**Half Yearly Examination -2019**

**Class – XII ( 065)**

**Time :** 3 Hrs **M.Marks**:70

**Note:**

1. All questions are compulsory
2. Question Paper is divided into 3 sections. Programming Language is Java.
3. Total Printed pages : 4

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| --- | --- | --- | --- |
| **Section-A** | | | |
| Q1 | A | Which of the following are open standards?  .OGG .DOC .BMP .ODF | 1 |
|  | B | Ms. Deeksha, a leading marketing professional working in a multinational company, is most of the time on move to cater her profession demands. Although she carries her laptop with her all the time but many a times she require to take some data from her office PC. She has to make several requesting phone calls to her colleague Mr. Rakesh to send her required documents from her office PC. Suggest her any one popular software name so that she can herself remotely access her office PC anytime from anywhere. | 1 |
|  | C | Write the URL of any two e-Governance website. | 1 |
|  | D | International Tour and Travels company has set up its new branch office in Jaipur where different buildings are spanned over in the radius of 900 meter in Jaipur. Name the network formed in the following situations :   1. The branch office is connected with the regional office in New Delhi. 2. All the buildings of branch office are connected to each other. | 1 |
|  | E | Ms Prachi Aggarwal is confused between the terms ASCII and Unicode. Help her by differentiating between ASCII and Unicode. | 2 |
|  | F | 1. Many of the programming brains has shifted their focus from Proprietary software to Free and Open software. Mention any two freedom offered by Free software. 2. Going with the flow, Sandhya has downloaded a software from the internet which can be freely distributed and used by anyone but the source code is not available. Is it Freeware or free software? Justify your answer as well. 3. Similarly Premjith wants to install a software on his system that can help him to create, edit and save office documents but he does not want to purchase the software. Suggest him a good software for the same. | 1+  2+  1=  4 |
| Q2 | A | Ruby, a class XI student has just started learning java programming. Help her in the following:   * 1. Explain her the concept of variable and data type by suitable example.   2. Help her in understanding the difference between assignment operator and comparison operator with the help of appropriate example. | 2+2 |
|  | b | Predict the output of the following code:  int n=4,f=0,i; for(i=1;i<=n;i++)  {  f=f\*i;  }  jTextField1.setText(""+f); jTextField2.setText(""+i); | 2 |
|  | C | Dev, a website designer with “Creative Designers Pvt. Ltd.” has written the following code. Observe the code given below and answer the following questions:  <company>  <employee eid=1>  <name>Albert</name>  <dept deptid=“d1”>Computer</dept>  </employee>  <employee eid=2>  <name>Manisha</name>  <dept deptid=“d2”>Accounts</dept>  </employee>  </company>   1. Are these tags part of HTML code or XML code? 2. Identify the root element. 3. Mention any two child elements. 4. Mention any two attributes | 4 |
| Q3 | A | What is the purpose of SQL? | 2 |
|  | B | Mr. Manav, a database administrator in “Global Educational and Training Institute” has created following table named “Training” for the upcoming training schedule  **Table :Training**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Tid** | **Name** | **Email** | **Topic** | **City** | **Fee** | | **101** | **Vivek singh** | [**vvksingh@gmail.com**](mailto:vvksingh@gmail.com) | **Cyber crime** | **Delhi** | **10000** | | **102** | **Vishakha** | [**vishakha@company.com**](mailto:vishakha@company.com) | **ICT in Educatin** | **Banglore** | **12000** | | **103** | **Udit soni** | [**udit@deans.com**](mailto:udit@deans.com) | **Cyber Law** | **Faridabad** | **14000** | | **104** | **Priyanska** | [**priya@company.com**](mailto:priya@company.com) | **NetBeans** | **Mumbai** | **12000** | | **105** | **Mohit Mourya** | [**mohit@company.com**](mailto:mohit@company.com) | **HTML** | **Delhi** | **NULL** |   Help him in writing SQL query for the following purpose   1. To count how many female candidates will be attending the training. 2. To display list of free trainings. 3. To display all the cities where Cyber Security training is scheduled along with its fee 4. Add a new column ‘**feedback**’ with some suitable data type and size. | 4 |
|  | c | Observe the table named “Training” given above carefully and predict the output of the following queries:   * 1. select city from training where topic = 'Cyber Crime';   2. select count(Tid) from training where email\_id like '%gmail% ';   3. select AVG (Fee) from training where Topic = 'Cyber Crime';   4. select name from training where INSTR (Email\_Id, '@’)=0; | 4 |
|  | D | What is the degree and cardinality of the above given table named ‘Training’. | 1 |
| Q4 | A | Mention any one advantage of jCheckBox control over jRadioButton control. | 1 |
|  | B | Prachi is working with following swing controls:  **jButton, jLabel, jTextField, jCheckBox.**  Suggest her any two basic methods commonly available with all the four controls mentioned above. | 1 |
|  | C | What will be an output of the following code if value of variable application is 1?  Switch (application) {  case 0 : jTextField1.setText("RDBMS");  case 1 : jTextField1.setText("BROWSER");  case 2 : jTextField1.setText("OS"); break;  case 3 : jTextField1.setText("PHOTO EDITOR"); break;  default : jTextField1.setText("Application Software"); break; } | 1 |
|  | D | Observe the given code:  int ctr=10; while(ctr>5)  {  ctr=ctr-2;  }  Attempt the following questions based on the above given code:   * 1. How many times the above given loop will run and what will be the value of ctr, immediately after exiting from the loop.   2. Out of entry controlled or exit controlled loop, above given loop will come under which category and why? | 2+2 |
|  | E | How jLabel is different from jTextField control at run time? | 2 |
|  | F | Capture.PNGMs Srishti a programmer in New Era Programming World has designed a computer program in Netbeans to collect the bills in a food court. She prepared the following  Write code in Netbeans to perform the following   1. Calculate CST and Payable amount for the selected food Items on the click Event of ‘**Calculate Bill**”. Where GST is 10% on the selected Items and Payable amount = Amount + GST. Also display these two amounts in JtextField3 and jTextField4. 2. Clear All te text Fields on the click event of **Clear Text** Button 3. Close This application on the click event of **Close App**. | 6 |
| Q5 | A | Write any one similarity and one difference between primary key and unique Constraint | 2 |
|  | B | Ms. Isha, a beginner in SQL is not able to understand the meaning of “Cancelling a  Transaction”. Help her in understanding the same. Also mention suitable command for it | 2 |
|  | C | Consider the following tables Library given below:   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | Bid | Name | Author | Price | Mem\_name | Issue\_date | Status | | B101 | Wings of fire | APJ Abdul Kalam | 550 | Suman | 20-10-2018 | Returned | | B102 | The monk who sold his ferari | Robin Sharma | 340 | Simmi | 30-03-2018 | Not returned | | B103 | You can wind | Shiv khera | 230 | Rajat | 26-05-2018 | Not returned | | B104 | Who moved my cheese | Spencer Johnson | 450 | Rakesh | 12-05-2019 | Not returned | |  |  |  |  |  |  |  |  1. Suggest the suitable data type for Issue\_Date column 2. Suggest the suitable SQL command to change the size of column name from 30 character to 50 characters. 3. Mention the significance of Bid column in table Library 4. Suggest the suitable command to display a list of the books in a sequence so that first all the book’s name should be displayed which has not been returned and after that all the book’s name which has been returned should be displayed. | 4 |
|  | d | Rishi, a class XII student has given following commands for the given purposes:   * 1. To add a new column “Rating” :   update table library add column rating varchar(20);   * 1. To give an increase of 150 Rs. to all the books:   alter library set price=price+150;  Check if above given SQL commands will be able to achieve desired task or not. Justify your answer. Suggest the correction (s) if required. | 2 |
| Q6 | A | Write SQL query to create a table “BOOKS” with the following structure  Table: Books   |  |  |  |  | | --- | --- | --- | --- | | Field name | Data type | Size | Constraints | | Book ID | Integer | 10 | Primary Key | | Book\_name | Varchar | 60 | Not Null | | Category | Varchar | 30 |  | | Issue\_date | date |  |  | | 2 |
|  | B | In a Bank’s database, there are two tables ‘Customer’ and ‘Transaction’ as shown below.  **Table : customer**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Acc No** | **Name** | **City** | **Phone** | **Balance** | | 213012023 | Rakesh kumar | GZB | 45345435345 | 120000 | | 456455655 | Udit soni | Delhi | 55656756767 | 450000 | | 21054605 | Mohit dubey | Faridabad | 56756757566 | 555004 | | 21302133 | Prachi | Delhi | 56464564565 | 600000 |   **Table : Transaction**   |  |  |  |  | | --- | --- | --- | --- | | **ID** | **Accno** | **Type** | **Amount** | | 001 | 213012023 | Credit | 45000 | | 002 | 456455655 | Debit | 45000 | | 003 | 21302133 | Credit | 450000 | | 004 | 21054605 | Credit | 1500 | | 005 | 456455655 | Debit | 4500 | | 006 | 21054605 | Credit | 15000 |   Consider these tables while attempting the questions given below:   1. Identify the candidate keys of Customer table. 2. Which column can be considered as foreign key column in Transaction table? | 2 |
|  | C | With reference to the above given tables, attempt the questions given below:   1. Write a query to display customer’s name who has withdrawn the money. 2. Write a query to display customer’s name who have not done any transaction yet. 3. Select Acc\_No, sum(Amount) from Customer c, Transaction t where c.Acc\_No=t.Acc\_No group by c.Acc\_No having Type="Credit"; |  |
| Q7 | A | It’s an era of online financial transactions. Help Julie in identifying any two challenges which a common man may face for the same. | 2 |
|  | B | Mention any one major environmental benefits of ICT to Ms. Megha so that she can utilize it in her future “Save Earth” campaign | 1 |
|  | C | Ms. Himani Mehra, works as a Programmer in a survey firm named “National Survey  Foundation”. In her current project, she is supposed to design a survey page for an online educational training program. Help her in choosing the most appropriate controls for the specified task from Textfield, Label, RadioButton, CheckBox, ListBox, ComboBox, Button and write in the third column:   |  |  |  | | --- | --- | --- | | S.no | Control used to input | Control Name | | 1 | Trainee name |  | | 2 | Training Location |  | | 3 | Grade the session  ( Excellent, good, Satishfactory, Unsatishfactory) |  | | 4 | Suggestion |  | |  |