)

Attempt **any three** questions [3×10=30]

1. What is memory? Classify and discuss various types of memories used in computer system. [2+8]
2. Describe any five logic gates with truth table and gate symbol. [10]
3. Define program, programming and programmer. Describe various types of language translators. [3+7]
4. What is an operating system? Describe GUI and CUI base operating systems with merits and demerits. [2+8]

Group B
(Short answer questions)

Attempt **any nine** questions [9×5=45]

5. Differentiate between primary and secondary memory. [5]
6. What is mobile computing? Explain the advantages and disadvantages of mobile computing. [1+4]
7. What is octal number? Convert $(567)_8$ number into hexadecimal number. [1+4]
8. What is an application program? List the major features and applications of spread-sheet. [1+4]
9. Describe algorithms and flow chart with examples. [2.5+2.5]
10. What is HTML? Describe the major features of HTML. [1+4]
11. Differentiate between third and fourth generation computer. [5]
12. Describe the features of Impact Printers with examples. [5]
13. Subtract (1001)2 from (11011)2 using 1's and 2's complement method. [5]
14. What is booting? Describe the types of computer booting. [1+4]
15. Write short notes on: [2.5+2.5]
    a. MICR
    b. Duality Principle

***

Set II

Group A
(Long answer questions)

Attempt **any three** questions [3×10=30]

1. Describe the importance of Boolean algebra in digital electronics. Also verify associative laws and distributive laws of Boolean algebra. [4+6]
2. What are the primary objectives of operating system? Describe major functions of operating system. [2+8]
3. Define the term 'computer architecture' and 'computer organization'. Explain the different units of computer system with suitable block diagram. [2+8]
4. What is programming language? Explain the different programming languages with their major features. [2+8]

Group B
(Short answer questions)

Attempt **any nine** questions [9×5=45]

5. Describe the technologies used in fourth generation of computer. [1+4]
6. What is hexadecimal number system? Convert $(167)_8$ octal number into $(?)_{16}$ hexadecimal number. [1+4]
7. What is memory? List out any four differences between RAM and ROM. [5]
8. What is program testing and debugging? Explain why logical errors are difficult to detect and correct than syntax errors.
9. What is word processor? Give the major features of word processor. [1+4]
10. What is spreadsheet application program? List the uses of spreadsheet. [1+4]
11. Differentiate between microcomputer and super computer. [5]
12. Describe the terms 'Operator', 'Operand' and 'Operation' with suitable examples. [5]
13. What is web page? Describe the major features of web-page. [1+4]
14. Subtract $(100000)_2$ from $(111)_2$ using 1st and 2nd complement method of subtraction. [2.5+2.5]
15. Write short notes on: [2.5+2.5]
    a. Cache Memory
    b. BCR

***

Set III

Group A
(Long answer questions)

Attempt **any three** questions [3×10=30]

1. What is virtual memory? Explain how it differs from primary memory and secondary memory. [4+6]
2. What is computer system? Explain the major applications of computer system. [2+8]
3. Describe the importance of flowchart and algorithm in program designing. Also write algorithm and flowchart to print 'Welcome to Nepal' ten times. [4+6]
4. a. What is email? Explain the various types of emails. [2+3]
   b. What is communication protocol? Write the full form of FTP, TCP and SMTP. [2+3]

Group B
(Short answer questions)

Attempt **any nine** questions [9×5=45]

5. Define the terms: data, instruction and information. Also difference between hardcopy and softcopy information. [3+2]
6. How do you measure the capacity of speed and memory of computer system? Explain. [5]
7. List out the different number system with its base. Convert $(456)_{10}$ decimal number to (….) 2 binary number. [2+3]
8. Describe the De Morgan's law. [5]
9. NOR gate is a universal gate. Justify the answer with proper diagrams. [5]
10. Differentiate between SRAM and DRAM [5]
11. List out the name of operating system. What are the main features of GUI based operating system? [2+3]
12. Define syntax and semantics. Write syntax and semantics for looping process. [2+3]
13. What is URL? Describe the search engine. [5]
14. Explain the <MARQUEE>, <UL> and <OL> tag with respective properties and values. [5]
15. Write short notes on: [2.5+2.5]
    a. Dr. Herman Hollerith
    b. IEEE Port

***

Set IV

Group A
(Long answer questions)

Attempt **any three** questions [3×10=30]

1. What do you mean by high level programming languages? Describe the features of various types of high level programming language. [4+6]
2. What is VDU? Describe various categories of monitors with respective merits and demerits. [2+8]
3. "An Operating system is an interface between human operators and machine." Justify. [10]
4. a. Explain the functions of web server and DNS. [5]
   b. Describe the properties of <A> tag, <IMG> and <OBJECT> tags with respective examples. [5]

Group B
(Short answer questions)

Attempt **any nine** questions [9×5=45]

5. What do you mean by the generations of computer? Differentiate between third and fourth generation of computers [1+4]
6. Differentiate between mini computer and mainframe computer. [5]
7. Solve the followings: [2.5+2.5]
   - Convert $(3203)_{10}$ into base 8
   - Subtract $(1005)_{10}$ and $(105)_{10}$ using 10's complement
8. NAND gate is a universal gate. Justify the answer with proper diagrams. [2+3]
9. What is bus system? Explain different types of buses in computer system. [2+3]
10. What is utility software? Explain any three types of utilities provided by the windows operating system. [2+3]
11. What is error? Explain the various types of programming errors. [2+3]
12. Write flowchart and algorithm to find greatest among three number. [2.5+2.5]
13. Define the terms: spreadsheet, worksheet and workbook. [5]
14. What is open source operating system? Explain pros and cons of open source operating system. [2+3]
15. Write short notes: [2.5+2.5]
    a. Light pen
    b. Charles Babbage

***

Set V

Group A
(Long answer questions)

Attempt **any three** questions [3×10=30]

1. Define the terms: program, software, programmer and programming language and also differentiate between low level and high level programming languages. [4+6]
2. Differentiate between impact printers and non-impact printers. Also explain various types of impact printers with respective merits and demerits. [4+6]
3. What do you mean by Boolean algebra? Explain the importance of Boolean algebra and also states the Boolean laws. [4+6]
4. a. What is cell addressing and explain different types of cell addressing used in Spreadsheet. [2+3]
   b. What is HTML? Write the functions of <p>, <h1> and <sub> tags. [2+3]

Group B
(Short answer questions)

Attempt **any nine** questions [9×5=45]

5. Explain the major achievements and expectations made from fifth generation of computers. [5]
6. What is personal computer? Describe the features of various types of personal computers. [1+4]
7. Define base and radix of a number system. Convert $(801)_{10}$ into base eight number system. [2+3]
8. Write truth table and logic circuit of the function $F = \overline{A}BC + A\overline{B}C + AB\overline{C}$
9. Describe the basic functions of light pen and Plotter [2.5+2.5]
10. Define backup storage. Explain why hard disk is more reliable than floppy disk. [5]
11. Differentiate between multiprogramming OS and multiprocessing OS. [5]
12. Differentiate between compiler and interpreter. [5]
13. Write flowchart and algorithm to check the given number is odd or even. [5]
14. Write short notes:
    - ASCII
    - Dr. Herman Hollerith

*****The End*****