

GULF SAHODAYA (SAUDI CHAPTER) EXAMINATION – 2008

SUBJECT: Informatics Practices

GRADE: XI

MAX. MARKS: 70

TIME: 3 hrs.

TOTAL PAGES: 4

SET-A

Instructions:

- i. Please check that this question paper contains V questions.*
- ii. Please write down the serial number of the question before attempting it*
- iii. Programming language: Visual Basic*
RDBMS: Oracle

Q.I.

1. Give some strengths and weaknesses of the computer. 1
2. What is a Bio-metric sensor? 1
3. What are word processors? 1
4. What is utility software? 1
5. What is an operating system? Explain any two types of operating system. 2
6. What is a computer virus? Why are antivirus software considered important? 2
7. What is the significance of the following? 2
 - i. Recycle bin
 - ii. My Computer

Q.II.

1. What is a separator bar? 1
2. Explain RAD. 1
3. Name the function that converts: 1
 - i. a string value into its equivalent number.
 - ii. a number to an equivalent string
4. Give the result of the following expressions: 1
 - i. $a*b/c$ (if $a=10, b=3, c=4$)
 - ii. $b>0$ AND $(b-c>0)$ XOR $(a*2+b>c+20)$ (if $a=13, b=4, c=5$)
5. What do you mean by an error? Differentiate between syntax errors and Symantec errors. 2
6. Differentiate between an input box and a message box with the help of an example code. 2
7. What is a data control? What is its significance? 2
8. Differentiate between Decision control and looping control structure with the help of an example. 2
9. What are custom dialog boxes? Differentiate between modal and modeless dialog boxes. 2

Q.III.

1. Develop a Result Preparation System as follows. 4
Write a program to read marks in five subjects, calculate and display the Total, percentage and grade according to the following criteria. Draw the required screenshot.

Percentage	Grade
• ≥ 90	A
• ≥ 80 or < 90	B
• ≥ 70 or < 80	C
• ≥ 60 or < 70	D

2. In an organization, the employer gives 20% bonus to each employee and an additional Rs. 1000 for the employees whose service is more than 10 years. Write a program to read the salary and the no. of years of service and calculate the net salary of the employee. Draw the required screenshot. 4

Q.IV.

1. A student of Kendriya Vidyalaya, Harish Algappa wanted to make an application to find even or odd out of a given number. He had written the following code and he is unable to correct some of the errors in the code. You are required to help him in correcting the code segment. Find the error and rewrite the corrected code underlining the correction made: 2

```
Private sub cmd find_click()
  If txtnumber.text MOD 2 = 0
    MsgBox "It is an even number"
  Else
    MsgBox "It is an odd number"
  End sub
```

2. Give the output of the following program segment: 2

```
sum = 0
For i = 1 to 10
  if (i MOD 2 = 1) then
    sum = sum + 1
  Else
    sum = sum - 1
  End if
Next i
Print sum
```

3. Rewrite the following code using Select Case: 2

```
If Stper >= 90 then
  lblStudentGrade.caption = "Grade is A"
ElseIf Stper >= 80 then
  lblStudentGrade.caption = "Grade is B"
ElseIf Stper >= 70 then
  lblStudentGrade.caption = "Grade is C"
ElseIf Stper >= 60 then
  lblStudentGrade.caption = "Grade is D"
Else
  lblStudentGrade.caption = "Grade is F"
End if
```

4. Rewrite the following code using Do..While loop: 2

```
X=1
For j = 0 to 20 step 2
  If (j mod 2 = 0) then
    Print x
  Else
    Print x-3
  End if
Next j
```

Q.V.

1. What do you mean by primary key in a relation? 1
2. Explain the difference between WHERE and HAVING clause? 1
3. Differentiate between COMMIT and ROLLBACK. 1
4. Write the resulting output of the following: 1
 - i. Select POWER(5,5) from Dual;
 - ii. Select LPAD('Hello', 15, '*.') from Dual;
5. If str= "INFORMATICS PRACTICES#####" AND STR2= "####FOR CLASS XI" 2
Write a command to print the output as 'informatics practices for class xi'
('#' denotes a blank space)
6. What are views? How are they useful? 2
7. What is Normalization? Define Third Normal Form. 2
8. Define the following terms: 2
 - i. Domain
 - ii. Cardinality
9. What are joins? Give an example. 2
10. Differentiate between SUBSTR() and INSTR() with the help of an example. 2
11. Consider tables **INSTRUCTOR** and **SALARY** with the following structures: 2

INSTRUCTOR

<i>Name of Column</i>	<i>Type</i>
I_code	Number(4)
F_Name	Varchar2(30)
L_Name	Varchar2(30)
T_id	Varchar2(10)
Salary	Number(9,2)

SALARY

<i>Name of Column</i>	<i>Type</i>
I_code	Number(4)
Subject	Varchar2(30)
Supervisor	Varchar2(30)

Write an SQL command to display the I_code, F_Name and Subject for all teachers using tables INSTRUCTOR and SALARY.

12. Create the table GRADUATE with the following structure: 2

Column	Data type	Constraint
Reg_No	Number(4)	Primary Key
Name	Varchar2(20)	Not Null
Stipend	Number(5)	
Subject	Varchar2(20)	
Average	Number(2)	<100
Div	Number(2)	

13. Write SQL commands for the following on the basis of the given TEACHER table:

TEACHER

No	Name	Age	Department	DOJ	Salary	Sex
1	Jugal	34	Computer	10/01/97	12000	M
2	Sharmila	31	History	24/03/98	20000	F
3	Sandeep	32	Maths	12/12/96	30000	M
4	Sangeeta	35	History	01/07/99	40000	F
5	Rakesh	42	Maths	05/09/97	25000	M
6	Shyam	50	History	27/06/98	30000	M

- i. To show all information about the teacher of History department. 1
- ii. To list the names of female teachers who are in Hindi department. 1
- iii. To list the names of all teachers with their date of joining in ascending order. 1
- iv. Display the department names uniquely. 1
- v. Display those teachers whose salary is between 20000 and 25000. 1
- vi. To display the number of records in the table. 1
- vii. Give the output of the following SQL commands: 4
 - a) SELECT AVG(Salary) FROM TEACHER;
 - b) SELECT MAX(Salary) FROM TEACHER;
 - c) SELECT COUNT(*) FROM TEACHER GROUP BY Department;
 - d) SELECT SUM(Salary) FROM TEACHER WHERE Department = 'History';

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