

**B.Sc. (Part—III) Semester—VI Examination**  
**6S-FORENSIC SCIENCE**  
**(Digital and Cyber Forensics)**

Time : Three Hours]

[Maximum Marks : 80

**Note** :— (1) All questions are compulsory.

(2) Q. No. 1 carries 8 marks and remaining questions carry 12 marks each.

(3) Draw neat and well labelled diagrams wherever necessary.

1. (A) Fill in the blanks :

- (i) Google is an ..... ½
- (ii) Ubuntu is an ..... open source operating system. ½
- (iii) ..... is the part of computer that you can see and touch. ½
- (iv) Bluetooth is a ..... communication media. ½

(B) Choose correct alternative from the following :

- (i) DNS stands for : ½
  - (a) Domain Number System
  - (b) Decimal Number System
  - (c) Domain Name System
- (ii) ALU is a component of : ½
  - (a) Central Processing Unit
  - (b) Central Logic Gate
  - (c) Central Public Unit
- (iii) FTP stands for : ½
  - (a) File Tele Program
  - (b) Full Transfer Protocol
  - (c) File Transfer Protocol
- (iv) WWW stands for : ½
  - (a) World Whole Web
  - (b) Wide World Web
  - (c) World Wide Web

(C) Answer in one sentence :

- (i) What is digital signature ? 1
- (ii) What does Encrypton mean ? 1
- (iii) CIA stands for ? 1
- (iv) What is Gutslak meant by ? 1

- 2. (a) Describe operating system and its type in detail. 8
- (b) What is cyber crime and explain its four types. 4

**OR**

- 3. (p) Explain security model CIA triad in detail. 6
- (q) Differentiate between Digital and Physical evidences in detail with examples. 6

4. (a) Explain IR methodology in detail. 4  
(b) Describe Coroner's toolkit. 4  
(c) Explain how to investigate incident in detail. 4
- OR**
5. (p) Describe FTK in brief. 4  
(q) What is disk imaging ? Also explain how to make disk image ? 4  
(r) What is incident response and give steps to handle incident most effectively ? 4
6. (a) Describe evidence collection in brief. 4  
(b) Explain how to obtain bit stream backup of hard drive. 4  
(c) Give advantages and disadvantages of general biometric system. 4
- OR**
7. (p) What is file system ? Give its data structure. 4  
(q) Describe various types of biometric methods. 4  
(r) Explain in brief what makes biometric difficult. 4
8. (a) Give computer ethics and application programmes in data and evidence recovery. 6  
(b) Explain how to recover swap files and temporary files. 3  
(c) Describe formatted partition recovery. 3
- OR**
9. (p) Describe data recovery procedure. 4  
(q) Explain Encase Forensic Edition. 4  
(r) Describe document a 'chain of custody' in detail. 4
10. (a) Describe cryptographic applications. 4  
(b) Explain SSL-secure in detail. 4  
(c) Explain E-mail investigation in detail. 4
- OR**
11. (p) Explain the term Encryption and give its method. 4  
(q) Explain password cracking in detail. 4  
(r) Explain electronic transaction. 4
12. (a) Explain the concept of e-governance in detail and mention various stages of e-governance. 8  
(b) Give notable features of IT Act 2008. 4
- OR**
13. (p) Describe recognition and verification of digital signature and penalties under IT Act 2000. 6  
(q) Write in brief emerging trends in Information Technology Law. 6