

PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCE
B.Sc. Summer 2017-18 Examination

Semester: 2

Date: 11/05/2018

Subject Code: 11107153

Time: 10:30 am to 1:00 pm

Subject Name: Introduction to Digital & Cyber Forensic

Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1. A) Answer the following questions. (4x2) (Each of 04 marks) (08)

(a) Solve following using Banker's Algorithm.

	R1	R2	R3
P1	3	2	2
P2	6	1	3
P3	3	1	4
P4	4	2	2

Claim matrix C

	R1	R2	R3
P1	1	0	0
P2	6	1	2
P3	2	1	1
P4	0	0	2

Allocation matrix A

R1	R2	R3
9	3	6

Resource vector R

(b) Solve following Disk Scheduling Algorithm (FIFO & SSTF).

- Total 200 tracks on disk
 - Disk head located at track 100
- 55, 58, 39, 18, 90, 160, 150, 38, 184

Q.1. B) Answer the following questions. (Any two)

(a) Do as directed. (2x2) (Each of 02 marks) (04)

1. $(1101 - 1001) = \underline{\hspace{2cm}}$.
2. $(1111 * 11) = \underline{\hspace{2cm}}$.

(b) Explain NAND & NOR gates in detail. (04)

(c) What is ROM? Explain any two types of ROM. (04)

Q.2. A) Answer the following questions.

(a) Do as directed. (2x2) (Each of 02 marks) (04)

1. $(98)_{10} = (?)_2$
2. $(1011101)_2 = (?)_{10}$

(b) List & explain basic elements of computer. (04)

Q.2. B) Answer the following questions. (Any two)

(a) Do as directed. (Each of 01 marks) (03)

1. CD stands for _____.
2. Explain Associative Law in detail.
3. ISDN stands for _____.

(b) Explain POP in detail. (03)

(c) What is file? Explain different attributes of file. (03)

Q.3. A) Answer the following questions. (4x2) (Each of 04 marks) (08)

(a) Explain any two output devices in detail.

(b) What is threat? Explain any two threats.

Q.3. B) Answer the following questions (Any two)

(a) What is Topology? Explain BUS and STAR topology in detail. (04)

(b) List out and explain LAN & MAN in detail. (04)

(c) What is cyber-crime? Explain different types of cyber-crimes. (04)

Q.4. A) Answer the following questions.

(a) Do as directed. (2x2) (Each of 02 marks)

(04)

1. What is DNS?
2. What is NTFS?

(b) What is dead lock. Explain conditions of dead lock.

(04)

Q.4. B) Answer the following questions (Any two)

(a) Do as directed. (Each of 01 marks)

(03)

1. EU stands for _____.
2. What is RAM?
3. SMTP stands for _____.

(b) Explain CD ROM in detail.

(03)

(c) What is web browser? List out any six web browsers.

(03)