FIRST YEAR HIGHER SECONDARY SECOND TERMINAL
EXAMINATION, DECEMBER 2023
Part – III
COMPUTER APPLICATION (COMMERCE)
Maximum : 60 Scores

Time : 2 Hours
Cool-off Time : 15 Minutes

General Instructions to Candidates :

- *There is a 'Cool off time' of 15 minutes in addition to the writing time.*
- *Use '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 മിനിട്ട് 'കൂൾ ഓഫ് ടൈം' ഉണ്ടായിരിക്കും.
- കൂൾ ഓഫ് ടൈം ചോദ്യങ്ങൾ പരിചയപ്പെടാനും ഉത്തരങ്ങൾ ആസൂത്രണം ചെയ്യാനും ഉപയോഗിക്കുക.
- ഉത്തരങ്ങൾ എഴുതുന്നതിന് മുമ്പ് ചോദ്യങ്ങൾ ശ്രദ്ധാപൂർവ്വം വായിക്കണം.
- നിർദ്ദേശങ്ങൾ ശ്രദ്ധാപൂർവ്വം വായിക്കണം.
- കണക്ക് കൂട്ടലുകൾ, ചിത്രങ്ങൾ, ഗ്രാഫുകൾ, എന്നിവ ഉത്തരപേപ്പറിൽ തന്നെ ഉണ്ടായിരിക്കണം.
- ചോദ്യങ്ങൾ മലയാളത്തിലും നൽകിയിട്ടുണ്ട്.
- 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. Number of symbols used in a number system is called its _____

2. The fastest memory in a computer is _____

3. Pictorial representation of Algorithm is known as _____

4. Find valid identifier from the list.

   int, area, 9B, register no.

5. Name the ternary operator in C++.

6. If no match is found, the statements in _____ block is executed in Switch statement.

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

7. If $1110010_2 = A_8 = B_{16}$. Find A and B.

8. Write any two methods of representing characters in computer memory.

9. Classify the following into System software and Application software :
   GIMP, Windows, Unix, Openoffice Writer

10. List the names of any four input devices.

11. Which are the two approaches in problem solving ?

12. Distinguish between Literals and Keywords in C++.

13. What is IDE ? Give one example.

14. What is L-value and R-value of a variable ?

15. What is meant by Unary operator ? Give one example.

16. Predict the output of the following.

    int a=5, b;

    b=a++;

    cout<<a<<'\t';

    cout<<b;

17. What is the use of pre-processor directive statement ? Give one example for such statement.

18. Write the four parts of a loop.

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

19. Draw the functional units of a computer.

20. Compare RAM and ROM.

21. What is Operating System ? Mention its two functions.

22. Write short notes on :

   a) Coding (1)

   b) Translation (1)

   c) Debugging. (1)

23. What is token in C++ ? List any four tokens.

24. If x = 5 and y = 3 then write the output of the following operations : (3×1)

   a) −x   b) x/y   c) x%y

25. Explain cascading of input and output operators. Give one example for each.

26. Explain any three fundamental data types in C++.

27. Write a C++ program to find the area of a circle.

28. Read the following C++ code and answer the questions given below :

```
sum = 0 ;

for (i = 1; i < 5; i = i + 1)

{

sum = sum + i ;

}

cout << sum ;
```

   a) Predict the output.   (1)

   b) Rewrite the above code using while loop.   (2)

29. Compare if ... elseif ladder and switch statements in C++.

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

30. a) _____ is known as the brain of Computer.   (1)

   b) Write the names of any two image formats.   (1)

   c) List the stages of Data processing.   (3)

31. a) Write four methods of e-waste disposal.   (2)

   b) Expand the term USB.   (1)

   c) Group the following into Primary memory and Secondary memory :   (2)

   CD, Cache, RAM, Pendrive

32. a) Identify the type of errors in the following :   (1)

   i) instead of "+" operator, "/" operator is used.

   ii) rules of the programming language are not followed.

   b) Write algorithm to find the sum and average of three given numbers.   (4)

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