SY-546

Reg. No. : .....

Name : .....

SECOND YEAR HIGHER SECONDARY EXAMINATION, MARCH – 2024

Part – III

Time : 2 Hours

COMPUTER APPLICATION (COMMERCE)

Cool-off time : 15 Minutes

Maximum : 60 Scores

General Instructions to Candidates :

- There is a 'Cool-off time' of 15 minutes in addition to the writing time.
- Use the 'Cool-off time' to get familiar with questions and to plan your answers.
- Read questions carefully before answering.
- Read the instructions carefully.
- Calculations, figures and graphs should be shown in the answer sheet itself.
- Malayalam version of the questions is also provided.
- Give equations wherever necessary.
- Electronic devices except non-programmable calculators are not allowed in the Examination Hall.

വിദ്യാർത്ഥികൾക്കുള്ള പൊതുനിർദ്ദേശങ്ങൾ :

- നിർദ്ദിഷ്ട സമയത്തിന് പുറമെ 15 മിനിറ്റ് 'കൂൾ ഓഫ് ടൈം' ഉണ്ടായിരിക്കും.
- 'കൂൾ ഓഫ് ടൈം' ചോദ്യങ്ങൾ പരിചയപ്പെടാനും ഉത്തരങ്ങൾ ആസൂത്രണം ചെയ്യാനും ഉപയോഗിക്കുക.
- ഉത്തരങ്ങൾ എഴുതുന്നതിന് മുമ്പ് ചോദ്യങ്ങൾ ശ്രദ്ധാപൂർവ്വം വായിക്കണം.
- നിർദ്ദേശങ്ങൾ മുഴുവനും ശ്രദ്ധാപൂർവ്വം വായിക്കണം.
- കണക്ക് കൂട്ടലുകൾ, ചിത്രങ്ങൾ, ഗ്രാഫുകൾ, എന്നിവ ഉത്തരപേപ്പറിൽ തന്നെ ഉണ്ടായിരിക്കണം.
- ചോദ്യങ്ങൾ മലയാളത്തിലും നല്കിയിട്ടുണ്ട്.
- ആവശ്യമുള്ള സ്ഥലത്ത് സമവാക്യങ്ങൾ കൊടുക്കണം.
- പ്രോഗ്രാമുകൾ ചെയ്യാനാകാത്ത കാൽക്കുലേറ്ററുകൾ ഒഴികെയുള്ള ഒരു ഇലക്ട്രോണിക് ഉപകരണവും പരീക്ഷാഹാളിൽ ഉപയോഗിക്കുവാൻ പാടില്ല.

Answer any 5 questions from 1 to 6. Each carries 1 score. **(5 × 1 = 5)**

1. The insertion operator in C++ is _____.
   (<, >, <<, >>)

2. The subscript of last element in the array A[10] is _____.

3. Which among the following is an empty tag ?
   (<B>, <H1>, <HR>, <FONT>)

4. _____ is a JavaScript function used to display a text in a webpage.

5. GRANT is a _____ command.
   (DDL, DML, DCL, None of these)

6. ERP stands for _____.

Answer any 9 questions from 7 to 18. Each carries 2 scores. **(9 × 2 = 18)**

7. Given
   int M[ ]={10,20,30,40};
   Write the output for the following C++ statements :
   (a) cout<<M[0]; **(1)**
   (b) cout<<M[1]+M[2]; **(1)**

8. (a) Expand DNS.
   (b) Write the port number of DNS.

9. Compare static and dynamic web pages.

10. Classify the following Scripting languages into client side and server side :
    JavaScript, PHP, ASP, VBScript

11. Write any four values of **type attribute** of the <INPUT> Tag in HTML.

12. Classify the following values in JavaScript into suitable data types :
    "Hello", false, 125.0, "True"

13. Compare shared hosting and dedicated hosting.

14. Write short note on Responsive web design.

15. List any four advantages of DBMS.

16. What is Data Independence ? Which are the two levels of Data Independence.

17. Differentiate the data type CHAR and VARCHAR in SQL.

18. Write short note on SMS.

Answer any 9 questions from 19 to 29. Each carries 3 scores. **(9 × 3 = 27)**

19. Explain any three jump statements in C++.

20. (a) Define an array. Give one example. (1)
    (b) Write declaration statement for an array "NAME" of size 25 to store the name of a student. (1)
    (c) Initialize an array "NAME" with value "Sachin". (1)

21. Compare the function calling methods Call by value and Call by reference in C++.

22. Explain any three string functions in C++.

23. Write HTML code to display the following using list :
    (1) CACHE (2) RAM (3) ROM

24. (a) Differentiate between <TD> and <TH>. (1½)
    (b) List any four attributes of <TD> and <TH>. (1½)

25. Write the built-in function used in JavaScript to do the following :
    (a) To find the character at a particular position. (1)
    (b) To check whether the data stored in a variable is a number or not. (1)
    (c) To convert the string "Covid" to "COVID". (1)

26. Explain any three aggregate functions in SQL.

27. Write SQL query for
    (a) Create a table **student** with the following fields :
    name char(20), rollno integer, mark integer (1)
    (b) Display name and rollno of all students (1)
    (c) Display name and rollno of students having mark greater than 600 (1)

28. Explain any three benefits of ERP.

29. Explain any three Industrial Property Rights.

Answer any 2 questions from 30 to 32. Each carries 5 scores. **(2 × 5 = 10)**

30. (a) Identify the four components of following for loop :

```
for(count=1; count<=n; count++)
{
sum=sum+count;
}
cout<<"sum=" <<sum;
```

(2)

(b) Rewrite the above code using while loop. (3)

31. (a) Explain any three text formatting Tags in HTML. (3)

(b) Write HTML code to display the following :

(i) H_2O (1)

(ii) $A^2+2AB+B^2$ (1)

32. Consider the following relations :

Football

Name	Age
Joseph	18
Anoop	17
Sachin	18

Cricket

Name	Age
Fatima	18
Anoop	17
Vivek	16

(a) What is the degree and cardinality of the relation Football ? (1)

(b) Find the result of the following relational algebraic operations :

(i) Football U Cricket (2)

(ii) Football – Cricket (2)