# HIGHER SECONDARY PRACTICAL EXAMINATION MARCH 2020 <br> <br> COMPUTER APPLICATION COMMERCE 

 <br> <br> COMPUTER APPLICATION COMMERCE}

## HSE II

MAX MARK 40
TIME 3 HRS

## INSTRUCTIONS TO THE CANDIDATES

* Examination will be of 3 hours duration and maximum score will be 40 .
* Practical evaluation will be conducted in batches. The maximum number of students in each batch is limited to 15.
* Students must attend the PE with Practical Log Book. It shouldcontain a minimum of 25 programs covering the practical syllabus as described earlier. ( $10 \mathrm{C}++$ Programs, 10 Web application and 5 SQL )
* There should be a minimum of 16 question papers for each batch of 15 students. Each Question paper should contain a question from Part A ( C++ programs) and another Question from Part B (Web application) or C (SQL).
* Once the learner is assigned the questions, he/she should write the source code/procedure/statements for any one of the questions and submit it to the examiner with in one hour. The examiner checks the correctness of the logic or procedure and allows doing it on the computer if found correct. If the logic or procedure is approximately $70 \%$ correct, some clues or hints may be given and the student is allowed to try on the computer.
* The answers to be submitted to the external examiner for verification. These programs should be developed in computer after the consent of the examiner and output is shown to the examiner.
- Viva voice will be conducted based on the given practical questions
* The output obtained by the students are verified and marked in the external examiners diary and in the answer booklet by the external examiner.
* Four marks are deducted for each change of questions. Maximum two changes are allowed.
* The score distribution will be as follows

|  |  | PART A $(C++)$ | PART B (WEB APPLICATION AND SQL) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | CORRECT PROGRAM CODE | 8 | 8 |  |  |
| 2. | EXECUTION | 4 | 4 |  |  |
| 3. | CORRECT OUTPUT | 4 | 4 |  |  |
| 4. | VIVA | 2 | 2 |  |  |
| 5. | RECORD |  |  |  |  |
| 6. | TOTAL |  | 4 |  |  |

## PART A PROGRAMMING IN C++

1. Input a number and check whether it is positive, negative or zero.
2. Input three numbers and find the largest.
3. Input three numbers and find the smallest.
4. Input a digit and display the corresponding word using switch.
5. Find the sum of the digits of an integer number.
6. Display the multiplication table of a number having 12 rows.
7. Find the sum of the squares of the first N natural numbers without using any formula.
8. Find the length of a string without using strlen() function.
9. Input the heights of 10 students and find the average height.
10. Find the factorial of a number.
11. Input the principal amount, type of account ( $C$ for current $a / c$ or $S$ for $S B a / c$ ) and number of years, and display the amount of interest. Rate of interest for current $\mathrm{a} / \mathrm{c}$ is $8.5 \%$ and that of $\mathrm{SB} \mathrm{a} / \mathrm{c}$ is $6.5 \%$.
12. Assume that January 1 is Monday. Write a program using switch to display the name of the day when we input a day number in that month.
13. Input a number and check whether it is palindrome or not.
14. Write a C++ program to display the following patters:

* 
*     * 
*     *         * 
*     *         *             * 

14. Input a number and check whether it is prime or not.
15. Create an array of N numbers and count the number of even numbers and odd numbers in the array.

Find the area of a rectangle, a circle and a triangle. Use switch statement for selecting an option from a menu.
16. Display the first $N$ terms of Fibonacci series.
17. Input two years (e.g. 1000,2000 ) and display all leap years in between them.
18. Input the amount of sales for 12 months of à medical representative and find the average sales value without using an array.
19. Program to print the binary equivalent of decimal number
20. Program to check whether a given character is a vowel or not.

## Part B (HTML, JavaScript)

21. Prepare an HTML document to display the following table.

| State Bank of India | Interest Rates |  |  |
| :---: | :---: | :---: | :---: |
|  | Less Than $\text { Rs. } 50,000$ | Between Rs.50,000 \& Rs. 1 Lakh | Above Rs. 1 Lakh |
| Less Than 5 Years | 8 | 8.5 | 9 |
| Between 5 \& 10 years | 8.5 | 9 | 9.5 |
| Above 10 years | 9 | 9.5 | 10 |

22. Write
an HTML code to create two web pages one about your school and other about your class, create a link from the school web page to the class web page.
23. Create two web pages one about higher secondary courses offered in your school and other about the list of subjects covered for commerce batch,. Display these two web pages in one window by using frame tag.
24. Write an HTML code to create an attractive web page about India:(Use alignments, font color, background color etc.
25. Prepare a data entry form to accept your bio-data using HTML. Form should have appropriate controls to accept name, address, age, sex \& qualification.
26. write HTML code to create a simple web page as*shown bellow
27. Design a simple web page as shown below:


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28. Design a web page containing a table as shown below.

| Speed Limits in Kerala |  |  |  |
| :---: | :---: | :---: | :---: |
| Vehicles | Near School <br> (In Km/hour) | Within Corporation/ In other <br> roads <br> (In Km/hour) | Municipality <br> (In Km/hour) |
| Motor Cycle | 25 | 40 |  |
| Motor Car | 25 | 40 | 50 |
| Light motor vehicles | 25 | 40 | 70 |
| Heavy motor vehicles | 15 | 35 | 60 |

29. Design a web page for promoting vegetable cultivation at homes as shown in the figure. It should contain features like background color/ image, headings and stylish fonts, images, marquee, etc.
30. Design a web page as shown below using appropriate list tags.

List of Nobel Laureates from India

## Rabindra Nath Tagore

He was the first to get Nobel Prize from India. He received prize in literature in 1921. He got Nobel Prize for his collection of poems "Gitanjali".

## C V Raman

He.got Nobel for Physics in 1930. He received Nobel Prize for his contribution called Raman Effect.

## Mother Teresa

Mother Teresa who founded Missionaries of Charity which is active in more than 100 countries received Nobel Prize in 1979.

## Amartya Sen

Amartya Sen was awaf́ded Nobel Prize in 1998 in Économics. He has made contributions to welfare economics, social choice theory etc.

## Kailash Satyarthi

He is a child right activist who founded "Bachpan Bachao Andolan" in 1980. He shared Nobel prize for peace in 2014.
31. Design a web page that displays the share prices of various companies as given below.

National Stock Exchange - Market on $13^{\text {th }}$ June 2015

| Sector | Company | Price (Rs.) <br> IT |
| :--- | :--- | :--- |
| IT Infosys <br> Banking TCS |  |  |
|  | ICICI Bank | 2520.00 |
|  | Axis Bank | 296.15 |
|  | Sun Pharma | 551.90 |
|  | Aurobindo Pharma | 1279.00 |

32. Design a web page showing tourist destinations in Kerala as shown below:

## Department of Tourism <br> Government of Kerala <br> Tourist Destinations in Kerala

1. Beaches
a. Kovalam
b. Muzhuppilangad
c. Kappad
2. Hill Stations
i. Munnar
ii. Wayanad
iii. Gavi
3. Wildlife
a. Iravikulam
b. Muthanga
c. Kadalundi
4. Design three web pages - one containing a heading displaying your school name, named 'head.htm'; second web page containing the list of teachers, named 'teachers.htm'; and the third webpage about your school, named 'school.htm'. Create a frame dividing the browser window into two sections horizontally in the ratio 15:85. The top frame should display the web page 'head.htm'. The bottom frame has to be divided into 2 frames vertically in
the ratio $30: 70$. The left part should display the web page 'teachers.htm' and the right part should display the web page 'school.htm'.
5. Develop a web page with two text boxes and a button labeled "Show". The user can enter a number in the first text box. On clicking the button, the second text box should display whether the number is even or odd. Write the required JavaScript.
6. Develop a web page with two text boxes and a button labeled "Show". The user can enter a number in the first text box. One clicking the button, the second text box should display the sum of all numbers up to the given number. Write the required JavaScript
7. A web page should contain one text box for entering a text. There should be two buttons labeled "To Upper Case" and "To Lower Case". On clicking each button, the content in the text box should be converted to upper case or lower case accordingly. Write the required JavaScript for these operations.
8. Develop a simple calculator using JavaScript. The web page should contain two text boxes rentering two numbers and another text box for displaying the answer. There should be four buttons to perform addition, subtraction, multiplication and division. On clicking a button, the corresponding result should be displayed in the answer box. Write the required JavaScript.
9. Develop a web page to find the capital of Indian States. The page should contain a dropdown list from which the user can select a state. On clicking the show button, the web page should display the capital of the state in another text box. Write the required JavaScript.
10. Develop a web page with two text boxes and a button labeled "Show". The user can enter a number in the first text box. One clicking the button, the second text box should display whether the number is prime or not. Write the required JavaScript

## Part-C SQL

40 Create a table Student with fields

| RollNo | Integer |
| :--- | :--- |
| Name | Character(25) |
| Sub1 | Integer |
| Sub2 | Integer |
| Sub3 | Integer |
| Total | Integer |

## Write SQL Queries to

i. Insert data in the fields RollNo, Name, Sub1, Sub2, Sub3. (At least 10 records)
ii. Update the field Total with the sum of Sub1, Sub2 and Sub3.
iii. Display highest marks in Sub2.
iv. Display the names in ascending order.
v. Display the name of the student with highest total.

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41. Create a table Student with fields

| RollNo | Integer |
| :--- | :--- |
| Name | Character(25) |
| Batch | Character(20) |
| Total | Integer |

Batch have values COMMERCE, SCIENCE and HUMANITIES.
Write SQL Queries to
a. Insert data in the fields RollNo, Name, Batch and Total. (At least 10 records)
b. Display a list of students having marks $>300$.
c. Display the number of students in each batch.
42. Create table Student with fields Rollno
integer
Primary Key
Name
Character(25)
Batch
Character(20)
Total
Integer
Batch have values COMMERCE, SCIENCE and HUMANITIES.
Write SQL Queries to
a. Insert data in the fields RollNo, Name, Batch and
b. Display the names of all the students in lum Total. (At least 10 records)
c. Display the highest mark in the dents in HUMANITIES batch.
d. Display the name table.
e. Display the details of studs in the descending order of total marks.
43. Create a table Employee with fields with RollNo from 2 to 5 .

EmpNo Integer

Primary key
Name
Character(25)
Designation
Character(20)
Department
Character(25)
BasicPay
DA
Number(8,2)
Number(8,2)
Total
Number(8,2)
Write SQL queries to
a. Insert data in the fields EmpNo, Name, Designation, Department and BasicPay. (at least 10 records)
b. Update DA in the table as $60 \%$ of BasicPay
c. Update Total as the sum of BasicPay and DA
d. Display the EmpNo, Name of the èmployee with minimum gross.
e. Display the details of the employee with maximum gross.
44. Create a table Employee with fields

| EmpNo | Integer |
| :--- | :--- |
| Name | Primary key |
| Designation | Character(25) |
| Department | Character(20) |
| BasicPay | Number(8,2) |
| DA | Number(8,2) |
| Total | Number(8,2) |

Write SQL queries to
a. Insert data in the fields EmpNo, Name, Designation, Department and BasicPay, DA and Total. (at least 10 records)
b. Update gross as the sum of BasicPay and DA.
c. Display the Department wise listing of all employees in ascending order of name.
d. Display the total salary paid to salesmen
e. Display the details of the employees arranged in the descending order of Gross salary.
45. Create a table Employee with fields

| EmpNo | Integer |
| :--- | :---: |
| Name | Character(25) |
| Desighatiọn | Character(20) |
| Department | Character(25) |
| BasicPay | Number(8,2) |
| DA | Number(8,2) |
| Total | . Number(8,2) |

Write SQL queries to
a. Insert data in the fields EmpNo, Name, Designation, Department and BasicPay, DA and Total. (at least 10 records)
b. Update Gross as the sum of BasicPay and DA.
c. Display total salary paid in each Department.
d. Display average salary of Managers
e. Display the details of the-employees with maximum salary.
46. Create a table deposit with fields

| AccNo | Integer |
| :--- | :--- |
| Name | Character(25) |
| Branch | Character $(20)$ |
| Amount | Number $(8,2)$ Not Null |

Branches can be CALICUT, COCHIN or TRICHUR.
Write SQL queries to
a. Insert data in all fields (At least 10 records)
b. Display the total deposit in each branch
c. Display the accounts branch wise in ascending order of AccNo.
d. Display the details of deposit with maximum amount.
e. Display the AccNo and Name of deposits in the branch TRICHUR.
47. Create a table Customer with fields

| AccNo | Integer | Primary key |
| :--- | :--- | :--- |
| Name | Character(25) |  |
| Branch | Character(20) |  |
| Amount | Number(8,2) | Not Null |

Branches can be CALICUT, COCHIN or TRICHUR.
Write SQL Queries to

1) Insert data in all the fields. (At least 10 records)
2) Display the AccNo and Name of Customers.
3) display the details of the customer who has deposited exactly. Rs. 10000 .
4) Display the Account no.s of account holders who have deposited more than Rs. 10000 and less than Rs. 30000.
5) Display the names and AccNo of depositors. in CALICUT branch who have more than Rs. 40000 as deposit.
48. Create a table Employee with fields.

| EmpNo | Integer | Primary key |
| :--- | :--- | :--- |
| Name | Character(25) |  |
| Designation | Character(20) |  |
| Department | Character(25) |  |
| BasicPay | Number $(8,2)$ |  |


| DA | Number $(8,2)$ |
| :--- | :--- |
| Total | Number $(8,2)$ |

Write SQL queries to
a. Insert data in all the fields. (At least 10 records)
b. Display the name of all the departments without repetition.
c. Update DA as $60 \%$ fo BasicPay.
d. Update Gross as the sum of BasicPay and DA.
e. Display the details of employees with gross between Rs. 5000 and Rs. 10000 .
49. Create a table Customer with fields

| AccNo | Integer | Primary key |
| :--- | :--- | :--- |
| Name | Character(25) |  |
| Branch | Character(20) |  |
| Amount | Number(8,2) Not Null |  |

Branches can be CALICUT, COCHIN or TRICHUR.

Write SQL Queries to
1). Insert data in all the fields. (At least 10 records)
2) Display the details of customers from AccNo 1 to 5 .
3) Display the list of customers with amount less than 100.
4) Display Name of customers with maximum Amount in each branch.
5) Display the details of Customers in a branch other than CALICUT.

