



BAMR12

HARYANA VISHWAKARMA SKILL UNIVERSITY

(Established under the Government of Haryana Act of Legislation No 25/2016)

Course	:	B.Voc. (Automotive Mechatronics)
Subject	:	Fundamental of Computer
Semester	:	2 nd
Subject Code	:	ZBCE-102
Duration	:	3 Hours
Maximum Marks	:	35

Instructions to the Students

1. This Question paper consists of two Sections. All sections are compulsory.
2. **Section A** comprises ten questions of objective type in nature. All questions are compulsory. Each question carries one mark.
3. **Section B** comprises six essay type questions out of which students need to do any five. Each question carries five marks.
4. Read the questions carefully and write the answers in the answer sheets provided.
5. Do not write anything on the question paper.
6. Wherever necessary, the diagram drawn should be neat and properly labelled.

SECTION-A (OBJECTIVE TYPE QUESTIONS)

(10×1=10 Marks)

Q1 The brain of any computer system is:

- a) RAM
- b) ROM
- c) CPU
- d) ALU

Q2 Write De Morgan's theorem of Boolean algebra.

Q3 Which of the following is not an input device?

- a) OCR
- b) Optical Scanner
- c) Voice Recognition Device
- d) COM (Computer Output to Microfilm)

Q4 What is the storage size of float data type in C?

- a) 4 bytes
- b) 8 bytes
- c) 3 bytes
- d) 6 bytes

Q5 Protocols are?

- a) agreements on how communication components and DTE's are to communicate
- b) Logical communication channels for transferring data
- c) Physical communication channels used for transferring data
- d) None of the above

Q6 The linker

- a) is same as the loader
- b) is required to create a load module
- c) is always used before programs are executed
- d) None of above

Q7 The network topology with highest reliability is

- a) Bus
- b) Ring
- c) Star
- d) Mesh

Q8 The for (; ;) loop in C means

- (a) Infinite Loop
- (b) Break
- (c) Continue
- (d) Syntax error

Q9 Example of computer anti-virus program includes

- a) Norton
- b) McAfee
- c) Dr Solomon Toolkit
- d) All of these

Q10 TCP/IP stands for

- a) Transmission Control Protocol/Internet Protocol
- b) Transfer Control Protocol/Internetworking Protocol
- c) Transmission Central Protocol/Internet Protocol
- d) Transmission Control Paper/Internet Paper

SECTION-B (ESSAY TYPE QUESTIONS)

(5×5=25 Marks)

- Q11** a) What is the basic difference between primary memory and secondary memory?
What is the principle behind use of cache memory? (2.5 Marks)
- (b) Elaborate the functions of an operating system as a resource manager of computer system. (2.5 Marks)
- Q12** Convert the following: (05 Marks)
- a) $(10110111001)_2$ into Hexadecimal
- b) $(213)_8$ into Binary
- c) $(8B)_{16}$ into Binary
- d) $(5628)_{10}$ into Binary
- e) State Idempotent law of Boolean algebra.
- Q13** (a) Differentiate between compiler and interpreter. (2.5 Marks)
- (b) What are the advantages and disadvantages of Machine Language. (2.5 Marks)
- Q14** (a) Explain the significance of for loop in C. (2.5 Marks)
- (b) Differentiate between Call by Value and Call by Reference. (2.5 Marks)
- Q15** Name seven layers of OSI Reference model. What is the need for a Router? (05 Marks)
- Q16** (a) Explain the following operators in C taking example: $\&\&$, $==$, $\%$ (2.5 Marks)
- (b) Write a program in C to swap two variables without using a third variable. (2.5 Marks)

-----End of Paper-----