

**KENDRIYA VIDYALAYA SANGATHAN  
ERNAKULAM REGION**

**INFORMATICS PRACTICES (065)**

**Time allowed: 3Hrs**

**Maximum Marks :70**

**Instructions:**

- i) All the questions are compulsory*
- ii) Programming Language Net beans & Mysql*

**1.**

- (a)**Mr Raj Malhotra is planning to connect all the 15 computers in his office to make a LAN. suggest an intelligent network device to connect all the nodes **1**
- (b)**What is Unicode **1**
- (c)**What is the difference between free ware & open source software **1**
- (d)**Define Protocol **1**
- (e)**Write the full forms of NRCFOSS, MAC **2**
- (f)**List out the four main denial of service attacks **2**
- (g)**Differentiate between true type font & open type font **2**

**2.**

- (a)** **1**  
While creating a frame Mr. Ajay included a Combobox in it. which property of Combobox he should choose to make changes in selection styles
- (b).**What value he should enable/select there for random selection with multiple items **1**
- (c)**Write the HTML tag to set the body color to green and text color to yellow **1**
- (d)**Expnad <TD>, <TH> **1**
- (e)**What will be the output of the following **2**  
for(int i=5;i<=25;i=i+5)  
jTextArea1.setText(" " + i);
- (f)**Write the features of XML **2**
- (g)**Write the java code to display the area of a circle in TF2 by accepting radius through TF1 **2**

**3.**

- (a) What is the command in mysql to see the structure of Material table 1
- (b) Karthik created a table “Exam” in the database and the table contains a column “marks”. Which SQL constraint is required to give by default value for marks column. 1
- (c)Expand DDL & TCL 1
- (d)Table1 contains 6 rows and 3 columns, Table2 contains 2 rows and 3columns how many columns and rows will be there in the Cartesian product of these two tables. 1
- (e)Differentiate between foreign key and primary key 2
- (f) John wants to modify the table “Inventory” and he want to change the column name “ITM” instead of “INM”.Specify the command in MySQL. 2
- (g) The NAME columnof the table “STUDENT” as shown below. 2

<b>NAME</b>
ROHIT
RAJ
SNEHA
HARI

Based on the above the above information ,give output of the following sql query.

- (i) SELECT NAME FROM STUDENT ORDER BY NAME;
- (ii) SELECT NAME FROM STUDENT WHERE NAME LIKE 'R%';

**4**

- (a) What will be displayed in jTextField1 after executing the following code 2  

```
int X=15;  
X=X+2;  
if(X<16)  
jTextFiled1.setText(Integer.toString(X));  
else  
jTextFiled1.setText(Integer.toString(X+X));
```
- (b)Rewrite the program using switch 2  

```
if(ch==1)  
option="car";  
else if(ch==2)  
option="bus";  
else
```

option="walk";

(c) How many times the following loop get executed 1

```
for(int W=5, L=40; W<=L;W=W+10)
jTextArea1.setText(jTextArea1.getText() + " "+W);
```

(d)What will be displayed in jTextArea1 after executing the following code 1  
jTextArea1.setText("I\n\tLOVE\n\t\tINDIA");

(e).The following code has some error(s). Rewrite the correct code underline all the corrections made 2

```
int i=5;j=10;
while j>i
{
jTextField1.getText("j is greater");
j--,++i;
}
JOptionPane.showMessageDialog("Error Corrected");
```

(f)What will be the output of the following if Price value = "2500" 2  
JOptionPane.showMessageDialog(null, " " + Price.length() + "3" + Integer.parseInt(Price));

(g). Write the necessary java codes to develop the following application

**Income Tax**

**Enter Your Code**

**Enter Emp Name**

**Enter Taxable Income**

**Calculate**      **Clear**      **Exit**

**Income Tax**       **Education Tax**

**Surcharge**       **Total Tax Amount**

The Frame details of the above Frame are given in the following table:

Object Type	Object Name	Description
Frame	FrmSalary	The main Frame object

Text Field	TxtEmpCode	To enter code of the employee
	TxtName	To enter name of the Employee
	TxtIncome	To enter Taxable Income of the Employee
	TxtTax	To display Income Tax
	TxtEDTax	To display Education Tax
	TxtSurcharge	To display Surcharge
	TxtIncomeTax	To display total tax to be paid by the employee
Command Buttons	CmdCalculate	To calculate Income Tax, Education Tax, Surcharge and Total Tax
	CmdClaer	To clear all the values in the Text Fieldes
	CmdExit	To close the application.

Write the code to implement the following:

**(i)** **1**  
 When the Frame loads Text Fieldes for Income Tax, Education Tax, Surcharge and Total Tax Amount should be disabled. They should also be enabled when Calculate command button is clicked.

**(ii)** **1**  
 When the user clicks the clear command button, the Text Fieldes EmpCode and EmpName should be set to blank and other TextFields should be set to zero.

**(iii)** **3**  
 When calculate command button is clicked, Income Tax, Education Tax, Surcharge and Total Tax (sum of Income Tax, Education Tax and Surcharge) is displayed in their respective Text Fields based on the following criterion:

TAXABLE INCOME	INCOME TAX	EDUCATION TAX	SURCHARGE
Up to Rs. 1,00,000	Nil	Nil	Nil
Rs. 1,00,001 -Rs. 1,50,000	10% of the amount exceeding Rs. 1,00,000	2% of Taxable Income	Nil
Rs. 1,50,001 – Rs.2,50,000	Rs. 5000 + 20 % of the amount exceeding Rs. 150,000	2% of Taxable Income	Nil
Rs. 2,50,001 and above	Rs10000 + 30% of the amount exceeding Rs. 2,50,000	2% of Taxable Income	1% of the Taxable Income

**5.**  
**(a).** What is the difference between character data type & varchar data type in mysql **2**

**(b)** **1**  
 In a relation STORE contains 16 rows and 5 columns. What is the degree and cardinality of the table?

**(c)** **7**

Given the the following family relation family . Write SQL commands for Question(i) to (iv) and output for (v) to (vii).

No	Name	FemaleMembers	MaleMembers	Income	Occupation
1	Mishra	3	2	700	Service
2	Gupta	4	1	50000	Business
3	Khan	5	3	8000	Mixed
4	Chaddha	2	2	25000	Business
5	Yadav	7	2	20000	Mixed
6	Joshi	3	2	14000	Service
7	Maurya	6	3	5000	Farming
8	Rao	5	2	10000	Service

- (i) To select all information of family whose occupation is service.
- (ii) To list the names of family where female members are more than 3.
- (iii) To list all names of family with income in ascending order.
- (iv) To display name, malemembers and occupation of business family.
- (v) Select MIN(DISTINCT Income) from family
- (vi) Select SUM(Income) from family where Occupation ='Service';
- (vii) Select AVG(Income) from Family;

6.

(a) Write Mysql command to create the Table Worker with the given constraints.

2

Table: **WORKER**

Column Name	Data type	Size	Constraint
Ecode	Varchar	5	Primary Key , NOT NULL
Ename	Varchar	15	-
Desig	Varchar	10	-
DOB	Date	-	NOT NULL

(b) Consider the two tables given below

**ITEM**

Itemcode	Itemname	Price
111	Refrigerator	1500
222	TV	2500
333	Computer	3500
444	Refrigerator	1600

**BRAND**

Brandcode	Brandname
111	Godrej
222	BPL
333	HCL
444	BPL

Answer the following

(i) Write a query to display Itemcode,Itemname and brandname of Brandcode>222 2

(ii) Write a query to display the Itemname, Price and Brandname of Refrigerators 2

(iii) Write a query to display Itemname(s) of the brand BPL 2

(c)

(i) Which field can be used as the primary key in the above given ITEM table 1

(ii) Write a query to add a new column Serialnumber of Varchar with a size of 20 in the table BRAND 1

7.

(a) Define Front end 1

(b) Write about E - Governance, Give 2 E-Governance portals 2

(c) Mr. Rohit is working as a Manager in Nest systems .He wants to create a form with the following functions. Help him to choose suitable controls from Text Box, Label, Option button, Check Box, Combo Box, Command Button 2

Sno	Control Used To	Suitable Control
1	Enter the Name, Address, basic salary	
2	choose hobbies	
3	Select Nationality	
4	Choose gender	

*Prepared By:*

ARUN PRASANTH P V  
PGT Comp. Science  
K V KANJIKODE