

Reg. No .....

Name .....

22U141

**END SEMESTER EXAMINATION : OCTOBER 2022**

**SEMESTER 1 : INTEGRATED M.Sc. PROGRAMME COMPUTER SCIENCE AND DATA SCIENCE**

**COURSE : 21UP1CRMCP03 : DATABASE MANAGEMENT SYSTEMS**

*(For Regular – 2022 Admission and Improvement / Supplementary - 2021 Admission)*

Time : Three Hours

**Max. Weightage: 30**

**PART A**

**Answer any 8**

1. State the use of \* (asterisk) operator along with SELECT statement.
2. Define the term cardinality of a database.
3. The information containing descriptions about the data stored in a database is called -----.
4. List any two attributes that an entity called 'television' can have.
5. Define the term fragmentation.
6. Write a sample query to enforce a NOT NULL constraint to the table STUDENT on the attribute AGE.
7. ----- helps to maintain integrity in relational databases.
8. Define the term data abstraction in a database.
9. Give an example of a procedural query language.
10. State the difference between UNIQUE constraint and PRIMARY KEY constraint.

**(1 x 8 = 8 Weight)**

**PART B**

**Answer any 6**

11. Differentiate between a primary key and a foreign key.
12. DDBMS have effective recovery mechanism. Justify the statement.
13. Explain the mathematical representation of a relationship set.
14. Differentiate between internal and external schema.
15. Explain how check constraints are added at the time of table creation.
16. Considering the relation given below, find the degree of the relation, and identify what constraint(s) would hold.

ST_ID	NAME	AGE	ADDRESS	CONTACT	PROGRAMME
102	John	20	XYZ	9878789098	BCA
103	Alen	18	ABC	9876543210	BCA
104	Ram	18	PQR	9874563210	BCA

17. Discuss the atomicity issues of file systems.
18. Discuss briefly about the table - DUAL.

**(2 x 6 = 12 Weight)**

**PART C**  
**Answer any 2**

19. Explain referential integrity constraint with an example.
20. Discuss on the roles and responsibilities of a Database Administrator.
21. Give a brief note about evolution of query languages.
22. Explain the approaches to distributed database storage.

**(5 x 2 = 10 Weight)**