


**FIRST YEAR HIGHER SECONDARY EXAMINATION, MARCH 2025**

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.

## PART - I

Answer any 5 questions from 1 to 6. Each carries 1 score.

(5 × 1 = 5)

1. The base of Octal number system is \_\_\_\_\_.
2. Which input device is used to value answer paper in Objective type examination ?
  - (i) MICR
  - (ii) Bar code Reader
  - (iii) OMR
  - (iv) Joystick
3. The program written by one person may need to be modified by some other person in future. Which phase of programming will be helpful for this ?
4. The name given to a memory location is known as \_\_\_\_\_.
5. Predict the output of the following C++ code segment, if the value of a = 10 :  
c=a++;  
cout<<c;
6. Who is known as the father of internet ?

## PART - II

Answer any 9 questions from 7 to 18. Each carries 2 score.

(9 × 2 = 18)

7. Convert the following numbers into binary number system :
  - (a)  $(175)_8$
  - (b)  $(6A)_{16}$
8. Write a short note on Unicode.
9. List out different E-waste disposal methods.
10. Write an algorithm to find the height of the taller one among two students.
11. Identify the type of error :
  - (a) Rules of the Programming language are not followed.
  - (b) Instead of '+' operator, '\*' operator is used.
12. What are the rules to name an identifier ?

(1)

(1)

13. Write the use of the following operators :  
(a) = (b) %
14. Evaluate the following expressions :  
(a)  $p - q * r / 2$ , given  $p=5, q=3, r=2$  (1)  
(b)  $x >= 10 \ \&\& \ y >= 3$ , given  $x=5, y=3$  (1)
15. Explain the two types of type conversions in C ++.
16. Rewrite the following code using if...else statement :  
`big = (n1 > n2) ? n1 : n2;`
17. Write each characteristic of any two unguided media.
18. Which are the different types of interactions in E-Governance ?

### PART – III

Answer any 9 questions from 19 to 29. Each carries 3 score.

(9 × 3 = 27)

19. Convert -38 to 2's complement method.
20. Differentiate between RAM and ROM.
21. (a) Define debugging. (1)  
(b) Which are the different types of errors ? (2)
22. Categorize the following into different type of tokens:  
123, "hello", int, sum, +, #
23. Describe the classification of operators based on number of operands with example.
24. Write a C++ program to find the average of 3 CE scores.
25. Differentiate between switch statement and else if ladder.
26. Expand the terms :  
(a) TCP/IP  
(b) HTTP  
(c) DNS

27. Write any three advantages of social media.
28. Answer the following in a word :
- (a) A stand alone malware program that replicates itself, usually makes the data traffic slow. (1)
  - (b) Technical effort to manipulate the normal behaviour of computers and associated networks. (1)
  - (c) Unsolicited e-mails sent indiscriminately. (1)
29. Describe any 3 E-Learning tools with their use ?

#### PART – IV

Answer any 2 questions from 30 to 32. Each carries 5 score.

(2 × 5 = 10)

30. (a) What is an operating system ? (1)
- (b) Write and explain the major functions of an operating system. (4)
31. Consider the following code segment :
- ```
int i=1;
while(i<5)
{
if(i%2==0)
    cout<<i<<"\n";
++i;
}
```
- (a) Predict the output. (1)
- (b) What will be the effect in output if first statement is changed to *int i=5;* (2)
- (c) Rewrite the above code using an exit controlled loop. (2)
32. (a) What do you mean by network topology ? (1)
- (b) Explain various network topologies. (4)