

SHIVALIK PUBLIC SCHOOL
Introduction to IT –ITeS Industry
Unit-1 Part- B

A. Give an example of the use of IT in the following areas. Avoid already discussed examples.

Teacher Practice

Example

Classroom content transaction:

Presentation of the topic taught, Videos from Youtube,

Assessment of students:

Assignments sent at home through internet to solve, online conduct of exam, Sending marks and messages to parents

Library management:

Easy & speedy access to information, Improves the quality of library service, Increases in the knowledge & experience

Student record management :

Result Analysis with previous marks, complete information of the student

B. Short answer questions (50 words)

1. What do you understand by the term IT and ITeS?

Ans: Information Technology (IT) means creating, managing, storing and exchanging information using all types of technology to deal with information.

ITeS: Information Technology that enables the business by improving the quality of service is Information Technology enabled Services (ITeS).

2. What are the pros and cons of using ICT?

Ans: Pros of Using ICT are:

1. Easy and quick communication
2. Anywhere anytime easy access to information
3. Improved housing and lifestyle
4. Increased the productivity and efficiency of every industry in the world.
5. Convenience in travelling and education
6. Encourages innovation and creativity
7. Creation of new jobs -ICT has created new and interesting jobs.

Cons of using technology are:

1. Privacy : Your information on phone or emails can be hacked,

2. Cybercrime: Crimes like cyber bullying, phishing, identity theft, cyberstalking etc.
3. Reliability of Information – Any information on internet is not reliable.
4. Computer viruses, worms, Trojans, malware, spam can cause chaos and disrupt our daily lives

3. What precautions are required to ensure that ICT use is safe?

Precautions required to use safe ICT are:

1. Install protective software : Install Antivirus which can help to reduce any damage to the data present in the computer and keep it updated.

2. Choose strong passwords:

Strong passwords use a combination of letters, numbers, and special characters.

3. Back up on a regular basis.

Routine backups on Hard disks or online drives can protect you from the unexpected loss of data.

4. Control access to your machine.

Always logout from your id and donot leave your machine unattended with your id logged in.

5. Use email and the internet safely.

Ignore unwanted emails. Be cautious of attachments, links, and forms in emails that come from people you don't know.

6. Protect sensitive data.

Protect sensitive files using the encryption tools built into your operating system.

7. Make Online Purchases From Secure Sites

8. Be Careful What You Post: Don't put anything online that may hurt someone.

9. Be Careful Who You Meet Online: People you meet online are not always who they claim to be.

10. Be Careful What You Download

4. What are the four main sub-sectors in the IT-BPM industry?

Ans: Four main sub sectors are:

1. IT Services (ITS) sub-sector involves a range of engagement types that include consulting, systems integration, IT outsourcing/managed services/hosting services, training and support/maintenance.

2. Business Process Management (BPM) sub-sector deals with the management of one or more business processes by an external organization.

3. Software Products The IT Industry providing services in the area of software products – through any of the product lifecycles – is referred to as the Software Products (SPD) sub-sector.

4. Engineering Research and Development (ERD) services are those that increase or manage processes which are related to the creation of a product or service.

5. Give examples of use of IT in everyday life.

Ans: The use of IT in our daily life includes listening to music, watching movies, playing games, doing office work, chatting and sending messages, managing daily planner, reading books, paying utility bills, booking ticket to travel, bank operations, etc.

IT in daily life is also used in washing machines, microwave oven and many other products using which have embedded software.

We can store all the information about our important work, appointments schedules and list of contacts in a computer.

6. How is IT used in libraries?

Ans: Nowadays many libraries are computerised. Each book has a barcode associated with it. This makes it easier for the library to keep track of books and the availability of a specific book. Computer software is used to issue and return the book. Each book in the library has a magnetic strip attached to it that is deactivated before the book can be borrowed.

7. What are the various processes of education where IT is used?

Ans: The various processes of education are:

(a) ICT in the classroom : It is used through e-learning classrooms; smart-board presentations; videos; magazines, letters and documents; educational games; gathering educational information on the Internet.

(b) Education — anywhere anytime: Students can access information of their subject at anytime using internet with the help of variety of websites and mobile apps. For e.g www.epathshala.nic.in or mobile app.

A teacher or a trainer can be contacted via Internet to use WBT (Web-based Training).

(c) Teaching aids and media : ICT is used as a teaching aid in schools to

- use pictures, animations and audio-visuals to explain subjects that are difficult to explain.

- make the lessons interesting using presentations.

(d) Learning Management System (LMS) : A Learning Management System (LMS) is being used by many countries to manage school systems. It will help students to learn better and will enable the parents to monitor the progress of their children.

8. Which software are used in digital communication?

Ans.: We use computers for email, chatting, FTP, telnet and video conferencing which means Digital communication. The software used are Skype, Whatsapp, Gmail, Facebook, Instagram etc.

9. For what purpose is IT used in business?

Ans.: **a)** Computers are used in business organisations for payroll calculation, budgeting, sales analysis, financial forecasting, managing and maintaining stocks.

b) A lot of business transactions happen through Internet called e-commerce.

c) IT helps in marketing, customer visit, product browsing, tax and shopping, receipt and process order, Online banking, ticket booking etc.

10. Which are the prominent areas where IT is used in science and engineering?

Ans: Scientists and engineers use computers for

- performing complex scientific calculations. CAD or CAM applications are used for drawing, designing and for simulating and testing the designs.
- for storing large amount of data, performing complex calculations.
- Complex scientific applications like rocket launching, space exploration, etc.

11. List the various uses of IT in a banking system.

Ans: Every activity of a bank is now online, like:

- The customer's data and transactions are recorded by computers.
- Recurring deposits, Fixed deposits, money transfer from one account to another (NEFT, RTGS), online transactions are done using Internet.
- Capital market transactions, financial analysis and related services are available in online platforms.
- ATM is used for cash deposits and withdrawal.

12. Which are the different areas of healthcare where IT is used? And how?

Ans: ICT is used in the health sector in numerous ways.

Hospital Management System is used to maintain and manage patients' records. The computerized machines are used for ECG, EEG, Ultrasound and CT Scan.

The variety of measuring instruments and surgical equipment are used to monitor patients' conditions during complex surgery.

Expert system is used for diagnosis.

(a) Use of ICT in diagnosis and treatment of critical diseases.

Some of the machines used are:

(i) Computerised Axial Tomography Machine (CAT): Using this machine (3D) images of different parts of the body can be made.

(ii) MRI (Magnetic Resonance Imaging Machine): MRI machines are used to give the digital impression of internal organs of the body by using strong magnetic fields and radio waves.

(iii) Electrocardiogram (ECG) Machine: The ECG machine is used to monitor the heartbeat. It records the electrical impulses and shows it in the form of a graph.

(iv) Cardiac Screening Machine: This machine displays the physiology of the heart and it displays the movements inside the heart.

(v) EEG (Electro - encephalography) Machine: This machine is used to record the activities of the brain. The small electrical probes attached to the head receive the electrical impulses of the brain and display them on a computer screen.

(vi) Blood Sugar Testing Machine: This device analyses a sample of blood and determines the blood glucose level.

(vii) Blood Pressure Measuring Machine: This device is worn as a wrist band to measure the blood pressure of a person.

13. List any 5 websites of the Indian government which provide IT enabled services to the people.

Ans: Indian government websites are:

www.India.gov.in

www.ssc.nic.in

www.incometaxindia.gov.in

www.upsc.gov.in

www.indianrailways.gov.in

www.rbi.org.in

www.portindia.gov.in