TCS–503

B. TECH. (CSE/IT) (FIFTH SEMESTER) END SEMESTER EXAMINATION, 2021-22

DATABASE MANAGEMENT SYSTEMS

Time : Three Hours

Maximum Marks : 100

Note : (i) All questions are compulsory.

(ii) Answer any *two* sub-questions among (a), (b) and (c) in each main question.

(iii) Total marks in each main question are **twenty**.

(iv) Each question carries 10 marks.

1. (a) What do you mean by the term Data Independence ? How many types of data independence are there ? Explain the concept by taking a practical example. (CO1)

   (b) How many types of database users are there ? Explain the difference between Database Manager and Database Administrator. (CO1)

(ii) To find the details of the trains that start from Hyderabad. (CO5)

(iii) To find all destinations, source and journey hours of train number '23344'.

(iv) To find all the train numbers whose source is "New Delhi" and destination is "Chennai".

(v) To display all the details of trains whose journey hours are more than 48.

5. (a) Explain the difference between serializable and conflicting schedule with a suitable example. (CO5)

   (b) Explain the transaction and transaction states. Explain ACID property through a suitable example. (CO5)

   (c) What do you mean by transaction and database failure ? Explain all the types of failure. (CO5)