## TB173190C Reg. No: ......

Name: .....

### B. Sc. DEGREE (C.B.C.S.S) EXAMINATION, OCTOBER 2018

(2017 Admissions Regular, 2016 Admissions Supplementary/Improvement & 2015 Admissions Supplementary)

# SEMESTER III - CORE COURSE (COMPUTER APPLICATIONS [TRIPLE MAIN]) CAC3B07TB - DATABASE MANAGEMENT SYSTEMS

Time: Three Hours Maximum Marks: 80

#### PART A

- I Answer all questions. Each question carries 1 mark.
- 1. Explain View?
- 2. Define Schema.
- 3. Define DataModel.
- 4. Define Attribute?
- 5. Expand DDL
- 6. Explain ACID Properties

(6x1=6)

#### **PART B**

- II Answer any seven questions. Each question carries 2 marks
- 7. Explain about DataBase Users.
- 8. What is a Ouery?
- 9. What are the Features of DBMS.
- 10. Define Null Values
- 11. Explain about the Purpose of Database system.
- 12. Explain Primary Key and Foreign Key.
- 13. Define Data Dictionary
- 14. Define entity and entity set.
- 15. Explain SQL
- 16. What is Data Independence

(7x2=14)

#### **PART C**

- III Answer any five questions. Each question carries 6 marks
- 17. Give Examples for one to one and one to many relationships
- 18. List the Relational Algebra operations of SQL.
- 19. Compare physical and logical database models
- 20. What do you mean by SQL? Discuss the various components of SQL in detail with suitable examples.
- 21. Consider the following tables:

Employee (Emp no, Name, Emp city)

Company (Emp no, Company name, Salary)

- i. Write a SQL query to display Employee name and company name.
- ii. Write a SQL query to display employee name, employee city, company name and salary of all the employees whose salary >10000
- iii. Write a query to display all the employees working in "XYZ" company.
- 22. Explain Single Valued and Multi Valued Attribute.
- 23. Explain the need of Normalisation.
- 24. List the drawback of normal File Processing System

(5x6=30)

#### PART D

- IV Answer any two questions. Each question carries 15 marks.
- 25. What is DBMS? Discuss the Architecture of DBMS. What are the components of DBMS? Explain in brief
- 26. Discuss normalization. Explain first normal form, second normal form, third normal form with suitable examples.
- 27. What is E-R model? What are the various symbols used to draw E-R diagram? Explain With an Example.
- 28. Explain nested subquery in detail

(2x15=30)