41(1) FNCO 1·1 (IT-01)

2016

(August)

PGDCA

(1st Semester)

Paper : IT-01

FUNDAMENTALS OF COMPUTER

Full Marks : 100

Time : Three hours

The figures in the margin indicate
full marks for the questions.

1. Choose the correct option among the following : 10×1=10

   (a) Assembly language is a :

   (i) First generation language

   (ii) Second generation language

   (iii) Third generation language

   (iv) None of the above

(b) Light pen is a/an :

    (i) input device

    (ii) output device

    (iii) storage device

    (iv) none of the above

(c) A motherboard is the main

    (i) Printed circuit board

    (ii) Personal circuit board

    (iii) Power circuit board

    (iv) Power computer board

(d) The ALU is responsible for :

    (i) Arithmetic & output operations

    (ii) Arithmetic & execution operations

    (iii) Arithmetic & memory operations

    (iv) Arithmetic & logic operations

(e) Input devices are used to transfer information into which unit of a computer :

(i) ALU

(ii) Control unit

(iii) Memory unit

(iv) CPU

(f) An optical drive is a type of storage medium that stores the content in :

(i) Coded form

(ii) Binary form

(iii) Alphanumeric form

(iv) Digital form

(g) The term 'software' was first used by :

(i) Charles Babbage

(ii) John. W. Tukey

(iii) Dr. John Atanasoff

(iv) Pascal

(h) Debugger is a/an :

    (i) System software

    (ii) Programming software

    (iii) Application software

    (iv) None of the above

(i) The full form of EDVAC is

    (i) Electric Discrete Value Automatic Computer

    (ii) Electronic Discrete Variable Automatic Computer

    (iii) Electronic Device Variable Automatic Computer

    (iv) None of the above.

(j) Secondary memory is also called

    (i) main memory

    (ii) auxiliary memory

    (iii) cache memory

    (iv) virtual memory

2. State True **or** False : 10×1=10

(a) Storing is the process of recording data and information so that it can be retrieved for use whenever required.

(b) The secondary memory of the computer system does not store all the instructions and data permanently.

(c) The most common fields found in the instructions are the operation code and the operands.

(d) The more the number of processors, the faster is the speed.

(e) Father of modern digital computer is Charles Babbage.

(f) Multithreading permits multiple programs to be run simultaneously.

(g) A procedure that permits running of processes that may not be entirely in memory is called a virtual memory.

(h) An optical disk is also known as diskette.

(i) Control unit performs arithmetic & logic functions.

(j) CPU is the brain of the computer.

3. Fill in the blanks : 10×1=10

   (a) The software which is used in solving problems which are non-algorithmic in nature is ——————.

   (b) —————— is a shared communication path consisting of one or more lines.

   (c) The main function of —————— is to simply load the program into the memory.

   (d) The speed at which the CPU performs it's basic operations is called ——————.

   (e) An —————— is the primary control program for managing all other programs in a computer.

   (f) Floppy disk is also known as ——————.

   (g) —————— helps in proper functioning of computer hardware.

   (h) The first sector of a partitioned storage device is ——————.

   (i) PILOT & SNOBOL are —————— generation languages.

(j) Primary storage memory of the computer communicates directly with the ————.

4. Match the following :   10×1=10

Column-A		Column-B	
(a)	Maurice Wilkies	(i)	optical drive
(b)	First generation computers	(ii)	input device
(c)	Plotter	(iii)	computer hardware
(d)	System Software	(iv)	non-volatile memory
(e)	Magnetic tape	(v)	EDSAC
(f)	Scanner	(vi)	virus
(g)	Brain	(vii)	ENIAC
(h)	ROM	(viii)	output device
(i)	RAM	(ix)	vacuum tubes
(j)	CD-ROM	(x)	storage device
		(xi)	volatile memory
		(xii)	cache memory
		(xiii)	system software
		(xiv)	antivirus software

5. Answer **any five** of the following questions :
                                    5×6=30

(a) What are the basic tasks of a computer ?

(b) What is software ? What is the need of software in a computer ?

(c) Mention the features of Linux Operating System.

(d) What is a programming language ? Differentiate between compiler and interpreter.

(e) What are the steps to be followed for controlling virus ?

(f) What is a motherboard ? State the functions of control unit.

(g) Describe the features of *any two* input devices.

(h) Distinguish between SRAM and DRAM.

6. Answer **any three** of the following questions :

$$10 \times 3 = 30$$

(a) Explain the features of different generations of computers.

(b) Describe ROM. What are the different types of ROM ? How does it differ from RAM ?

(c) What is auxiliary memory ? Explain the structure of magnetic disk.

(d) What is an Operating System ? Describe the different components of Operating System. Give *two* examples of Multiuser Operating System.