

P.G.D.C.A Semester - 1 (CBCS) Examination
OCT/NOV-2025 (AS PER SYLLABUS YEAR JUNE-2018)
COMPUTER FUNDAMENTALS & EMERGING TECHNOLOGY(CORE)

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Que.1(A) Answer the following questions. (03)
- (1) What is data processing cycle?
 - (2) What is ROM?
 - (3) What is a motherboard?
- Que.1(B) Answer the following question. (Any Two) (06)
- (1) Explain the terms Data, Processing, and Information with an example.
 - (2) Differentiate between Analog and Digital computers.
 - (3) Explain three functions of an Arithmetic Logic Unit (ALU).
- Que.1(C) Answer the following question. (Any One) (05)
- (1) Explain the five generations of computers with features.
 - (2) Explain the data processing cycle with a flow diagram.
- Que.2(A) Answer the following questions. (03)
- (1) What is an input device?
 - (2) Give two examples of pointing devices.
 - (3) What is a joystick used for?
- Que.2(B) Answer the following question. (Any Two) (06)
- (1) Explain the difference between Input and Output devices with examples.
 - (2) Differentiate between OMR and MICR.
 - (3) Compare CRT and OLED Monitors.
- Que.2(C) Answer the following question. (Any One) (05)
- (1) Discuss the different types of monitors with advantages and disadvantages.
 - (2) Write a detailed note on Game input devices.
(Joystick, Trackball, Gamepad, VR devices).
- Que.3(A) Answer the following questions. (03)
- (1) What is a sector in magnetic storage?
 - (2) What is seek time?
 - (3) Give two examples of magnetic storage devices.
- Que.3(B) Answer the following question. (Any Two) (06)
- (1) Differentiate between tracks, sectors, and clusters in a hard disk.
 - (2) Explain seek time, rotational latency, and access time.
 - (3) Explain advantages of cloud storage.
- Que.3(C) Answer the following question. (Any One) (05)
- (1) Compare different storage devices: Hard Disk, USB Pen Drive, DVD, and Cloud Storage.
 - (2) Describe the process of reading and writing data on a magnetic disk.
- Que.4(A) Answer the following questions. (03)
- (1) How many bits make one byte?
 - (2) Write the base of the hexadecimal number system.
 - (3) Which translator converts assembly language to machine language?

- Que.4(B) Answer the following question. (Any Two) (06)
- (1) Differentiate between binary, octal, decimal, and hexadecimal number systems.
 - (2) Convert the binary number $(101101)_2$ to decimal.
 - (3) Explain any three types of operating systems with examples.
- Que.4(C) Answer the following question. (Any One) (05)
- (1) Explain different binary arithmetic operations with examples.
 - (2) Explain the role of translators: assembler, compiler, and interpreter.
- Que.5(A) Answer the following questions. (03)
- (1) What does GIS stand for?
 - (2) Expand VOLTE.
 - (3) What is a computer virus?
- Que.5(B) Answer the following question. (Any Two) (06)
- (1) Differentiate between GSM and VOLTE.
 - (2) Explain three types of computer viruses.
 - (3) Explain IaaS, PaaS, and SaaS in cloud computing.
- Que.5(C) Answer the following question. (Any One) (05)
- (1) Explain different communication devices with examples.
 - (2) Explain cloud computing with its architecture, characteristics, and service models.
