First Year B.C.A (Sem. I) (CBCS) Examination
103 : Introduction to computer

Q.1 **Short Questions (2 marks)**
(1) Define term firmware.
(2) Define POST.
(3) What is the difference between 2nd and 3rd generation of computer?
(4) What is Software? List types of software.
(5) Define the term Volatile and Non-Volatile.
(6) What do you mean by 32-bit and 64-bit computer?
(7) What is use of EBCDIC?
(8) What is BIOS?
(9) What is Flash Memory?
(10) What is Serial port and Parallel port?
(11) What is EEPROM?
(12) What is Parity bit?
(13) What is access time?
(14) What is seek time?
(15) What is transfer rate?
(16) Define EDSAC, UNIVAC
(17) What is Latency?
(18) What is OCR?
(19) What is OMR?
(20) What is write protect notch?

Q.2 **Long questions** **(7 or 8 marks)**
(1) Draw a block diagram of computer and explain all its functional units.
(2) Explain in detail backup devices.
(3) Explain types of computers in details.
(4) Explain different characteristics of computer.
(5) Explain different phases of Machine cycle.
(6) Explain Motherboard in detail.
(7) Explain Cache memory in detail.
(8) Explain Monitor in Detail.
(9) Explain different types of PORTS in detail.
(10) Explain in detail generation of computer.
(11) What is impact printer? Explain any one impact printer in details.
(12) Explain scanner in detail.
(13) What are the different Non-Impact printers? Explain any 1 of them.
(14) What are the different Impact printers? Explain any 1 of them.
(15) What are the different types of scanners? explain any 1 of them detail.
(16) Explain the structure of magnetic disk in detail.
(17) Explain the storage structure of magnetic tape in detail.
(18) What are the types of hard disk? Explain each in detail.
(19) Explain classification of computer in brief.
(20) Explain any 2 addressing modes with necessary example.

Q.3   **Differences (3 to 4 marks)**
(1)   Cache Memory Vs Virtual Memory
(2)   Inkjet Printer Vs Laser Printer
(3)   Primary Storage Vs Secondary Storage
(4)   RAM Vs ROM
(5)   Inkjet Printer Vs Dot Matrix Printer
(6)   Desktop Computer Vs Laptop
(7)   CISC Vs RISC
(8)   DVD Vs CD

Q.4   **Short Notes**   **(5 marks)**
(1)   Write a short note on Plotters.
(2)   Write a short note on Hard disk
(3)   Write a short note on OCR and OMR.
(4)   Write a short note on CD-ROM
(5)   Write a short note on ROM in detail.
(6)   Write a short note on Floppy Disk.
(7)   Write a short note on Pen Drive
(8)   Write a short note of Virtual Memory.

Q.5   **Answer the Following. (4 marks each)**
(1) $(2AB)_{16} = (?)_2$
(2)   Add binary numbers $(100111)_2$ and $(11011)_2$ in both decimal and binary forms
(3) $(5050)_8 = (?)_{16}$
(4)   Find the complement of $(10101)_2$
(5) $(1715)_{10} = (?)_{12}$
(6) $(10111)_2 = (?)_8$
(7) $(5AC)_{16} = (?)_2$
(8)   Subtract : $(01110)_2$ from $(10101)_2$
(9)   Subtract $(56)_{10}$ from $(92)_{10}$ using complementary method.
(10) $(110111101001)_2 = (?)_8$
(11) $(576)_8 = (?)_2$
(12) $(1234)_9 = (?)_{10}$
(13) $(1670)_8 = (?)_{10}$
(14) $(11010011)_2 = (?)_{16}$