PSJA-4061

M.Sc. Computer Science (IVth Semester) Examination, June-2025

(B) INTRODUCTION TO CYBER SECURITY

Paper – FS-COMP-MSC-CS-EO-406(b)

Time : 3 Hours]

[*Maximum Marks : 40*

श्री जैन (पी. जी.) कॉलेज, बीकानेर

The question paper contains three Sections.

| **Section–A** | **(Marks : 1 × 10 = 10)** |

Note :– Attempt all *ten* questions (Answer limit **50** words). Each question carries **1** mark.

| **Section–B** | **(Marks : 3 × 5 = 15)** |

Note :– Answer any *five* questions by selecting at least *one* question from each Unit. (Answer limit **200** words). Each question carries **3** marks.

| **Section–C** | **(Marks : 5 × 3 = 15)** |

Note :– Answer any *three* questions by selecting *one* question from each Unit. (Answer limit **500** words). Each question carries **5** marks.

Section–A

1. (i)   Name any *two* search engines.

   (ii)   What do you mean by borderless world ?

   (iii) Which command is used to print working directory in Linux ?

   (iv)   Write one line of code in Python for the following :

$$a = 5^7$$

   (v)   Write the syntax to define a dictionary in Python.

   (vi)   Is Python case-sensitive language ?

   (vii) Are viruses and malwares same ?

   (viii) What do you know by hacking ?

   (ix)   What do you understand by stalking ?

   (x)   What is the meaning by trespassing ?

Section–B

Unit–I

2. Explain vulnerability assessment and penetration testing.

3. Describe professional ethics.

4. Explain any *two* digital payment modes.

Unit–II

5. Write a function to find out the cube of an integer.

6. Write a program in Python to print the sum of first 10 natural numbers.

7. Explain how do we create objects in Python ?

Unit–III

8. Explain the penalty for hacking with computer system.

9. Justify the need for cyber regulations in your words.

10. What are the main human rights impacted in context of cybercrime.

Section–C

Unit–I

11. Write short notes on each of following :

    (a) Auditing

    (b) Deep web

12. Write any *five* Linux Terminal commands and explain their usage.

Unit–II

13. Write a program in Python to explain the usage of lists and related operations.

14. Write a program in Python to explain the usage of dictionaries and related operations.

Unit–III

15. Explain Sec. 66 and 67 of IT Act, 2000 and penalties related to these sections, in case of violation.

16. Name any *two* key international organizations that work for International Co-operation in investigating cybercrimes. Explain the initiatives that are taken by them in order to control cybercrimes.