

B.C.A Semester - 1 (NEP-2020) Examination**OCT/NOV-2024****Computer Fundamentals & emerging technology (Multidisciplinary course)****Time: 2:00 Hours****Marks: 50****Instructions:**

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

-
- Que-1 Answer the following question. (any two) (10)
- (1) Draw Block diagram of computer and explain it in detail.
 - (2) Explain 4th Generation Computer.
 - (3) Differentiate between : RAM V/s. ROM
 - (4) Describe : Characteristics of Computer.
- Que-2 Answer the following question. (any two) (10)
- (1) List out input devices and explain any two of them.
 - (2) Differentiate between : Impact Printer & Non-Impact Printer.
 - (3) Write a short note on : Laser Printer.
 - (4) What is projector? Explain their types. Also write down their applications.
- Que-3 Answer the following question. (any two) (10)
- (1) What is Hard disk? How it works? Explain in details.
 - (2) Explain USB Pen drive.
 - (3) Write a short note : CD Optical disk and their mechanism.
 - (4) Explain shortly : Track, sector, seek time, rotational delay, transfer rate in Magnetic Storage Device.
- Que-4 Answer the following question. (any two) (10)
- (1) What is Operating System? Explain Online & Real Time operating system in detail.
 - (2) Explain : Assembler, Compiler and Interpreter.
 - (3) Explain : Machine Level Language, Assembly Level Language, High Level Language.
 - (4) Convert the following.
[a] $1010111_2 = \underline{\hspace{2cm}}_{10}$
[b] $43006_{10} = \underline{\hspace{2cm}}_8$
- Que-5 Answer the following question. (any two) (10)
- (1) Explain GIS and GPS.
 - (2) What is Computer Virus? Explain their types. How can we protect our computer from virus?
 - (3) Describe : Cloud Computing. Also explain their characteristic and service models. (IaaS, PaaS, SaaS).
 - (4) List out communication devices and explain one of them.
