FIRST YEAR HIGHER SECONDARY SECOND TERMINAL EXAMINATION, DECEMBER 2025
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 set familier 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.

PART – I

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

1. The base of Hexadecimal number system is _____

2. Write an example of an operating system that is a free and open source software.

3. _____ are tokens that never change their values while execution takes place.

4. Which is the keyword used for empty data type ?

5. The starting symbol of a preprocessor directive statement is _____

6. If no match is found, the _____ block in switch statement is executed.
   a) case   b) else   c) default   d) break

PART – II

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

7. Convert $(A2D)_{16}$ into its octal equivalent.

8. Write a short note on Unicode.

9. Explain any two types of CPU Registers.

10. Match the following :
    1) MS Word   a) Operating System
    2) Compiler   b) Utility Program
    3) Antivirus software   c) Application Program
    4) Windows   d) Language Processor

11. Write an algorithm to find the sum of two numbers.

12. Classify the identifiers given below as valid and invalid :
    sum, if, _Num 1, Switch

13. If a = 5, b = 7 and c = 3, predict the output of the following expressions.
    a) a < c
    b) b % a

14. List out any 4 fundamental data types in C++.

15. Write four different C++ statements to add 1 to the value stored in the variable Num.

16. Which are the different type modifiers in C++ ?

17. Rewrite the following C++ code using if..else statement

large=(n1>n2)?n1:n2

18. Which are the two categories of loops in C++ ? Give example for each.

PART – III

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

19. If $(11011)_2 = (A)_8 = (B)_{16} = (C)_{10}$, find the value of A, B, C.

20. List and explain any 3 output devices with their use.

21. Explain different language processors.

22. Explain different types of programming errors.

23. Why documentation is needed ? Which are the different types of documentation ?

24. What are the advantages and limitations of flowcharts over algorithm ?

25. a) What do you mean by an identifier ?

    b) Explain identifier naming rules.

26. Briefly explain the important parts associated with a variable.

27. Classify the following operators into unary and binary and ternary.

    <, !, =, ?:, ++

28. a) What is type conversion ?

b) Which are different methods of type conversion ?

29. a) Give the output of the following C++ code :

```
for (i=10;i<15;i++)
{
cout<<i<<"\t";
}
```

b) Rewrite the above code using while loop.

PART – IV

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

30. a) Explain integer data representation methods with example. (3)

b) Write the full form of (2)

    i) ASCII

    ii) JPEG

31. a) What is E-Waste ? (1)

b) Which are the E-Waste disposal methods ? (2)

c) Explain approaches that you can adopt to promote Green Computing. (2)

32. Write a C++ program to input a day number from 1 to 7 and display the corresponding name of day using switch statement in C++ (For example: if input is 1, display Sunday).

(5)