

Roll No.

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Candidates must write the Code on the title page of the answer-book.

- Please check that this question paper contains **7** printed pages.
- Code number given on the right hand side of the question paper should be written on the title page of the answer-book by the candidate.
- Please check that this question paper contains **31** questions.
- **Please write down the Serial Number of the question before attempting it.**
- 15 minute time has been allotted to read this question paper. The question paper will be distributed at 10.15 a.m. From 10.15 a.m. to 10.30 a.m., the students will read the question paper only and will not write any answer on the answer-book during this period.

DATABASE MANAGEMENT APPLICATIONS

Time allowed : $2\frac{1}{2}$ hours

Maximum Marks : 50

- (i) This question paper contains **31** questions, out of which the candidate needs to attempt only **23** questions.
- (ii) Question paper is divided into two sections.

SECTION A

- Multiple choice questions / Fill in the blanks/Direct questions : contains total **12** questions of **1** mark each. Answer **any 10** questions.
- Very short answer type questions : contains total **7** questions of **2** marks each. Answer **any 5** questions.
- Short answer type questions : contains total **7** questions of **3** marks each. Answer **any 5** questions.

SECTION B

Long answer / Essay type questions : contains total **5** questions of **5** marks each. Answer **any 3** questions.

SECTION A

*Multiple Choice Questions (Choose the most appropriate option). Attempt **any ten** questions.* *1×10=10*

1. USE keyword in MYSQL is used to select a 1
 - (i) Table
 - (ii) Column
 - (iii) Database
 - (iv) All of the above

2. A byte code in Java is 1
 - (i) Another name for Java source file that contains the information about the hardware.
 - (ii) A binary code that is generated by JVM for operating system.
 - (iii) An intermediate code generated by Java compiler for JVM.
 - (iv) None of these

3. The wild card character used in MYSQL for pattern searching is 1
 - (i) * (asterisk)
 - (ii) % (percentage)
 - (iii) & (ampersand)
 - (iv) - (hyphen)

4. Which of the following describes e-commerce ? 1
 - (i) Doing business electronically
 - (ii) Doing business
 - (iii) Sale of goods
 - (iv) All of the above

5. On executing DELETE command, if you get an error “foreign key constraint”, what does it imply ? 1
 - (i) Foreign key is not defined
 - (ii) Table is empty
 - (iii) Connectivity issue
 - (iv) Data is present in the other table

6. Which type of e-commerce focuses on consumers dealing with each other ? 1
- (i) B2B
 - (ii) B2C
 - (iii) C2B
 - (iv) C2C
7. Which operator performs pattern matching ? 1
- (i) BETWEEN operator
 - (ii) LIKE operator
 - (iii) EXISTS operator
 - (iv) None of the above
8. In SQL which command is used to change a table's storage characteristics ? 1
- (i) Alter table
 - (ii) Modify table
 - (iii) Change table
 - (iv) All of the above
9. Which data type value is returned by all transcendental math functions ? 1
- (i) int
 - (ii) float
 - (iii) double
 - (iv) long
10. Which of these statements is correct ? 1
- (i) True and false are numeric values 1 and 0.
 - (ii) True and false are numeric values 0 and 1.
 - (iii) True is any non-zero value and false is 0.
 - (iv) True and false are non-numeric values.
11. Which of these packages is used for text formatting in Java programming language ? 1
- (i) Java.text
 - (ii) Java.awt
 - (iii) Java.awt.text
 - (iv) Java.io
12. _____ is the use of electronic i.e. information and communication technique tools for governance by the government for the citizens. 1
- (i) e-learning
 - (ii) e-governance
 - (iii) e-payment
 - (iv) e-commerce

13. Write any two limitations of using DBMS approach. 2
14. Consider the following statements :
A = 10; //first statement
A = = 10; //second statement
Is there any difference between the two statements ? Justify your answer. 2
15. Expand IDE. Name any one open source IDE for writing Java programs. 2
16. Mr. Prason wants to create a new table “Voters” having fields as Voters_Id, Name and Age with Voters_Id as Primary Key. Help him to write the appropriate SQL command. 2
17. Define Work Integrated Learning. Give suitable example. 2
18. Write any four best features of Java. 2
19. What is e-governance ? Write the website address of National Portal of India. 2

Short Answer Questions (Attempt **any five** questions).

20. What are aggregate functions ?
Consider the table Student having fields (Rollno, Name, Marks) :
Write the SQL query to perform the following : 3
(i) To find the minimum marks from the table “Student”
(ii) To count the names beginning with ‘A’ from the table “Student”
21. What will be the output of the following code and why ? 3
- ```
public class first
{
public static void main(String[] args)
{
 System.out.println(2+0+1+8+"Welcome"); //Statement 1
 System.out.println("Welcome"+2+0+1+8); //Statement 2
}
}
```

22. Online shopping has become a craze these days. Write any two benefits of it and name any one popular shopping website. 3
23. What is the use of front end and back end tool ? Name any one back end tool used for making software. 3
24. Write any three challenges being faced by the Government in digitizing India. 3
25. How have database applications helped in improving the performance of Banks ? Explain. 3
26. Why are loops used in programming ? What will be the output of the following loop and why ? 3
- ```
int x = 5;
while (x == 5)
{
    System.out.println("In the loop");
}
```

SECTION B

*Long Answer Questions (Attempt **any three** questions).* 5×3=15

27. What is Web Application ? Explain the different phases involved in Web Application development. 5
28. What is an Exception ? Explain how Exception handling takes place in Java. 5

29. (i) What are Conditional Statements ? What will be the output of following Code : 5
- ```

int Number = 20;
Switch (Number)
{
case 10:
System.out.println("Ten Thousand");
break;
case 20:
System.out.println ("Twenty Thousand");
case 30:
System.out.println ("Thirty Thousand");
break;
case 40:
System.out.println ("Forty Thousand");
default:
System.out.println ("Not enough!!!");
}

```
- (ii) What is the use of break and default clause in Switch statement ?

30. Explain any four modes of payment in Online transactions. 5

31. Consider the following table ITEM and answer the following queries in SQL : 5

**Table : ITEM**

| ICode | IName        | Price | Quantity |
|-------|--------------|-------|----------|
| I01   | Book         | 250   | 30       |
| I02   | Copy         | 30    | 15       |
| I03   | Bag          | 270   | 30       |
| I04   | Lunch Box    | 130   | 20       |
| I05   | Water Bottle | 220   | 30       |

- (i) To display the Item Name and Price of all items whose Quantity is more than 40.
- (ii) To add a new value in Table : ITEM
- (iii) To count the total number of items whose Quantity is 30.
- (iv) To display Item Name and Quantity in descending order of Price.
- (v) To display all items whose Item Name starts with 'B'.