D 150317 **(Pages : 2)** **Name.....**

Reg. No.....

THIRD SEMESTER M.Sc. (CBCSS) [REGULAR/SUPPLEMENTARY] DEGREE EXAMINATION, NOVEMBER 2026

Forensic Science

FSC3C13—DIGITAL AND CYBER FORENSICS

(2019 Admission onwards)

Time : Three Hours Maximum : 30 Weightage

I. Answer any *four* of the following (Short Answer type questions) (Weightage-2) :

1 Name any *four* types of storage media.

2 What is a cryptographic hash in digital forensics ?

3 What is volatile data ?

4 Differentiate between DoS and DDoS attacks.

5 What is email spoofing ?

6 What is rooting in Android ?

7 Give the meaning of cloud forensics.

(4 × 2 = 8 weightage)

II. Answer any *four* of the following (Short Essay Type Questions) (Weightage-3) :

8 Differentiate between HDD and SSD from a digital-forensic perspective.

9 What is the purpose of hashing during digital evidence acquisition ?

10 Compare the OSI and TCP/IP models.

11 What is routing table poisoning ?

12 What is e-mail spoofing ?

Turn over

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13 Explain the difference between logical and physical acquisition of mobile-device data.

14 What are the forensic challenges associated with virtual machines ?

(4 × 3 = 12 weightage)

III. Answer any *two* of the following (Long essay type questions) (Weightage-5)

15 Describe the process of imaging and hashing a storage device for forensic examination.

16 What are DoS and DDoS attacks ? Explain their mechanisms, and forensic indicators that may help identify them.

17 Discuss the forensic analysis of an e-mail from header examination to sender tracking.

18 Narrate the forensic investigation of a smartphone, including preservation, acquisition and analysis.

(2 × 5 = 10 weightage)