

# GULF SAHODAYA (SAUDI CHAPTER) EXAMINATION -2013

SUBJECT: INFORMATICS PRACTICES

GRADE: XI  
MAX. MARKS: 70  
DURATION: 3 HRS  
Total pages: 6

## General Instructions:

1. All questions are compulsory.
2. Marks are indicated against each question.
3. Programming must be done in Java

### Q1.

- |  |   |
|--|---|
| (a) What is a computer?  | 1 |
| (b) Which language processor converts a HLL program into machine language in one go? | 1 |
| (c) Write the difference between Digital Signature and Digital Certificate.          | 2 |
| (d) What do you mean by CPU? Name the three sections of CPU.                         | 2 |
| (e) Differentiate between primary and secondary memory.                              | 2 |
| (f) Name the Cyber Act in India.   | 1 |
| (g) Expand the following:  | 1 |
| i. OCR   |   |
| ii. MICR   |   |

### Q2.

- |  |   |
|--|---|
| (a) Differentiate between syntax error and logical error with example.           | 2 |
| (b) Write the equivalent <b>do -while</b> loop for the following.                | 1 |
| <pre>int x, c;<br/>for(x = 10, c = 20; c &gt;= 10; c = c - 2)<br/>    x++;</pre> |   |
| (c) Differentiate between:   | 2 |
| (i) TextField and TextArea components.   |   |
| (ii) RadioButton and CheckBox  |   |
| (d) Write a java code to display the following output:                           | 2 |

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

- (e) While working in NetBeans, Ms Kanta wants to display 'cleared' or 'Re – attempt required' message depending upon the marks entered in jTextField. Help her to choose more appropriate statement out of 'if' statement and 'switch' statement. 1
- (f) Write a java code that takes the price of a pencil from jTextField1 and quantity of pencils from jTextField2 and calculates total amount as Price \* Quantity to be displayed in jTextField3 . 2
- (g) Explain the following terms: 2
- (i) Exception Handling
  - (ii) Prettyprinting

### Q3.

- (a) What will be the output of the following code segment? 1
- ```
String firstName = "Mahatma ";
String lastName = "Gandhi";
String fullName = firstName + lastName;
jTextField1.setText("Full Name: ");
jTextField2.setText (fullName);
```
- (b) Rewrite the code after making the corrections. Underline the corrections . 2
- ```
int sum = 0; count=0;
int i;
for(i==0 ; i= < 10 ; i ++)
{
    sum =+ i;
    count ++;
}
```
- (c) Find the output: 1
- ```
int f=1, i = 2;
do{
    f * = i;
} while( ++i < 5);
TF2.setText( "" + f);
```

(d) Write equivalent 'switch' statement for the following :

2

```
if ( code == 's')
    jlabel1.setText("Season is Summer");
else if ( code == 'r')
    jlabel1.setText("Season is Rainy");
else if ( code == 'w')
    jlabel1.setText("Season is Winter");
else
    jlabel1.setText("Wrong code");
```

Q4.

(a) Mr. Madhav works in a construction company. To calculate total wages he has developed the following GUI in NetBeans. The sample screen shot is shown below:

Male and female labours are paid a basic of Rs. 150/- and Rs. 170/- per day respectively. Skilled labourers are paid extra at the rate of Rs. 100/- day. Labourers from rural areas are paid 10% less of the total amount.

- (i) When Calculate Wage button is clicked, the total wages is calculated as per the given criteria and displayed in total wage text box. 3
- (ii) When Clear button is clicked, all the text boxes should be cleared and radio button, check box should be deselected. 2
- (iii) Close the application when Quit button is pressed. 1

**Q5**

- (b) Write the java statement to make jTextField1 as non - editable. 1
- (a) What do you mean by a **function** in MySQL? Name any two string functions. 2
- (b) Differentiate between DDL and DML commands with an example each. 2
- (c) Differentiate between a Keyword and a clause with example. 2
- (d) What is the purpose of the following commands in MySQL. 2
- (i) DESCRIBE
- (ii) CREATE
- (e) What is the purpose of a Column Alias? Write an example. 2
- (f) Define RDMS? 1
- (g) Distinguish between Primary Key and Candidate Key. 2

**Q6**

- (a) How do you list all the columns from a table named "Employee"? 1
- (b) A table "Animals" in a database has 3 columns and 10 records. What is the degree and cardinality of this table. 1
- (c) If a database "School" exists, which MySQL command helps you to start working in that database. 1
- (d) The LastName column of a table "Directory" is given below: 2

| LastName |
|----------|
| Batra    |
| Sehgal   |
| Bhatia   |
| Sharma   |
| Mehta    |

Based on this information, find the output of the following queries:

- (i) `SELECT LastName FROM Directory`  
`WHERE LastName like "_a%";`
- (ii) `SELECT LastName FROM Directory`  
`WHERE LastName not like "%a";`

(e) Consider the following table "Loan\_Accounts".

**Table: Loan\_Accounts**

| AccNo | Cust_name   | Loan_Amount | Instalments | Int_Rate | Start_Date | Interest |
|-------|-------------|-------------|-------------|----------|------------|----------|
| 1     | R.K. Gupta  | 300000      | 36          | 12.00    | 19-07-2009 |          |
| 2     | S.P. Sharma | 500000      | 48          | 10.00    | 22-03-2008 |          |
| 3     | K.P. Jain   | 300000      | 36          | NULL     | 08-03-2007 |          |
| 4     | M.P. Yadav  | 800000      | 60          | 10.00    | 06-12-2008 |          |
| 5     | S.P. Sinha  | 200000      | 36          | 12.50    | 03-01-2010 |          |
| 6     | P. Sharma   | 700000      | 60          | 12.50    | 05-06-2008 |          |
| 7     | K.S. Dhall  | 500000      | 48          | NULL     | 05-03-2008 |          |

Write the SQL commands for (i) to (iv) and find output for (v) to (viii).

(i) Display the details of all the loans in the ascending order of their loan\_Amount and within Loan\_Amount in the descending order of their start\_date. 1

(ii) Display the details of all the loans whose rate of interest is in the range 11 to 12. 1

(iii) Display the amounts of various loans from the table Loan\_Accounts. A loan amount should appear only once. 1

(iv) Display the cust\_name and loan\_amount for all the loans for which the loan amount is less than 500000 or int\_rate is more than 12. 1

(v) `SELECT cust_name, LCASE(cust_name), UCASE(cust_name)` 1/2  
`FROM Loan_Accounts`  
`WHERE Int_Rate < 11.00;`

(vi) `SELECT DAYOFMONTH(Start_Date)` 1/2  
`FROM Loan_Accounts;`

(vii) `SELECT MID(cust_name, 6)` 1/2  
`FROM Loan_Accounts;`

(viii) `SELECT ROUND(Int_Rate, -1)` 1/2  
`FROM Loan_Accounts;`

(f) Write SQL statements for the following:

(i) Display the day of week on which your birthday will fall in 2013. 1

(ii) Use the string "Internet is a boon" and extract the string "net". 1

- (iii) Display the length of the string "Informatics Practices". 1
- (iv) Display the position of "soft" in "Microsoft". 1
- (v) Display current date. 1
- (vi) Using the three separate words "We" ,"study" and "MySQL" produce the 1  
following output:  
"We study MySQL"

- Q7.** (a) What is E- Business? 1
- (b) Write short notes on E –Governance. 1
- (c) Define E-learning. Name any two websites of E-Learning. 1
- (d) Mr. Ram works for the Customs Department. He wishes to create controls on the form for 2  
the following functions. Choose appropriate controls from Textfield, Label, Radio Button,  
Check Box, Combo Box, Ok Button and write in the third column.

| S.No | Control used to                                      | Control |
|------|------------------------------------------------------|---------|
| 1.   | Enter last name                                      |         |
| 2.   | Choose your Gender(M/F)                              |         |
| 3.   | Choose the name of the country that issued passport. |         |
| 4.   | Submit form                                          |         |