

**HIGHER SECONDARY PRACTICAL EXAMINATION –**  
**March 2019**  
**COMPUTER APPLICATION (Commerce)**

Max. Score :40

Time:3 Hrs

**INSTRUCTIONS**

- 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 should contain a minimum of 25 programs covering the practical syllabus as described earlier. Only one notebook is enough for the Practical
  - Log Book (no rough – fair separation). Practical Log Book should be certified at the end of Class XI as well as Class XII by the teacher-in-charge. The same should be verified and signed by the external examiner.
  - There will be three parts in the question paper. Part A contains questions from Programming in C++. Part B contains questions for web applications from the respective syllabus and Part C includes questions for database queries. A candidate has to attend two questions – one from Part A and the other from either Part B or C whichever is assigned.
  - One question paper will be selected by the student at random from a set of 16 Question papers. Appropriate strategy may be adopted by the examiner to ensure the fair conduct of examination.
  - 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. 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. If the logic (or procedure) is wrong, the examiner can give another problem from the same area with the same level. The student may be allowed to change the question within half an hour, if the question is found unanswerable. In such cases, score should be deducted appropriately.
  - The debugging skills are to be assessed and credit should be given.
  - The accuracy in the output is to be tested with proper sample data.
  - Teacher should ensure that the programs developed as part of lab work and by the previous candidates are deleted before the commencement of the examination.
  - The students are not allowed to use the help files of the software.
  - Write down the question and the required program/ code/ queries in the answer sheet within one hour.
  - The output obtained by the students are verified and should be marked in the external examiner's diary and in the answer booklet by the external examiner.
  - Four Marks are deducted for each change of questions (Maximum two changes are allowed)
  - Viva voce will be conducted on the basis of the given practical questions
- Score Distribution:

	PART A (C++)	PART B (HTML/ JAVA SCRIPT/ SQL)
CORRECT PROGRAM CODE	8	8
EXECUTION	4	4
OUTPUT	4	4
VIVA	2	2
RECORD		4
TOTAL		40

## 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 with the help of a user-defined function.
11. Input three numbers and find the difference between the smallest and the largest numbers.
12. Input the principal amount, type of account (C for current a/c or S for SB a/c) and number of years, and display the amount of interest. Rate of interest for current a/c is 8.5% and that of SB a/c is 6.5%.
13. Input a number and check whether it is palindrome or not.
14. Write a C++ program to display the following patters:  

```
1
1 2
1 2 3
1 2 3 4
```
15. Input a number and check whether it is prime or not.
16. Input three numbers and find the smallest and the second smallest.
17. Find the area of a rectangle, a circle and a triangle. Use switch statement for selecting an option from a menu.
18. Display the first N terms of Fibonacci series.
19. Input two years (e.g. 1000, 2000) and display all leap years in between them.
20. Input an integer number and display its binary equivalent.
21. Find simple interest and compound interest by accepting principle amount, time and rate of interest as arguments.
22. Program to find sum of even numbers up to 20.
23. Program to find the decimal equivalent of a Binary number.
24. Program to check whether a given character is a vowel or not.

## Part B HTML and JavaScript

1. Design a simple and attractive web page for Kerala Tourism. It should contain features like background colour/image, headings, text formatting and font tags, images, etc.
2. Design a webpage as shown below using appropriate list tags.

### Permanent members in UN Security Council

- Russia
  - China
  - USA
  - UK
  - France
3. Design a simple web page about your school. Create another web page named address.html containing the school address. Give links from school page to address.html.
  4. Design a personal web page for your friend. It should have a link to his e-mail address.
  5. 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 1913. 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 awarded Nobel Prize in 1998 in Economics. He has made contributions to welfare economics, social choice theory etc.

#### Kailash Swarthy

He is a child right activist who founded "Bachpan Bachao Andolan" in 1980. He shared Nobel prize for peace in 2014.

6. Design an HTML document to create a simple web page as shown below

### DEPARTMENT OF TOURISM KERALA STATE

#### Tourist Attractions in Kerala

##### A Thiruvananthapuram

1. Kovalam Beach
2. Padmanabha Temple.
3. Museum

##### B. Ernakulam

- a. Bolgatty Palace
- b. Vembanad Lake
- c. Cochin Shipyard

##### C. Kozhikode

- i. Beypore Port
- ii. Kappad Beach
- iii. Thusharagiri.

- Write an HTML document to prepare an application form to accept your Bio – Data ( Information such as Name, Date of Birth, Sex, Caste, educational qualifications, Hobbies, are to be entered)
- Design a web page containing frames that divide the screen vertically in the ratio 50:50 and display any simple web pages in the frames.
- Prepare an HTML document to create the following Table

**STRENGTH OF THE SCHOOL**

Batch	No of boys	No of girls	Total
Science	30	20	50
Commerce	32	18	50

- Design the following table using HTML

Class	Strength		
	Science	Commerce	Humanities
Plus One	49	55	51
Plus Two	50	52	56

- 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'.
- Design a web page for promoting vegetable cultivation at homes as . It should contain features like background colour/image, headings and stylish fonts, images, marquee, etc.
- A web page should contain one text box for entering a text. There should be two buttons labelled "Upper Case" and "To Lower Case". On clicking each button, tire content in the text box should be converted to upper case or lower case accordingly. Write the required JavaScript code for theseoperations
- Develop a web page with two text boxes and a button labelled "Show". The user can enter a numberin the first text box. One clicking the button, the second text box should 'display the day corresponding to the given number using switch statement in JavaScript, (1- Sunday, 2- Monday,...., 7 - Saturday)
- Develop a web page with two text boxes and a button labelled "Show". The user can enter a numberin the first text box. On clicking the button, the second text box should display whether the numberis even or odd, Write the required JavaScript code
- develop a web page with two text boxes and a button labelled "Show". The user can enter a numberin the first text box. One clicking the button, the second text box should display the sum of allnumbers up to the given number " Write the required JavaScript.
- Design a simple web page as shown below:

LOGIN	
ENTER USER NAME	<input type="text"/>
ENTER PASSWORD	<input type="password"/>
<input type="button" value="Submit"/>	<input type="button" value="Submit"/>

18. 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.
19. Develop a simple calculator using JavaScript. The web page should contain two text boxes of entering 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.

### SQL

1. Create a table Student with the following fields and insert at least 5 records into the table except for the column Total.
  - Roll\_Number Integer Primary key
  - Name Varchar (25)
  - Batch Varchar (15)
  - Mark1 Integer
  - Mark2 Integer
  - Mark3 Integer
  - Total Integer
  - a. Update the column Total with the sum of Mark1, Mark2 and Mark3.
  - b. List the details of students in Commerce batch.
  - c. Display the name and total marks of students who are failed (Total < 90).
  - d. Display the name and batch of those students who scored 90 or more in Mark1 and Mark2.
  - e. Delete the student who scored below 30 in Mark3.
2. Create a table Employee with the following fields and insert at least 5 records into the table except the column Gross\_pay and DA.
  - Emp\_code Integer Primary key
  - Emp\_name Varchar (20)
  - Designation Varchar (25)
  - Department Varchar (25)
  - Basic Decimal (10,2)
  - DA Decimal (10,2)
  - Gross\_pay Decimal (10,2)
  - a) Update DA with 75% of Basic.
  - b) Display the details of employees in Purchase, Sales and HR departments.
  - c) Update the Gross\_pay with the sum of Basic and DA.
  - d) Display the details of employee with gross pay below 10000.
  - e) Delete all the records from the table.
- 3 Create a table Stock, which stores daily sales of items in a shop, with the following fields and insert at least 5 records into the table.
  - Item\_code Integer Primary key
  - Item\_name Varchar (20)
  - Manufacturer\_Code Varchar (5)
  - Qty Integer
  - Unit\_Price Decimal (10,2)
  - Exp\_Date Date
  - a. Display the details of items which expire on 31/3/2016.
  - b. Display the item names with stock zero.
  - c. Remove the items which expire on 31/12/2015.
  - d. Increase the unit price of all items by 10%.
  - e. List the items manufactured by "ABC & Co" with quantity above 100.

4. Create a table Book with the following fields and insert at least 5 records into the table.

Book\_ID Integer Primary key

Book\_Name Varchar (20)

Author\_Name Varchar (25)

Pub\_Name Varchar (25)

Price Decimal (10,2)

a. Display the details of books with price 100 or more.

b. Display the Name of all the books published by SCERT.

c. Increase the price of the books by 10% which are published by SCERT.

d. List the details of books with the title containing the word "Programming" at the end.

e. Remove all the books written by "Balaguruswamy".

5. Create a table Bank with the following fields and insert at least 5 records into the table.

Acc\_No Integer Primary key

Acc\_Name Varchar (20)

Branch\_Name Varchar (25)

Acc\_Type Varchar (10)

Amount Decimal (10,2)

a. Display the account details of "Savings Account" in Kodungallur branch.

b. Change the branch name "Trivandrum" to "Thiruvananthapuram".

c. Display the details of customers in Thiruvananthapuram, Ernakulam and Kozhikode.

d. List the details of customers in Thrissur branch having a minimum balance of Rs. 5000.

e. Delete all the current accounts in Mahe branch.

6. Create a table Student with the following fields and insert at least 5 records into the table except for the column Total.

Roll\_Number Integer Primary key

Name Varchar (25)

Batch Varchar (15)

Mark1 Integer

Mark2 Integer

Mark3 Integer

Total Integer

a. Update the column Total with the sum of Mark1, Mark2 and Mark3.

b. List the details of students in Science batch in the ascending order of their names.

c. Display the highest Total in Humanities batch.

d. Display Name and Total in descending order of the Total.

e. Delete the student who scored below 30 in Mark3

7. Create a table Employee with the following fields and insert at least 5 records into the table except the column Gross\_pay and DA.

Emp\_code Integer Primary key

Emp\_name Varchar (20)

Designation Varchar (25)

Department Varchar (25)

Basic Decimal (10,2)

DA Decimal (10,2)

Gross\_pay Decimal (10,2)

a. Update DA with 75% of Basic for Managers and 80% Basic for all other employees.

b. Update the Gross\_pay with the sum of Basic and DA

c. Display the details of employees in Purchase, Sales and HR departments in descending order of Gross pay.

d. Find the number of employees in Accounts department.

e. Delete the details of clerks whose Gross pay is below 5000.