

BACHELOR OF SCIENCE (COMPUTER SCIENCE) (CBCS - 2018 COURSE)
F.Y.B.Sc.(Computer Science) Sem-II : WINTER- 2022
SUBJECT : RDBMS USING ORACLE

Day : Monday

Time : 02:00 PM-05:00 PM

Date : 5/12/2022

W-20078-2022

Max. Marks : 60

N.B.

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
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- Q.1** Answer any **TWO** of the following: (12)
- a) Explain database transaction with suitable example.
 - b) What is PL/SQL stored procedure? What is the syntax for stored procedure? Explain the syntax with suitable example.
 - c) Explain the following relational algebra operations with the help of example:
 - i) Union
 - ii) Set difference
- Q.2** Answer any **TWO** of the following: (12)
- a) What is database schedule? Explain serial schedule with the help of example.
 - b) Explain the following PL/SQL control structure with syntax and example :
 - i) IF-THEN-ELSE
 - ii) WHILE LOOP
 - c) Explain the following terms:
 - i) Functional dependency
 - ii) Transitive dependency.
- Q.3** Answer any **TWO** of the following: (12)
- a) Explain the advantages of PL/SQL.
 - b) Explain phantom problem with the help of example.
 - c) Write a PL/SQL block for the following:
Create table Employee (eno, ename, esal). Select the employee salary for given employee number, if salary > 50,000 then display 'No Bonus' message. If salary < 50,000 then give 15% bonus and display bonus amount.
- Q.4** Answer any **THREE** of the following: (12)
- a) State various features of PL/SQL.
 - b) Write a note on ACID properties of transaction.
 - c) What is database incorrect analysis problem? Give one example for the same.
 - d) What are the basic data types in PL/SQL? Give one example for each.
- Q.5** Answer any **FOUR** of the following: (12)
- a) State the advantages of database trigger.
 - b) What do you mean by concurrent execution of transactions?
 - c) State any three oracle named exception handlers with meaning.
 - d) Write a PL/SQL block to accept radius of circle and display area of circle.
 - e) What are the rules for 3NF?
 - f) Write a short note on lossless join decomposition in DBMS.

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