

R.N.G.PATEL INSTITUTE OF TECHNOLOGY-RNGPIT
(An Autonomous Institute U/s UGC Act 1956)

IMSc-IT SEMESTER- I, SEMESTER END EXAMINATION – SUMMER 2025

Subject Code: IBS103**Date: 06-06-2025****Subject Name: FUNDAMENTAL OF COMPUTER****Time: 11:00 AM to 01:30 PM****Total Marks:70****Instructions**

1. It is **compulsory** for students to write **Enrolment No. /Seat No.** on the question paper.
2. Write answers of **Section A** and **Section B** in **separate answer books**.
3. Attempt all questions from both **Section A** and **Section B**.
4. Each section carries **35 marks**, with a total of **70 marks** for the examination.
5. The figures to the right of each question indicate full marks, make suitable assumptions with justification.
6. BL - Bloom's Taxonomy Levels (R-Remember, U-Understanding, A –Application, N –Analyze, E – Evaluate, C -Create), CO - Course Outcomes.

SECTION A**Marks BL CO****Q.1 Multiple-Choice Questions****[05]**

(a) What type of computer is designed to serve multiple users and manage network resources?

1 U 1

(i) Tablet

(ii) Laptop

(iii) Server

(iv) Mobile

(b) Which of the following is an example of a port connector?

1 R 2

(i) USB

(ii) ROM

(iii) RAM

(iv) CPU

(c) What is the role of BIOS in a computer?

1 U 2

(i) Manage internet access

(ii) Save files to the cloud

(iii) Initiate hardware during the booting process

(iv) Display images on screen

(d) Which of the following is a key feature of Linux?

1 U 5

(i) Proprietary and paid

(ii) Open source and customizable

(iii) Requires high-end hardware

(iv) Only runs on Windows systems

(e) Which command displays a calendar?		1	U	5
(i) time		(ii) calendar		
(iii) date -cal		(iv) cal		
Q.2	Attempt Any Two	[10]		
(a)	Explain Advantages and Disadvantages of Computers.	5	U	1
(b)	Explain types of computers in detail.	5	R	1
(c)	Explain various hardware components of computers.	5	U	1
Q.3	Attempt Any Two	[10]		
(a)	Explain storage devices in detail.	5	R	2
(b)	Explain Register and RAM in detail.	5	U	2
(c)	Explain Block Diagram of Computer in detail.	5	U	2
Q.4	Attempt Any Two	[10]		
(a)	Explain the components of Linux.	5	R	5
(b)	Explain below given Linux command. cat, mkdir, wc, pwd	5	A	5
(c)	Explain below given Linux command. rmdir, ps, who, ls	5	A	5

SECTION B

Marks BL CO

Q.5 Multiple-Choice Questions

[05]

(a) Which of the following is not a positional number system?

1 R 3

- (i) Roman Number system (ii) Octal Number System
(iii) Binary Number System (iv) Hexadecimal Number System

(b) What is the binary equivalent of the decimal number 13?

1 A 3

- (i) 1010 (ii) 1010
(iii) 1110 (iv) 1101

(c) What is the full form of ASCII?

1 R 3

- (i) Asian Standard Code for Information Interchange
(ii) American Standard Code for Information Interchange
(iii) American Standard Code for Information Internet
(iv) Asian Standard Code for Internet Interchange

(d) What type of file system is NTFS?

1 U 4

- (i) Journaling file system (ii) Hierarchical file system
(iii) Basic file system (iv) Flash file System

(e) What is disk partitioning?

1 U 4

- (i) Increasing internet speed (ii) Dividing a disk into separate sections for data storage
(iii) Copying all data to USB (iv) Changing screen resolution

Q.6 Attempt Any Two

[10]

(a) Convert: $(274)_{10} = (?)_2$ and $(?)_8$

5 A 3

(b) Explain number system and its type in details.

5 U 3

(c) Write a short note on 4-bit BCD System.

5 U 3

Q.7 Attempt Any Two

[10]

(a) What is operating system? Explain objectives of operating system.

5 R 4

(b) Write a short note: Real time operating system and its types 5 R 4

(c) Differentiate between Single user and Multi user operating system. 5 A 4

Q.8 Attempt Any Two **[10]**

(a) What is file system? Explain its types. 5 R 4

(b) Write a short note on ASCII. 5 U 3

(c) What is Linux? Explain installation of Linux. 5 U 4
