

- Part-B (Unit-I)** 10 each
2. Explain Fourth generation of computers in detail.
 3. Draw the block diagram of computer and explain the working of its each unit.

- Part-C (Unit-II)** 10 each
4. Discuss the organization of main memory and its types in detail.
 5. Explain the working of optical storage devices and solid state storage devices in detail.

- Part-D (Unit-III)** 10 each
6. List out any five input devices and discuss the working of any three of them.
 7. Discuss different types of printing devices and explain their working.

- Part-E (Unit-IV)** 10 each
8. Discuss Compiler, Assembler and Interpreter in detail. Also, explain why they are required ?
 9. Write short notes on the following :
 - (i) High level language
 - (ii) Assembly language
 - (iii) Machine language
 - (iv) Spreadsheet software

2½×4=10

C-586

(4)

Roll No.620115DD15.....

Total No. of Questions : 9]
(2021)

[Total No. of Printed Pages : 4

**BCA (CBCS) RUSA Ist Semester
Examination**

4039

**COMPUTER FUNDAMENTALS
BCA-0103**

Time : 3 Hours]

[Maximum Marks : 70

Note :- Attempt five questions in all, selecting one question each from Unit-I to Unit-IV. Part-A (Q. No. 1) is compulsory.

Part-A

(Compulsory Question)

1. (A) Attempt all parts. Answer the following MCQ's by selecting most appropriate option :
 - (i) One Nibble is equal to how many bits ?
 - (a) 2
 - (b) 4
 - (c) 8
 - (d) 1

C-586

(1)

Turn Over

(ii) Components that provide internal storage to CPU are :

- (a) Registers
- (b) Program Counters
- (c) Controllers
- (d) Internal Chips

(iii) A non-erasable disk that stores digitized audio information is :

- (a) CD
- (b) CD-ROM
- (c) DVD-R
- (d) DVD-RW

(iv) The functions of execution and sequencing are performed by using :

- (a) Input Signals
- (b) Output Signals
- (c) Control Signals
- (d) CPU

(v) Multiprogramming is mainly accomplished by :

- (a) Operating System
- (b) Software
- (c) Hardware
- (d) Program

Fill in the blank spaces :

(vi) unit act as the central nervous system of the computer.

(vii) allows single processor to run several concurrent threads.

(viii) MICR stands for

State whether the statement is True or False :

(ix) Micro-program consists of a set of microinstructions which are strings of 0's and 1's. (True/False)

(x) ALU is the place where the actual executions of instructions take place during the processing operation. (True/False)

(B) Answer the following in 25 to 50 words : 1×10=10

(i) Differentiate between Micro and Mini Computer.

(ii) What is Cache Memory ?

(iii) Discuss point and draw devices in brief.

(iv) What is File Allocation Table (FAT) ?

(v) Write a short note on 4GL. 4×5=20

C-586

(3)

Turn Over

Roll No.

Total No. of Questions : 9]
(1109)

[Total No. of Printed Pages : 4

**BCA UG (CBCS) RUSA Ist Semester
Examination**

3597

COMPUTER FUNDAMENTALS

BCA-0103

Time : 3 Hours]

[Maximum Marks : 70

Note :- Attempt *five* question in all, selecting *one* question each from Units-I to Unit-IV. Part-A (Q. No. 1) is compulsory.

Part-A

(Compulsory Question)

1. (A) Select the correct option for MCQ's : $10 \times 1 = 10$
 - (i) Microprocessors as switching devices are for which generation computers :
 - (a) First Generation
 - (b) Second Generation
 - (c) Third Generation
 - (d) Fourth Generation

C-737

(1)

Turn Over

- (ii) Which of the following produces the best quality graphics reproduction ?
- (a) Inkjet printer
 - (b) Laserjet printer
 - (c) Plotter
 - (d) Dot matrix printer
- (iii) The following are all application softwares, except :
- (a) MS Word
 - (b) MS Excel
 - (c) MS Windows
 - (d) MS Access
- (iv) 1 Gigabyte (GB) is equal to :
- (a) 1024 KB
 - (b) 1024 byte
 - (c) 1024 MB
 - (d) 1024 TB
- (v) ASCII stands for
- (vi) EBCDIC stands for
- (vii) The information stored in is erased when computer is turned off.

- (viii) The speed imbalance between the main memory and processor is avoided by using flash memory. (True/False)
- (ix) Image capturing devices are input devices. (True/False)
- (x) Primary memory is Volatile. (True/False)
- (II) Answer the following in 25 to 50 words :
- (i) Write a short note on evolution of computer.
 - (ii) What are sequential access storage devices ?
 - (iii) Discuss the various data scanning devices.
 - (iv) Differentiate between High Level Language and Machine Level Language.
 - (v) What is an Application Software ? Name any three. 4x5=20

Part-B (Unit-I)

2. (a) Draw the block diagram of computer and explain the function of its each Unit. 8,2
- (b) Give two limitations of computers. 5,5
- Or
- (a) What do you mean by Instruction Set ? Discuss.
- (b) Discuss types of processors used in Computer System.

C-737

(2)

C-737

(3)

Turn Over

Part-C (Unit-II)

4. (a) What is Primary Memory ? Why it is needed ?
(b) What do you mean by specification of a PC ? 5,5

Or

5. (a) Write a short note on Solid State Storage Devices.
(b) Discuss different types of optical disks. 4,6

Part-D (Unit-III)

6. (a) What are point and draw devices ? Explain their working.
(b) Differentiate between Laserjet and Inkjet printers. 6,4

Or

7. (a) What is difference between a mouse and track ball ?
(b) Explain OCR, OMR and MICR. 4,6

Part-E (Unit-IV)

8. (a) What is an Operating System ? What are its functions ?
(b) Differentiate between compiler and interpreter. 6,4

Or

9. (a) What is Disk Operating System ? What are its drawbacks ?
(b) Differentiate between file and directory structure. Discuss naming rules for directory. 5,5

C-737

(4)

Roll No. 62111.....

Total No. of Questions : 9]
(2111)

[Total No. of Printed Pages : 4

**BCA (CBCS) RUSA Ist Semester
Examination**

4510

COMPUTER FUNDAMENTALS

BCA-0103

Time : 3 Hours]

[Maximum Marks : 70

Note :- Attempt *five* questions in all, selecting *one* question each from Unit-I to Unit-IV. Part-A (Q. No. 1) is compulsory.

Part-A

(Compulsory Question)

1. (A) Attempt all parts. Answer the following MCQ's by selecting most appropriate option :
- (i) A process is a
 - (a) Single thread of execution
 - (b) Program in the execution
 - (c) Program in the memory
 - (d) Task

C-573

(1)

Turn Over

(ii) What is smallest unit of the information ?

- (a) A bit (b) A byte
(c) A block (d) A nibble

(iii) The extension of Notepad is

- (a) .txt (b) .xls
(c) .ppt (d) .bmp

(iv) Speed of computer is measured in

- (a) Nanoseconds (b) Kilo-seconds
(c) Gigahertz (d) Megabytes

(v) is also called auxiliary storage.

- (a) Secondary Memory
(b) Tertiary Memory
(c) Primary Memory
(d) Cache Memory

Fill in the blank spaces :

- (vi) Each personal computer has a that manages the computer's arithmetical, logical and control activities.
(vii) DDV stands for
(viii) is the fastest means of memory access for CPU.

C-573

(2)

State whether the statement is True or False :

(ix) Secondary storage virtually has an unlimited capacity because the cost per bit is very low. (True/False)

(x) Magnetic tape is a type of direct access device. (True/False)

(B) Answer the following in 25 to 50 words :
 $1 \times 10 = 10$

(i) What do you mean by Mainframe Computers ?

(ii) Write a short note on Instruction Set.

(iii) Differentiate between RISC and CISC Processors

(iv) What is Digitizer ? What are its advantages ?

(v) What is FAT32 ? $4 \times 5 = 20$

Part-B (Unit-1) 10 each

2. Explain the characteristics of Computers. Also discuss the capabilities and limitations of computers.

3. Discuss the block diagram of computer and explain the working of its each unit.

C-573

(3)

Turn Over

Part-C (Unit-II)

- ④ Discuss the different types of memory available in a computer system. 10
5. (a) Distinguish between Static RAM and Dynamic RAM.
- (b) What do you mean by Flash Memory ? What are its advantages ? 5,5

Part-D (Unit-III)

6. Explain various point and draw devices in detail. 10
- ⑦ Differentiate between :
- (i) OCR and OMR
- (ii) Soft Copy Output and Hard Copy Output
- (iii) Trackball and Mouse
- (iv) Inkjet and Laser Printers 2½×4=10

Part-E (Unit-IV)

8. (a) What is an Operating System ? Why is it necessary for a computer system ?
- (b) What is Utility Program ? Explain. 5,5
- ⑨ (a) Differentiate between Linux and Windows.
- (b) What are 4GL ? Discuss their merits and demerits. 5,5