

Chapter # 1: ICT Fundamentals

Q.1: Fill in the blanks.

- i. Raw, unorganized facts and figures are called **Data**.
- ii. **Information** is the form of data that has been processed and organized.
- iii. A form of communication that is used to spread information on digital devices is called **Digital Media**.
- iv. **Elektro** was the first humanoid Robot built by Westinghouse in 1939.
- v. All the physical parts of a computer system are called **Hardware**.
- vi. The case that contains all the electronic components of a computer system is called **System Unit**.
- vii. **Input Devices** are used to enter data and instructions into the computer.
- viii. Devices that are used to show the results of data processing are called **Output Devices**.
- ix. First Generation computers were developed using **Vacuum Tube** technology.
- x. The devices which are used to exchange data are called **Communication Devices**.

Q.2: Match column-A with column-B and write the correct option i.e. (A, B, C....J) in column-C.

Column – A	Column – B	Column – C
1. Print Media	A. AI (Artificial Intelligence)	1. <u> C </u>
2. Digital Media	B. Input Device	2. <u> D </u>
3. 5 th Generation computer	C. Newspaper	3. <u> A </u>
4. Keyboard	D. Television	4. <u> B </u>
5. Biometric Device	E. Communication Device	5. <u> H </u>
6. Printer	F. Storage Device	6. <u> J </u>
7. DSL Modem	G. Temporary Memory	7. <u> E </u>
8. Memory Card	H. Fingerprints	8. <u> F </u>
9. RAM	I. 3 rd Generation Computer	9. <u> G </u>
10. IC (Integrated Circuit)	J. Output Device	10. <u> I </u>

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Short response questions:

Q.1. Define ICT.

Ans: Information and Communication Technology (ICT) is defined as, a “diverse set of technological tools and resources that are used to create, store, manage and communicate information.”

Q.2. Differentiate between Data and Information with example.

Ans: **Data:** Data consists of raw, unorganized facts and figures that need to be processed into information.
Example:

Roll No.	Name	English	Maths
2	Ali	70	65
1	Amir	80	85
3	Asif	75	70

Information: Information is the form of data that has been processed and organized and is used for decision making. Example: Data of Fig 1 is converted into information as shown in Fig 2.

Roll No.	Name	English	Maths	Total	%age
1	Amir	80	85	165	82.5
2	Ali	70	65	135	67.5
3	Asif	75	70	145	72.5

Q.3. Write down ICT applications in industries.

Ans: Different ICT devices are used in production and control in the industrial sector. One of the examples is robots which are widely used in manufacturing, assembling and packing, transport, earth and space exploration, surgery, research etc.

Q.4. Compare System software and Application software with example.

Ans: **Application Software:** Application Software help the user to perform specific task such as Word Processing software are used to prepare documents and Gaming software are used to entertain.

System software: System software controls and manages the computer hardware and enables the application software to run e.g. Operating System

Q. 5. Differentiate between Input and Output devices.

Ans: **Input Devices:** Input devices are used to enter data and instruction into the computer. For a example Keyboard, Mouse, Microphone etc.

Output Devices: Output devices are used to show the results of data processing. For a example Display screen, Printer, Speaker etc.

Exercise Q:8: Write functions of the following devices?

a) Printer:

It is used to get hard copy of the output like document or photo on paper.

b) Biometric Device:

It is used for verifying or recognizing the identity of living person with the help of fingerprints, facial image, iris (eye), voice recognition etc.

c) Digital Camera:

It is used to take photos or videos that can be stored in computer.

d) Smart Phones:

It is an ICT device that combines mobile telephone and computing functions offering internet access, storage capabilities, playing video games, camera features etc.

e) Speaker:

it is used to listen the audio or sound from computer video games or videos etc.

f) Router:

it is a network device that forwards data from one network to another and selects best route.