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41 (1) PGDCA 1-1 F COM (IT-01)

2019

(September)

PGDCA

(1st Semester)

FUNDAMENTALS OF COMPUTERS

Paper : IT-01

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: 1×10=10

(a) Microsoft Word is _____ software.

(i) an Application

(ii) an Open Source

(iii) a Free

(iv) not a

Contd.

- (b) Which is a system software ?
- (i) Power Point
 - (ii) Google Chrome
 - (iii) Notepad
 - (iv) OS
- (c) RAM is a
- (i) Primary memory
 - (ii) Secondary memory
 - (iii) Cache memory
 - (iv) All of the above
- (d) Data are lost automatically even though power is supplied to the computer from
- (i) SRAM
 - (ii) DRAM
 - (iii) ROM
 - (iv) PROM
- (e) MICR stands for
- (i) Magnetic ink character recognition
 - (ii) Magnetic input character recognition
 - (iii) Magnetic ink computer recognition
 - (iv) Magnetic input computer recognition

- (f) Which of the following register is used to store the address of the next instruction executed by ALU ?
- (i) Stack pointer
 - (ii) Program counter
 - (iii) Instruction register
 - (iv) Temporary register
- (g) Devices such as printers and scanners are installed on the computer using
- (i) System drivers
 - (ii) Software drivers
 - (iii) Device drivers
 - (iv) All of the above
- (h) Assembly language is translated into machine language by
- (i) Assembler
 - (ii) Compiler
 - (iii) Linker
 - (iv) Interpreter
- (i) Input devices are used to transfer information into which unit of a computer
- (i) ALU
 - (ii) Control unit
 - (iii) Memory unit
 - (iv) CPU

(j) Which of the following is a non-impact printer ?

(i) Drum Printer

(ii) Chain Printer

(iii) Inkjet Printer

(iv) Laser Printer

2. State **true** or **false** : 1×10=10

(a) Charles Babbage is known as father of modern digital computer.

(b) Third generation computers used vacuum tubes in their circuits.

(c) Scheduling is the process of arranging jobs to execute on the computer.

(d) Microsoft Office is an example of system software.

(e) Joystick is an input device.

(f) Compilers, interpreters, linkers and debuggers are programming software.

(g) Motherboard is a printed circuit board that gives the physical arrangement that integrates the basic circuitry and the functional components of the computer system.

- (h) Storing is the process of recording data and information so that it can be retrieved for use whenever required.
- (i) The secondary memory of the computer system does not store all the instructions and data permanently.
- (j) A parallel port transmits data one bit at a time.

3. Fill in the blanks : 1×10=10

- (a) _____ carries the control, timing and co-ordination signals to manage the various functions across the system.
- (b) The _____ register pair works as memory pointer.
- (c) _____ is known as brain of the computer.
- (d) A double-sided DVD consist of recording sides.
- (e) Firmware is loaded from _____, which is located within the device itself.
- (f) A user can interact with the computer system via _____ unit.
- (g) To read a bank cheque _____ is used.
- (h) The _____ tool allows to quickly delete temporary and cache files to free up space on the hard drive.

(i) Preemptive and _____ are the two types of multitasking.

(j) Memory management is a function of _____.

4. Match the following : 1×10=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 :

6×5=30

- (a) Explain the different types of software.
- (b) What are the advantages of a computer system ?
- (c) What is RAM? Distinguish between static and dynamic RAM.
- (d) What is disk defragmentation ?
- (e) What are the three key factors on which the memory hierarchy depends? Explain.
- (f) Write a short note on cache memory.
- (g) What is Direct Mapping? How does Set Associative Mapping overcome the drawback of Direct Mapping?
- (h) What is a bus? Explain the different types of bus.

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

10×3=30

- (a) What are the different types of personal computers? Elaborate on the types.
- (b) What is an operating system? What are the different functions of an operating system?

- (c) What is a motherboard? Explain the different components of a motherboard.
- (d) Explain the salient features of different generation of computers.
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