

CBSE Question Paper – 2010

INFORMATICS PRACTICES

Class – XII

Time allowed: 3 hours

Maximum Marks: 70

Instructions: Attempt all question.

SECTION A

1. Answer the following questions:

(a) Expand the terms OSS and W3C.

2

(b) What are the following software used for?

2

(i) PHP

(ii) MySQL

(c) Name any four application areas of databases.

2

(d) What are the different types of relationships that can be depicted through an ER model? Explain the concept of ER Model using the case study of a Ticket Reservation System that has three entities Ticket, Passenger and Train. Assume that each passenger can buy more than one ticket.

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2. Answer the following questions: 4
- (a) Differentiate between the ForNext and For EachNext loop of Visual Basic giving a suitable example of each. 2
- (b) Name and explain the usage of any two types of modules available in Visual Basic. 2
- (c) What are data-aware controls? Name any two ActiveX data aware controls that can be used on a form. 2
- (d) Explain the term ADO object model. Differentiate between the Connection Timeout and Command Timeout properties of the Connection object. 4
3. Answer the following question : 2
- (a) Differentiate between row-level and statement-level triggers. 2
- (b) Define the terms Candidate key and foreign key with respect to a database. 2
- (c) Differentiate between DDL and DML commands. Give one example of each type of command. 2
- (d) Mentions any two advantages of PL\SQL as compared to SQL. 2
- (e) Name the keyword used to 2
- (i) Allow duplicate rows in a query
- (ii) Avoid duplicate rows in a query.

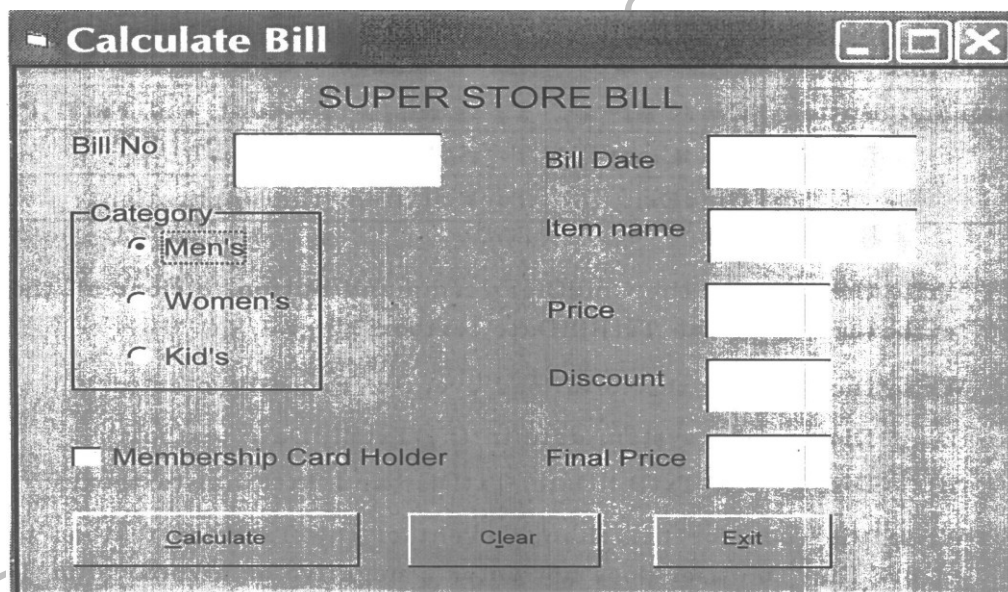
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SECTION

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

Mr. presi of Super Store decided to computerize the billing department. The accounts manager at Super store is creating billing software to generate the bill during the sale period. A new bill is generated for each item sold. The discount is given based on the item category. An additional discount of 5% is given to the store Membership Card holders. The following is the data entry screen used at the store:



The list of controls for the above form is as follows:

Object Type	Object Name	Description
Form	FrmBill	The main form
Text Box	Txt Bill no	To enter Bill Number

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	Txt Bill Date	To display System Date
	Txt Name	To input Item Name
	Txt price	To input Item Price
	Txt Disc	To display Discount
	Txt final	To display Final Price
Option Buttons	Opt Men's	To select men's Category
	Opt Women's	To select Women's Category
	Opt Kids	To Select Kid's Category
Check Box	ChkMember	To be checked for members
Command Button	CmdCalc	To calculate discount and Final Price
	Cmd Clear	To clear all textboxes
	Cmd Exit To	To Exit from the application

- (a) Write the code for the Cmd Clear command button to clear all the textboxes Except the Txt Bill Date textbox.

1

- (b) Write the code for the form load event of Form Bill so as to:

2

- (i) Display the system date in the Txt Bill date text box.
- (ii) Disable the Txt Bill Date, Txt Disc and Txt Final textboxes.

- (c) Write the code for the change event of the Txt Price textbox to ensure that the user does not enter a negative or a zero value. If a negative or a zero value is entered then the text box should be made blank and a warning message should be displayed.

3

- (e) Write the code for the Cmd Calc command button to display the discount and final price in the Txt Disc and Txt Final textboxes respectively. Note that Final price is calculated as price – discount and the discount is calculated based on the category and price according to the following table. Also remember to give

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an additional 5 % discount for membership card holders i.e. if the Chkmember checkbox is checked.

4

Category	Price.	Discount
Men's	<1000	30%
	>=1000	50%
Women's	<1500	40%
	>=1500	50%
Kid's	<500	20%
	>=500	30%

5. Answer the following questions:

- (a) Find the errors from the following code segment and rewrite the corrected Code Underlining the correction made.

2

```

Private Function Is prime (num As Integer) As Bool
Dim Limit as Integer
Limit = num /2
For ctr = 2 To limit
If num modulo ctr = 0 Then
Exit for Loop
End If
Next
Is Prime = If (ctr > limit, True, False)
End Sub
    
```

- (b) Find the output of the following code :

2

```

Dim astr as string
Dim I as Integer
I = 1
Astr = "Come"
    
```

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```
DO while I <= Len (astr)
    Print Mid (astr, I)
    I = I +1
Loop
```

- (c) Rewrite the following code using If then Else construct without affecting the Output:

```
Dim a as Integer
a = 1
Select Case a
Case 1
    Print "Sunday"
Case 2 to 6
    Print "weekday"
Case 7
    Print "Nearing weekend"
End select
```

- (e) Write a visual basic procedure that takes a number as argument and displays The sum of all the digits in the number. For example, if the argument passed is 354, the procedure should display 12 (i.e. 3+5+4)

SECTION C

6. Read the questions given below and answer accordingly :

- (a) Writhe the output produced by the following PL/SQL code :

```
DECLARE
    A NUMBER;
```

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```

B NUMBER;
TEMP NUMBER;
BEGIN
  FOR X IN 1... 4 LOOP
    TEMP: = A;
    A: = B;
    B: =TEMP;
    A: = A + 1;
    B: = B - 1;
    DBMS _ OUTPUT. PUT _ LINE ('A = ' // A);
    DBMS _ OUTPUT. PUT _ LINE ('B = ' // B);
  END LOOP;
END;

```

- (b) Find the errors from the following PL/SQL code and rewrite the corrected Code underlining the correction made.

2

```

DECLARATION
V_ MNO MOVIES.MOVIESNO %TYPE;
V_TITLE MOVIES. TITLE%TYPE;
V_PRICE MOVESE. PRICE. %TYPE
BEGIN
V_MNO EQUALS 101
LOOP
SELECT TITLE, PRICE, RATING INTO V_ TITLE, V_PRICE, V_RATE
FROM MOVIES
WHERE MOVIEENO = V_MNO;
DBMS_OUTPUT.PUTTEXT (V_TITLE II' 'IIV_PRICE);
EXIT WHEN V_ RATE < 4;

```

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V_MNO: = V_MNO + 1;

LOOP END;

END;

(C) Differentiate between the IN and IN OUT modes of a parameter in a PL/SQL Block.

2

(d) Write a PL/SQL function POWER that takes two numbers as arguments and Returns the value of the first number raised to the power of the second.

4

7. Answer the questions based on the table comp lab given below:

Table: Comp Lab

Column Name	Data Type	Size	Constraint	Description
It_Code	NUMBER	4	PRIMARY KEY	Item Code
It_Cat	CHAR	1	'H' or 'S'	Item category as Hardware or Software
It_Name	VARCHAR2	25	NOT NULL	Name of the item
It_Cost	NUMBER	8,2		Cost of each unit of an item
It_Qty	NUMBER	3		Item Quantity in the Lab
Dt_Pur	DATE			Date of Purchase

(a) Write the SQL command to create the table Comp Lab including the constraints.

2

(b) Write the SQL command to display the details of the item with the maximum It Cost.

2

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(c) Write the PL/SQL code to increase the item cost by 10% for an item code accepted from the user if the date of purchase of the item is later than 12-Oct – 2005.

3

(d) Write the PL/SQL code to create a stored procedure disp_Details to display the details of all the items with It_ Cat as "H". The code should also display the total quantity of all such items.

3

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