

(FOR THE CANDIDATES ADMITTED

SUBJECT CODE

23UPS6E19

DURING THE ACADEMIC YEAR 2023-24 ONLY)

REG.NO.:

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI

END-OF-SEMESTER EXAMINATIONS : MAY– 2026

B.Sc. – PHYSICS

MAXIMUM MARKS: 75

VI SEMESTER

TIME : 3 HOURS

PART – III

C PROGRAMMING AND INFORMATION SECURITY

SECTION – A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

(K1)

1. Which of the following is a valid C identifier?
a) 1sum b) total_sum c) float d) sum-total
2. Index of first element in an array is
a) 0 b) 1 c) -1 d) depends
3. A function calling itself is called
a) nesting b) recursion c) iteration d) looping
4. TCP/IP stands for
a) Transfer Control Internet Protocol
b) Transmission Control Protocol / Internet Protocol
c) Technical Control Internet Program
d) Transfer Communication IP
5. Authentication verifies
a) data b) identity c) access d) integrity

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. What is a keyword?
7. Define switch statement.
8. What is a pointer?
9. Define phishing.
10. Define steganography.

(CONTD 2)

SECTION – B

(5 X 5 = 25 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

(K3)

11. a) Explain different types of constants used in C.
(OR)
b) Discuss operator precedence and associativity with examples.
12. a) Explain if...else statement with example.
(OR)
b) Explain one-dimensional array declaration and initialization.
13. a) Explain functions with arguments and return values.
(OR)
b) Explain structure initialization with example.
14. a) Explain the basics of Internet and wireless networks.
(OR)
b) Write short note on dumpster diving.
15. a) Describe effective password management practices for secure systems.
(OR)
b) Explain user authentication mechanisms used in web applications.

SECTION – C

(5 X 8 = 40 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.

(K4 (Or) K5)

16. a) Describe the data types in C with suitable examples.
(OR)
b) Explain arithmetic and relational operators in C.
17. a) Explain for loop with example.
(OR)
b) Explain string declaration and double string handling functions in C..
18. a) Describe pointers and pointer operations.
(OR)
b) Explain the syntax of functions in C and classify it's types with examples.
19. a) Explain spoofing, identity, tampering and repudiation..
(OR)
b) Explain threats, vulnerabilities, and risks in information security.
20. a) Explain Cross-Site Scripting (XSS) and Cross-Site Request Forgery (CSRF) attacks.
Describe it's preventive measures.
(OR)
b) Explain computer forensics and its role in cybercrime investigation.