

INTERNATIONAL INDIAN SCHOOL, DAMMAM
MODEL EXAMINATION, 2012-2013

SUBJECT: INFORMATICS PRACTICES
CLASS: XI

TIME: 3HRS
MAX MARKS: 70

SET A

1. (a) What is the difference between hardware and software? (2)
- (b) What do you understand by IDE? (1)
- (c) Define firewall and digital signature. (2)
- (d) Give an example of (1)
1) System software. 2) Utility software. (2)
- (e) Name the Cyber Act in India and what is its function? (2)
- (f) What is the function of CPU? State its subunits and explain the function of each. (2)
2. (a) While working on Net Beans, Arun included a “addBtn” which is disabled at design time. It should be enabled only at runtime. Write the statement to do the same. (1)
- (b) Name the window that contains the swing control components. (1)
- (c) What is the difference between runtime error and logical error? (2)
- (d) What will be the value of the following expression if the value of j=5? (2)
i) $(5 * ++j) \% 6$
ii) $(5 * j++) \% 6$
- (e) Rectify the errors in the following code fragment and re write the corrected code: (2)

```
int a, b;  
a = text1.getText ();  
b= text2.getText ();  
if a>b  
{  
System.out.println(“The greater Number is ”+a);  
else  
System.out.println(“The greater Number is ”+b);
```

- (f) What will be the value of P and Q after execution of the following code: (2)

```
int P, Q=50;  
for(P=8;P<=12;P++)  
{  
Q+=P;  
}  
JOptionPane.showMessageDialog(this,”P: “ +P +”Q: “ +Q + “ “);
```

- (g) Write a java code that takes the cost of a pencil from jTextField1 and number of pencils from jTextField2 and calculate total amount as cost*number to be displayed in jTextField3 and 20% service tax out of total amount in jTextField4. (2)
3. (a) While writing a code, Ms. Sawant wants to execute any statement even if the condition is false at least once. Help her to choose appropriate loop out of do ... while() and while() (1)
- (b) What is the difference between selection and repetition statements? (2)
- (c) Write the equivalent code for the following using If .. else if.. structure (2)

```

switch(op)
{
case '+': c=a+b; break;
case '-': c=a-b; break;
case '*': c=a*b; break;
case '/': c=a/b; break;
default : System.out.println("Not a valid operation"); System.exit(0);
}
System.out.println(""+c);

```

- (d) How many times does the following while loop get executed? (1)

```

int K=5;
int L=36;
while(K<=L)
{
    K+=6;
}

```

- (e) What will be displayed in jTextField1 after executing the following statement? (1)

```

jTextArea.setText("GREAT \n COUNTRY \t INDIA");

```

- (f) Write the equivalent code for the following using 'do-while' loop (1)

```

for( int i = 0, j=10; i !=j; i++,j--)
{
    System.out.println(i+j);
}

```

4. Given below is a form used for interest calculator:

The screenshot shows a window titled "INTEREST CALCULATOR". Inside the window, there are four text input fields arranged vertically, labeled "NAME", "PRINCIPAL", "TIME", and "INTEREST". To the right of these fields is a "CATEGORY" section containing three radio buttons: "MALE", "FEMALE", and "SR. CITIZEN". At the bottom of the window, there are three buttons: "CLEAR", "CALCULATE", and "EXIT".

The controls used are:

Text Fields :- txtname, txtprincipal, txttime, txtinterest

Radio Buttons :- rbmale, rbfemale, rbsr

Push Buttons :- btnclear, btncal, btnexit

Interest rates are:

7% for Males, 8% for Females and 9% for Sr. Citizens.

Now write the code for the following requirements:

- (i) When btnclear is clicked, all the text boxes must be cleared. (1)
- (ii) When btncal is clicked the interest to be calculated as per the interest rates given and should be displayed in the appropriate Text Field(txtinterest). (3)
- (iii) When the btnexit is clicked the application should close. (1)

5. (a) Ms. Mirana wants to remove the entire content of a table "BACKUP" along with its structure to release the storage space. What MySQL statement should she use? (1)

(b) Differentiate between Alternate key and Candidate key. (2)

(c) Mr. Janak is using a table with the following columns:
Name, Class, Course_Id, Course_name (2)

He needs to display names of students, who have not been assigned any stream or been assigned Course_name that ends with "economics".

He wrote the following command, which did not give the desired result.

```
SELECT Name, Class FROM Students
```

```
WHERE Course_name = NULL OR Course_name ="%economics";
```

Help Mr. Janak to run the query by removing the error and write the correct query. (2)

(d) What is the difference between delete and drop command in MySQL?

- (e) Answer the given queries based on the following table Student: (2)

Student

Name	Mark
Anil	83
Vinil	98
Karthik	65
Sonia	42

- (i) Select length(Name) from Student where Mark between 42 and 83;
(ii) Select Name, Mark from Student where Name like '%ni%';

- (f) What is a keyword? (1)

- (g) Write the output of the following SQL queries: (2)

- (i) Select Right(Upper("Computer"),3);
(ii) Select Truncate(1672.784,-2);
(iii) Select Date('2010-12-15 11:15:03');
(iv) Select Dayofyear('2010-12-31');

- (h) What is the purpose of the following commands in MySQL? (2)

- i) DESCRIBE
ii) USE

6. Write SQL commands for (i) to (vi) and write output for (vii) to (x) on the basis of Teacher relation given below. (8)

Teacher

No	Name	Age	Department	Date of Join	Salary	Sex
1.	Jigal	34	Computer	1997-01-10	12000	M
2.	Sharmila	31	History	1998-03-24	20000	F
3.	Sandeep	32	Maths	1996-12-12	30000	M
4.	Sangeeta	35	History	1999-07-01	40000	F
5.	Rakesh	42	Maths	1997-09-05	25000	M
6.	Shyam	51	History	1997-02-27	30000	M
7.	Shiv Om	44	Computer	1997-02-25	21000	M
8.	Shalakha	33	Maths	1997-03-31	20000	F

- i. To show all information about the teachers who has joined after 31st March 1997.
ii. To list the names of male teachers who are in Maths department
iii. To list names of all teachers earning below 25000 with their year of joining.
iv. To display the position of 'a' in name in every row.
v. To list the name concatenated with their department of all male teachers.
vi. To increase the salary of computer teachers by 20000.
vii. *SELECT No, Name FROM TEACHER WHERE AGE>34;*
viii. *SELECT NAME, SALARY FROM TEACHER WHERE (SELECT RIGHT(NAME,1)='M');*
ix. *SELECT NAME FROM TEACHER WHERE NAME LIKE '_h%';*
x. *SELECT NAME, DEPARTMENT FROM TEACHER WHERE AGE IN(30,31,32);*

7. (a) What is the purpose of column alias? Write an example. (2)
- (b) Write the SQL query to create the following table. (2)

Table: SalesPerson

Column Name	Data Type	Size
SNum	INT	6
SFName	VARCHAR	25
SLName	VARCHAR	25
City	VARCHAR	10
Sales	DECIMAL	7,2
Comm	DECIMAL	7,2

- (c) Write Sql commands for the following using above table: (4)
- i) To add a new column PhoneNo to the above table.
 - ii) Remove the row having SNum as 20.
 - iii) To select all the rows of the table.
 - iv) To display the cities of all SalesPerson, without duplicates.
8. (a) What is e-learning? (1)
- (b) List the advantages of e-Governance. (2)
- (c) Write two important features of e-Business. Give two most commonly used e-Business sites. (2)

*****GOOD LUCK*****