

## UNIT - IV

- 4 What is log ? How is it maintained ? Discuss the salient features of deferred DataBase modification and immediate DataBase modification strategies in brief.

16

OR

- 4 What is Recoverable schedule ? Why is recoverability of schedule desirable ? Are there any circumstances, under which it would be desirable to allow non-recoverable schedule ?

16

## UNIT - V

- 5 Construct a B<sup>+</sup> tree for the following set of key value (2, 3, 5, 7, 11, 17, 19, 23, 29, 31). Assume that the tree is initially empty and values are added in ascending order. Construct B<sup>+</sup> trees for the cases where the number of pointers that will fit in one node is as follows :

- (i) Four
- (ii) Eight.

16

OR

- 5 (a) What is the difference between a clustering index and a secondary index ?

8

- (b) Describe Static and Dynamic Hashing.

8

