



Name :

Roll No. :

Invigilator's Signature :

CS/BTTM/SEM-1/TTM-103/2010-11

2010-11

COMPUTER FUNDAMENTALS

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following : $10 \times 1 = 10$
 - i) Choose the odd one out :
 - a) Micro Computer
 - b) Mini Computer
 - c) Supercomputer
 - d) Digital Computer.
 - ii) With an Internet connection software enables a user to visit a website.
 - a) web browser
 - b) web explorer
 - c) web viewer
 - d) none of these.
 - iii) The computer that is not considered as a portable computer is
 - a) Laptop computer
 - b) Notebook computer
 - c) Mini computer
 - d) None of these.



- iv) The unit of speed used for supercomputer is
 - a) KFLOPS
 - b) MFLOPS
 - c) GFLOPS
 - d) None of these.

- v) The unit that performs the arithmetical and logical operations on the stored numbers is known as
 - a) ALU
 - b) CU
 - c) Memory unit
 - d) both (a) & (b).

- vi) A computer network which provides long distance transmission of data, images and sound over a large distance is
 - a) MAN
 - b) WAN
 - c) LAN
 - d) VAN.

- vii) The fastest memory in a computer system is
 - a) ROM
 - b) RAM
 - c) Cache
 - d) None of these.

- viii) Which one is not a pointing device ?
 - a) Scanner
 - b) Trackball
 - c) Light pen
 - d) Mouse.

- ix) With the combination of , and colours, other colours can be shown.
 - a) Red, Black, Blue
 - b) Yellow, Blue, Green
 - c) Red, Green, Blue
 - d) Black, White, Yellow.

- x) Select the smallest memory size :
 - a) Terabyte
 - b) Kilobyte
 - c) Gigabyte
 - d) Megabyte.



GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

2. Differentiate between impact and no-impact printers.
3. What are software and hardware ? Differentiate between system software and application software with example.
 $2 + 3$
4. Compare RISC and CISC architectures briefly.
5. What are the various types of memories available in the computer system ? Write the definition of RAM and ROM.
 $2 + 3$
6. Perform the following conversions : 5×1
 - a) $(111001101)_2$ to $()_{10}$
 - b) $(777)_{10}$ to $()_2$
 - c) $(11000110)_2$ to $()_{10}$
 - d) $(967.625)_{10}$ to $()_2$
 - e) $(10011100.101)_2$ to $()_{10}$.



GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7. Define Hardware. Describe booting process. Discuss the difference between GUI and CLI. Define operating system. What is the main function of Operating System ?
 $2 + 5 + 3 + 2 + 3$
8. What is Bridge ? What is the main function of a bridge ? Why are communication protocols needed in computer network ? What are modems ? What purpose do they serve in data communication systems ?
 $2 + 4 + 4 + 2 + 3$
9. What is computer program ? Define and distinguish between application software and system software. What is entertainment software ? Give few examples of such software. What is firmware ?
 $2 + 2 + 4 + 2 + 3 + 2$
10. Define Compiler, Interpreter and Assembler. Differentiate between Logical error and Syntax errors. What is object oriented programming ? Describe IF ... Then ... Else construct in programming statement.
 $6 + 2 + 2 + 2 + 3$
11. Write short notes on any *three* of the following : 3×5
- a) Operating system – DOS
 - b) Router
 - c) OSI layers
 - d) Output unit
 - e) CPU.