

COPYRIGHT RESERVED

**UESE (1)-CC2
(Computer Application)**

2024-27

(Vocational)

Full Marks : 60

Time : 3 Hours

Candidates are required to give their answer in their own words as far as practicable. Their figures in the margin indicate full marks.

Answer from **both** Group as directed.

Group - A

(Compulsory)

1. Answer the following questions : $1 \times 10 = 10$

(a) What is logic gate ?

(b) What is sequential circuit ?

(c) What is flip flop ?

(d) What is Instruction set ?

- (e) What is Multiplexer ?
- (f) What is register ?
- (g) Define AND, NOT gate.
- (h) What is Pipelining ?
- (i) Define Input-Output Modules.
- (j) Define RAM.

2. What is K-map (Karnaugh map) explain. 5

Group - B

Answer any **three** questions of the following :
15×3=45

- 3. What is combinational circuits ? Explain Multiplexer in details with logic diagram.
- 4. Explain R-s flip flop with truth table and diagram.
- 5. What is Adder ? What is the difference between Half Adder and full Adder ?
- 6. What is Memory ? Explain about Cache Memory and its Mapping.

MR-280

2

7. Connect the following :

- (i) Convert 1101 into a decimal number.
- (ii) Convert 169 into its binary equivalent.
- (iii) Convert decimal 786 into its octal equivalent.
- (iv) Convert 1239 into its hexadecimal equivalent.
- (v) Find the 2's complement of 0101010.

MR-280

3

1200