

**Informatics Practices (065)  
Sample Question Paper –1**

Note

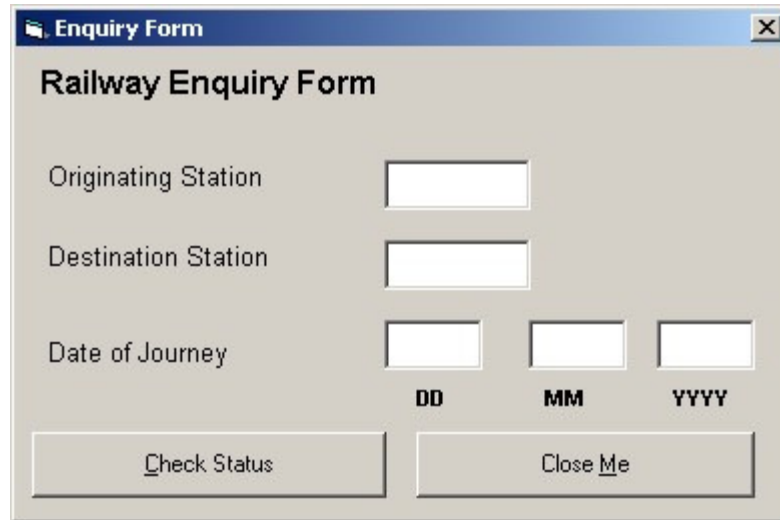
1. This question paper is divided into sections
2. Section – A consists 30 marks.
3. Section – B and Section – C are of 20 marks each
4. Answer the questions after carefully reading the text.

<b>Section – A</b>		
Q 1.	Answer the following questions	
	(a) Explain the following terms: i. Shareware ii. PHP	2
	(b) Elaborate the term SDLC explaining its essential components using a sample case study.	4
	(c) Explain the term Data Modeling. What does UML mean? Give the name of two commercially available packages supporting Object Modeling Technique.	4
Q2	Answer the following questions	
	(a) "Oracle Database is an example of an RDBMS" Justify this statement	2
	(b) Define SQL. Explain SQL subcategories giving at least one example command in each category.	4
	(c) Differentiate between Decision Control and Looping Control Structure in context with PL/SQL	4
Q3	Answer the following questions	
	(a) "Visual Basic is not an Object Oriented Language" Justify this statement.	2
	(b) Differentiate using a suitable example, between MsgBox () and InputBox () functions in Visual Basic	4
	(c) Differentiate between a ADODB project reference and ADO DC in a form using suitable Example	4

**Section – B**

Q4 Read the following case study and answer the questions that follows

Mr Nath of ABC Software Corporation has got requirement of a Software Project from a Customer in Tours and Travel Business. He performed the preliminary analysis and found that software Application should be based on Client/Server technology. He opted for Visual Basic Language to develop the front end, as RAD is one of its features. We had taken the excerpt from his analysis and presenting you one of the forms to enquire about railway reservation. Carefully observe the following picture.



The List for the above form is as follows:

Object Type	Object Name	Description
<b>Form</b>	frmEnquiryForm	The Main Form Object
<b>Label</b>	lblOriginatingStation	
	lblDestinationStation	
	lblDateOfJourney	
	lblDD	
	lblMM	
	lblYYYY	
<b>Text Box</b>	txtOriginatingStation	To enter a string type value
	txtDestinationStation	To enter a string type value
	txtDD	To enter a Date
	txtMM	To enter a numeric value of month
	txtYYYY	To enter a numeric value of Year
<b>Command Button</b>	cmdCheckStatus	To check Status of Ticket Availability
	cmdCloseMe	To close the form frmEnquiryForm

- |     |  |   |
|-----|--|---|
| (a) | Write the value for the Caption property of the Object cmdCheckStatus.   | 1 |
| (b) | Write the code snippet for cmdCloseMe Command Button if it is required to close the form on its Click event.                                   | 1 |
| (c) | Write a code snippet to allow the user to restrict alphabets in the DD field.  | 4 |
| (d) | Write a procedure to check for the validity of the entered date value. Clear the text boxes for invalid date value and set the focus on txtDD. | 4 |

Q5 Read the following case study and answer the questions that follows

Mr. Das is working as a Chief Information Officer in AMD Constructions Company. In the month of January he received a letter from the management to store all his employee information in electronic form. He decided to develop a small software application to store employee's personal data. He instructed one of his juniors to make a Form in Visual Basic to enter employee information. The junior presented the following form to Mr. Das

The form details are given in the following table

Object or Control Type	Object Name	Description
<b>Form</b>	frmDataEntry	The Main Form Object
<b>Label</b>	lblEmployeeDataEntry	
	lblName	
	lblFatherName	
	lblMotherName	
	lblAddress	
<b>Text Box</b>	txtName	To enter Name of Employee
	txtFatherName	To enter Father Name of employee
	txtMotherName	To enter Mother Name of employee
	txtAddress	To enter Address of employee
<b>Option Button</b>	optFemale	To provide Gender Information
	optMale	
<b>Check Box</b>	chkIntermediate	To be Checked if employee is Intermediate
	chkGraduate	To be Checked if employee is Graduate
	chkPostGraduate	To be Checked if employee is Post Graduate
<b>Command Button</b>	cmdClearForm	To clear all the entered values in the form
	cmdCloseForm	To close the form
	cmdSubmitDetails	To store the form data

(a) Write a Code snippet on Click event of cmdClearForm command button to clear text box objects, set default choice in the Option Buttons and clearing Check Box controls.

2

	(b)	Write a procedure <b>procCheckQualification</b> to be called in the cmdSubmit_Click event. The procedure code will perform the following action: If the check box chkPostGraduate is checked then the procedure will automatically check the check boxes chkGraduate and chkIntermediate irrespective of their initial state. Similarly if the check box chkGraduate is checked than chkIntermediate should also be automatically checked.	4
	(c)	Write a procedure procConvertCase to convert all the employee details in txtName, txtFatherName, txtMotherName and txtAddress to Upper case character	4

<b>Section C</b>			
------------------	--	--	--

5	Answer the questions																																
	(a)	Write a SQL (DDL) query to create the following table Employee <table border="1" data-bbox="289 573 1193 747"> <thead> <tr> <th>Column Name</th> <th>Data Type</th> <th>Size</th> <th>Constraint</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>EmpID</td> <td>NUMBER</td> <td>6</td> <td>PRIMARY KEY</td> <td></td> </tr> <tr> <td>EmpName</td> <td>VARCHAR2</td> <td>20</td> <td>NOT NULL</td> <td></td> </tr> <tr> <td>EmpAddress</td> <td>VARCHAR2</td> <td>30</td> <td></td> <td></td> </tr> <tr> <td>EmpPhone</td> <td>VARCHAR2</td> <td>10</td> <td></td> <td></td> </tr> <tr> <td>EmpSal</td> <td>NUMBER</td> <td>9,2</td> <td></td> <td></td> </tr> </tbody> </table>	Column Name	Data Type	Size	Constraint	Description	EmpID	NUMBER	6	PRIMARY KEY		EmpName	VARCHAR2	20	NOT NULL		EmpAddress	VARCHAR2	30			EmpPhone	VARCHAR2	10			EmpSal	NUMBER	9,2			2
Column Name	Data Type	Size	Constraint	Description																													
EmpID	NUMBER	6	PRIMARY KEY																														
EmpName	VARCHAR2	20	NOT NULL																														
EmpAddress	VARCHAR2	30																															
EmpPhone	VARCHAR2	10																															
EmpSal	NUMBER	9,2																															
	(b)	Write PL / SQL Code to increase the salary of all the employees by some percentage amount accepted from the user	4																														
	(c)	Write program code to declare and use an Explicit Cursor to display the Salary increased by 10%	4																														

6

Assume that you are provided with the following two table

Table: Dept		
DEPTNO	DNAME	LOC
10	ACCOUNTING	NEW YORK
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON

Table: Emp							
EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	17-Dec-80	800		20
7499	ALLEN	SALESMAN	7698	20-Feb-81	1600	300	30
7521	WARD	SALESMAN	7698	22-Feb-81	1250	500	30
7566	JONES	MANAGER	7839	02-Apr-81	2975		20
7654	MARTIN	SALESMAN	7698	28-Sep-81	1250	1400	30
7698	BLAKE	MANAGER	7839	01-May-81	2850		30
7782	CLARK	MANAGER	7839	09-Jun-81	2450		10
7788	SCOTT	ANALYST	7566	09-Dec-82	3000		20
7839	KING	PRESIDENT		17-Nov-81	5000		10
7844	TURNER	SALESMAN	7698	08-Sep-81	1500	0	30
7876	ADAMS	CLERK	7788	12-Jan-83	1100		20
7900	JAMES	CLERK	7698	03-Dec-81	950		30
7902	FORD	ANALYST	7566	03-Dec-81	3000		20
7934	MILLER	CLERK	7782	23-Jan-82	1300		10

The table structure are

Table: Dept				
Column Name	Data Type	Size	Constraint	Description
DeptNo	Number	2	PRIMARY KEY	
Dname	VARCHAR2	10	NOT NULL	
Loc	VARCHAR2	10		

Table: Emp				
Column Name	Data Type	Size	Constraint	Description
EmpNo	Number	4	PRIMARY KEY	
ENAME	VARCHAR2	10	NOT NULL	
JOB	VARCHAR2	10		
MGR	NUMBER	4		
HIREDATE	DATE			
SAL	NUMBER	(7,2)		
COMM	NUMBER	(7,2)		
DEPTNO	NUMBER	2	FOREIGN KEY	References DeptNo field of Dept Table

- |     |   |   |
|-----|---|---|
| (a) | Create a View on the above tables to show Ename, Dname, Job and Sal of an employee whose department number is either 10 or 20.  | 2 |
| (b) | Write a SQL Function to return Bonus, which is calculated as 20% of the amount passed. Also give an example of its use on column Sal of Emp table.  | 4 |
| (c) | Write the PL/SQL code to create a stored procedure Raise_Salary to increase salary of an employee whose EMPNO and Sal_Percentage is passed as IN mode argument and will also display the changed value. | 4 |