

**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);
```

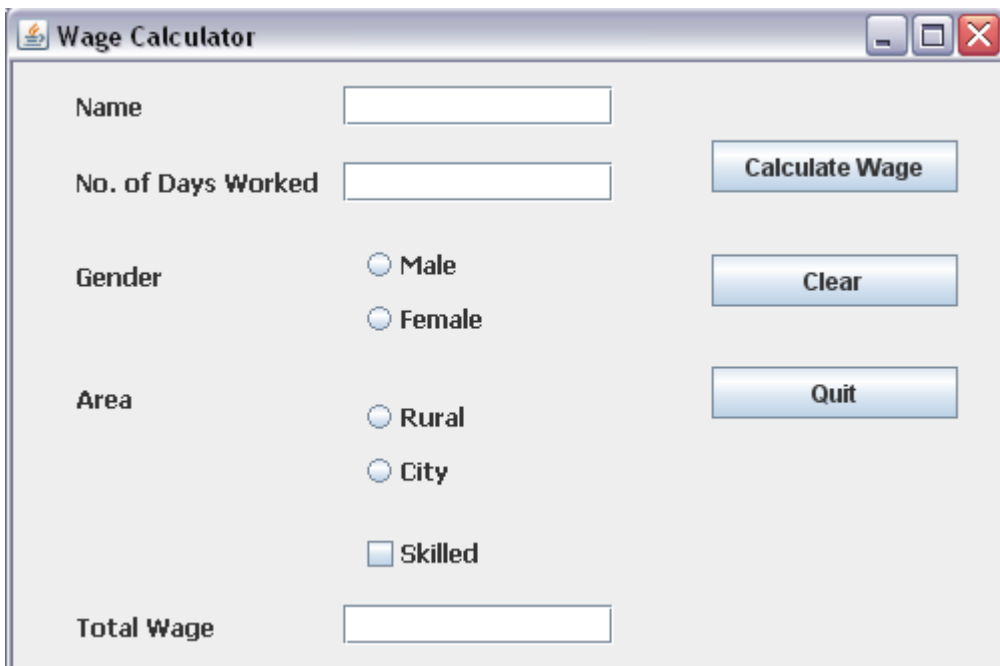
(d) Write equivalent 'switch' statement for the following :

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

- (b) Write the java statement to make jTextField1 as non - editable. 1

### Q5

- (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 following output: 1

"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 the following functions. Choose appropriate controls from Textfield, Label, Radio Button, Check Box, Combo Box, Ok Button and write in the third column. 2

| 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                                          |         |