

Roll No. 82382300071

Total No. of Questions : 8]

[Total No. of Printed Pages : 3

EY-228**B.Tech. IIIrd Semester (New Scheme) CSE****Examination, 2023-24****Discrete Structure****Paper - CS-305****Time : 3 Hours]****[Maximum Marks : 60****Note :-** Attempt any five questions. All question carry equal mark.**1. Explain the following terms:****(a) Set identities****(ii) Relation****EY-228****(1)****P.T.O.**

- (c) Eulerian circuit
- (d) Recurrence relation
- (e) Computer Buss

2. Define the following basic logic operations along with Truth table :

- (a) Conjunctions (\wedge)
- (b) Disjunction (\vee)
- (c) Negation (\sim)
- (d) Conditions ()

3. Explain inclusion exclusion Principle in discrete structure with example?

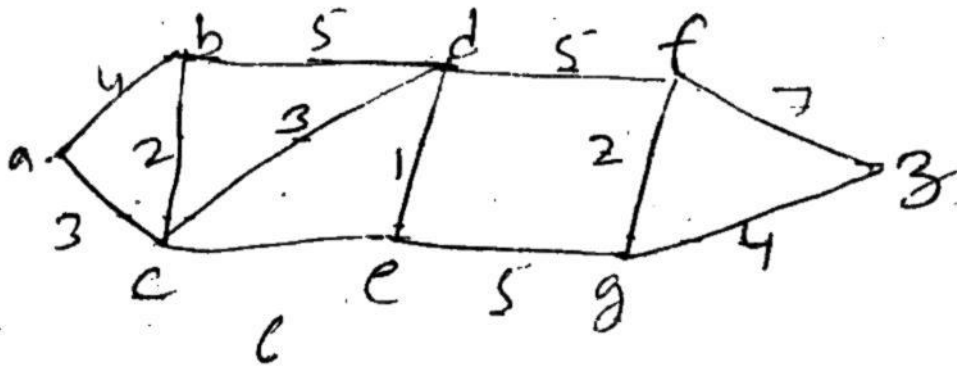
4. Explain in detail Tree traversal with example?

5. What are functions? Explain Various type along with the Properties of Function

EY-228

(2)

6. Define shortest Path, find the length of a Shortest Path between a and z in the given weighted graph using Dijkstra's algorithm



7. What do Mean by Completeness of an algorithm ? What are the type of algorithm in discrete structure ?
8. Explain Algebraic system group, Ring and its types ?

AJEET SONI
