



**WEST BENGAL STATE UNIVERSITY**  
B.Com. Programme 5th Semester Examination, 2020 held in 2021

**FACGDSE06T-B.COM. (DSE1)**

Time Allotted: 2 Hours

Full Marks: 50

*The figures in the margin indicate full marks.  
Candidates should answer in their own words and adhere to the word limit as practicable.  
All symbols are of usual significance.*

1. Answer any **five** questions from the following: 2×5 = 10
- (a) Define DBMS.
  - (b) What is DDL?
  - (c) List different types of data model used.
  - (d) What are the applications of DBMS?
  - (e) Give the levels of data abstraction.
  - (f) What is instance?
  - (g) Define data dictionary.
  - (h) Explain attributes with example.

**Answer any four questions from the following** 5×4 = 20

- 2. Explain entity relationship model. 5
- 3. Define schema. What are the different types of schema? 2+3
- 4. List the difference between file processing system and DBMS. 5
- 5. Who is DBA? What are the responsibilities of DBA? 2+3
- 6. Explain the distinction among the term candidate key, primary key and super key. 5
- 7. What is weak entity set? State generalization. 2+3

Answer any *two* questions from the following

10×2 = 20

8. What is normalization in DBMS? What are the types of normalization? List the difference between BCNF and 3NF. 2+5+3
9. Explain hierarchical model. State three schema architecture. 5+5
10. Write short notes on: 5+5  
(a) Aggregation (b) Generalization.
11. Define data transmission. Differentiate LAN & WAN. Explain various topologies. 2+3+5

**N.B. :** *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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