

INTERNATIONAL INDIAN SCHOOL-DAMMAM
DEPARTMENT OF COMPUTER SCIENCE
WORK SHEET SUB : IP (065)

Answer the following questions :

Q . 1. write a PL/SQL block to print a Pyramid as given

```
1
 1 2
 1 2 3
 1 2 3 4
 1 2 3 4 5
```

Q . 2. Distinguish between numeric for loop and cursor for loop with example .

Q . 3. Distinguish between before and after triggers with example .

Q . 4. explain in brief the types of cursors supported by pl/sql .

Q . 5. differentiate between grant and revoke commands explaining the purpose of each .

Q . 6. explain the usage of bind variables in pl/sql with the help of example .

Q . 7. In a pl/sql code, DBMS_output.put_line is used to display output but the output is not getting displayed on screen.what might have gone wrong ?

Q . 8. what is a view ? why does view not require any physical storage .

9. suggest parameter mode (IN/OUT/IN OUT) for the following ?

- i. parameter can be used as a normal variable.
- ii. Passed value must not get changed.

Q . 10. what do you understand by term Self join ? give an example ?

SECTION - B

Answer the following questions :

Q . 11. find the output of the following code segment

```
loop
  dbms_output.put_line(i);
  i:= i+1;
end loop;
```

Q . 12. write an equivalent for loop for the following code and write its output

```

sum :=0;
for j in 2..20
loop
    sum:= sum + j;
end loop;

```

Q . 13. what is the significance of a login.sql file ?

Q . 14. write a pl/sql script to obtain the name of a department whose number is 30 from dept table. Display the department name on screen along with department number;

Q . 15. what are pl/sql cursor exceptions ?

Q . 16. discuss the role of the following :

- a. Commit
- b. Rollback
- c. Commit work
- d. savepoint with examples.

Q . 17. using paramaterized cursors write a piece of code that displays the name of employees of a department whose name is entered by the user . the data is to be displayed using

- a. simple loop
- b. for loop

Q . 18. Answer the questions based on the table student below

| COLUMN NAME | DATA TYPE | SIZE | DESCRIPTION | CONSTRAINT |
|-------------|-----------|------|-----------------------------------|--------------------------|
| Rollno | Number | 2 | Students rollno | Primary key |
| Name | Varchar2 | 25 | Name of the student | Not null |
| Class | Varchar2 | 3 | Class of student | |
| Stream | Varchar2 | 15 | Stream opted by the student | |
| Total marks | Number | 8,2 | Total marks scored by the student | |
| Grade | Varchar2 | 1 | Grade scored by the student | Can be 'A' or 'B' or 'C' |

- a. write sql command to display Roll numbers, names, Total marks grades of all the students in 'non medical ' stream sorted by total marks in descending order.

- b. write sql command to create a view consisting of all students in 'medical'stream And who have scored 'A' grade.
- c. write a pl/sql procedure that takes in Student's Roll number as a parameter and increases Total marks of that student by 2% (as he/she is a sports person)
- d. Create a Trigger to display the name and stream of student(s) whose record(s) are being Deleted from the student table.

Q . 19. Consider the following table :

| EMPNO | SALARY | ENAME |
|-------|--------|--------|
| 1000 | 10400 | jones |
| 1001 | 11625 | ramesh |
| 1002 | 12700 | ajay |
| 1003 | 10195 | adams |

- a. Write a procedure raise_sal which increases the salary of an employee . It accepts an employee number and salary increase amount . it uses the employee number to find the current salary from the employee table and update the salary.
- b. write the sql command to display employee number and employee name from EMPLOYEE table.
- c. write a pl/sql block that determines the highest paid and lowest paid employee table and print their record on the screen .

Q. 2. Answer the following questions.

1. Name any Four property of MDI from. 2
2. Which loop executes when the given condition is False? Explain with an example. 2
3. What are modules in VB? Name various modules available in VB. 2
4. Define: RecordSet and Record Source. 2
5. What do you mean by scope and life time of variables? Explain with example. 2

Q. 3. (a) State any two advantages of PL/SQL over SQL. 2

b) Differentiate between IN and OUT parameter of PL/SQL procedure. 2

c) State the difference between –

i) DDL and DCL commands. ii) %Type and %Rowtype 2

d) What is trigger? Name the statements for which triggers are executed. 2

e) What is the need of creating cursor in PL/SQL? Name any two attribute of it. 2

Section - B

Q. 4. Read the following case study and answer the questions that follow.

Paradise Company is a dealer of goods. The company's programmer has made the following form to calculate the total cost of the order of the customers. The total cost is calculated as per the following criteria.

For Units

1-30

Price For wholesalers

Rs. 100/-

Price for Retailers

Rs. 80/-

31-70

Rs. 90/-

Rs. 70/-

>70

Rs. 60/-

Rs. 50/-

Special customers are given a discount of 20%.

| Object Type | Object Name | Description |
|----------------|----------------|--------------------------------------|
| Form | FrmParadise | Main Form |
| Text Box | txtUnitOrdered | To enter Unit Ordered |
| | txtTotalCost | To show calculated cost |
| Check Box | chkSpCust | To be checked if customer is special |
| Option Button | optWholesaler1 | To Provide customer type |
| | optRetailer | |
| Command Button | cmdCalcCost | To calculate total cost |
| | cmdClear | To clear the entered values |
| | cmdQuit | To close the application |

- Write the commands to disable the text boxes txtPercentage and txtGrade. 1
- Write the code for text boxes txtFirstTerm or txtSecondTerm which accept only numeric data. 1
- Write the code for cmdCalcPer to calculate the percentage after finding the total marks of first term and second term (assuming that both marks are out of 100). Also ensure that NCC cadets get an increment of 5% in their percentage. 3
- Write the code for cmdCalcGrade to calculate the grade depending on the stream selected according to the criteria given above. 3
- Write the code for cmdClear command button to clear all the text boxes and check box. Also write the code for cmdExit to close the application. 2

Q. 5. (a) Find the error from the following code segment and rewrite the corrected code underlining the correction made(VB):

```
dim work as integer, l as integer
```

```

work=10
l=0
do while work<20 loop
print work * l
l = l + 2
If l = 8 then
Work=20
Elseif
Work=work – 3
end
loop while 2

```

(b). Find the output of the following statements:

- i. Print 9 and 5
- ii. Print $\text{INT}(4-8*5/2+10)$ 2

(c). Rewrite the following Procedure after converting into Function.

```

Sub Factorial( N as Integer)
Dim Fact as Long
Fact=1
For I = N to 2 Step -1
Fact=Fact*I
Next I
Print "Factorial of"; N; "is "; Fact
End Sub 2

```

(d). Write a function which takes a string as argument and return the reverse of it. 2

(e). Write a procedure that takes two arguments and swaps the numbers without using third variable. 2

Section - C

Q. 6. Answer the following question.

(a). Write the output produced by the following part of code in PL/SQL.

```

DECLARE
Num NUMBER:=3;
BEGIN
FOR I IN 1..3 LOOP
FOR J IN REVERSE 1..2 LOOP
Num:=Num+J;
DBMS_OUTPUT.PUT(Num||' ');
END LOOP;
DBMS_OUTPUT.NEW_LINE;
Num:=Num + MOD(Num,2);
END LOOP;
END; 2

```

(b). Find Error in the following code, underline errors and rewrite the correct code.

```

DECLARE;
Bonus NUMBER[5] default 10;

```

```

Commission NUMBER default 20;
Status BOOLEAN =True;
BEGIN ;
Bonus<Commission:=Status;
END; 2

```

(c). What are anonymous blocks? How will you save and execute it. 2

(d). I want to execute a block of code every time when SQL session starts, where I would write the code. 1

(e). Write a PL/SQL function Exponent that takes a 3-digit number argument and return the value, first digit to the power second digit to the power third digit. 3

Q. 7. Answer the following question based on the FLIGHT table.

Table : FLIGHT

| Column Name | Data Type | Size | Constraint | Description |
|-------------|-----------|------|--------------|---------------------------|
| Flight_No | NUMBER | 4 | Primary Key | Flight Number |
| Origin | VARCHAR2 | 30 | NOT NULL | Place of Origin of Flight |
| Destination | VARCHAR2 | 30 | NOT NULL | Destination of Flight |
| Seats | NUMBER | 3 | Less than 50 | No. of seats Available |
| Flt_Date | DATE | | | Sate of Flight |
| Rate | NUMBER | 7,2 | | Rate of Ticket |

- Write the SQL command to create the table Flight including the constraints.
 - Write the SQL command to display the details of all the flights whose destination is the same as the destination of Flight_No 3002.
 - Write a PL/SQL procedure IncreaseRate to increase rate by 15% of the flight whose Flight_No is passed in the procedure.
 - Write PL/SQL code to create two statement level triggers BD_FLIGHT and AD_FLIGHT before and after DELETE statement respectively on the table FLIGHT which displays a message 'Ready for Deletion' and 'Record Deleted' respectively.
-