

A. Multiple Choice Questions

- | | | | | |
|---------|---------|---------|--------|---------|
| 1. (a) | 2. (b) | 3. (c) | 4. (a) | 5. (b) |
| 6. (c) | 7. (b) | 8. (a) | 9. (c) | 10. (a) |
| 11. (b) | 12. (a) | 13. (b) | | |

B. Fill in the Blanks

- | | |
|---------------------------|-------------------|
| 1. Information Technology | 2. Instructions |
| 3. Software | 4. Streaming |
| 5. Shopping Cart | 6. Neural Network |
| 7. Animation | 8. MRI |
| 9. Swachh Bharat Mission | 10. Services |
| 11. MNC's | 12. Information |

C. State Whether the Statements Given Below are True or False

- | | | | | |
|-------|-------|-------|-------|-------|
| 1. T | 2. F | 3. T | 4. T | 5. F |
| 6. T | 7. F | 8. T | 9. T | 10. T |
| 11. T | 12. T | 13. F | 14. T | 15. T |

D. Differentiate between the following

1. **Software:** It is a set of instructions, organized for a common purpose that tells the hardware what to do and how to perform a particular job.

Hardware: All the physical and mechanical equipment attached together to make a computer system is called hardware. We can touch and feel the hardware.

2. **Blog:** It is a website which consists of posts (text, photos, links, etc.) in a journal format, usually listed in reverse chronological order.

Podcast: It is a popular way to distribute recorded audio or video on the web.

3. **ECG:** This machine is used to monitor heartbeat. When the heart pumps blood to different parts of the body,

some electrical impulses are produced. This machine records the electrical impulses and shows them in the form of a graph.

EEG: 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. This device can retrieve the data in both states whether a patient is awake or asleep.

4. **BPO:** It is an acronym for Business Process Outsourcing. This is a practice of contracting a particular work process to some external service provider. The services may include accounting, payroll, human resource, IT services, data recording, telemarketing, social media marketing, health care, web promotion and more.

BPM: Business Process Management is dedicated to analyzing, designing, implementing, and continuously improving organizational processes.

5. **MNC:** Multinational Corporation is an enterprise that has branches in several countries but is managed from one (home) country. It has its headquarters outside India but operates worldwide including India. They cater to both domestic and/or global clients.

ISPs: Indian Service Providers enterprises have their headquarters in India with offices in multiple locations worldwide. Some of these enterprises cater both global as well as domestic clients, while others serve only the Indian clients.

6. **ERP:** Enterprise Resource Planning allows information to flow across an organization for managing and coordinating the ongoing activities of the enterprise, including product planning, manufacturing and distribution, accounting and finance, sales, human resources, and customer support. Advantages of ERP include complete integration of information systems across departments, better project management, and improved customer services.

TPS: Transaction Processing System is an information system that captures and processes data from day-to-day business activities. Examples of transactions are deposits, payments, orders, and reservations.

When we use a debit or a credit card to purchase an item, we are interacting with a transaction processing system.

7. **DMS:** Document Management System allows storage and management of company's documents such as word processing documents, presentations, and spreadsheets. A central library stores all documents within a company or department.

CMS: Content Management System enables and manages the publishing, modification, organization, and access of various forms of documents and other files, including media and webpages, on a network or the web.

8. **MIS:** Management Information System is an information system that generates accurate, timely, and organized information, so that managers and other users can make decisions, solve problems, supervise activities, and track progress. These systems are often integrated with transaction processing systems and focus on creating information that managers and other users need to perform their job.

DSS: Decision Support System helps users analyze information and make decisions. Some decision support systems are company specific and designed solely for managers. Others are available to everyone on the web.

E. Short Answer Questions

1. Information Technology refers to anything related to computing technology, such as networking, hardware, software, the Internet, or the people who work with these technologies. IT is the use of computers and software to manage information.
2. Instructions specify what operations need to be performed on the data.

Example: Printers = 25

Monitors = 60

This is data. This data must be added to get total number of these output devices.

Total = Printers + Monitors

This is an instruction.

3. IT in healthcare is used to maintain and access patient records, manage health conditions, implant computerized devices, perform laser eye surgery and robot-assisted heart surgery.
4. IT in publishing is used to make books, magazines, newspapers, etc., more attractive by adding borders, inserting pictures, etc.
5. IT is used in transport to interact with a navigation system or GPS which uses satellite signals to determine a geographic location. IT helps aircrafts to control and land plan in foggy and stormy weather.
6. DigiLocker is used to store crucial documents in the cloud storage like voter ID card, PAN card, driving license, educational certificates, etc.
7. ITes are defined as the services that lead to improvement in the quality of services for an organization. ITes enables the creation of new services in diverse fields like finance, HR, administration, healthcare, telecommunication, manufacturing, etc.
8. Three career options available in IT are:
 - i. Technology Equipment
 - ii. Software and Apps
 - iii. Technology Service and Repair
9. BPO is an acronym for Business Process Outsourcing. This is a practice of contracting a particular work process to some external service provider. The services may include accounting, payroll, human resource, IT services, data recording, telemarketing, social media marketing, health care, web promotion and more.
10. Decision Support System helps users to analyze information and make decisions. Some decision support systems are company specific and designed solely for managers. Others are available to everyone on the web.
11. The role of a computer professional in management includes directing the planning, research, development, evaluation, and integration of technology.
12. The role of a computer professional in software development and research field includes analysing,

designing, developing, and implementing new information technology, as well as maintaining and improving existing systems.

13. The role of a computer professional in technical support services includes evaluating and integrating new technologies, administers the organization's data resources, and supports the centralized computer operating system and servers.
14. The role of a computer professional in marketing/strategy includes directing and implementing Internet and social media marketing, and managing customer relationships.
15. Technology certification is the process of verifying the technical knowledge of an individual who has demonstrated competence in a particular area.
16. IT is used in business for manufacturing, improving customer care, transportation, human resource management, business communication, improving services or products to gain competitive advantage, etc.

F. Long Answer Questions

1. Computer has become an integral part of our lives. We can say that computers have entered each and every walk of life, be it at home, at work or at school. Most of our daily activities either involve the use of computers or depend on the information derived from them. Computer are used in our life in different way.

Finance: Computers are widely used for economic activities. we can check our bank account, pay bills, transfer funds, evaluate financial plans, etc. At the grocery store, a computer tracks our purchases and calculates the amount of money we owe.

Education: Schools and colleges have computers for educational purposes. Students complete assignments and do research on computers, in computer labs.

Entertainment: Computers have also become a source of entertainment. we can play games, listen to music, watch videos or movies, edit a photograph and plan a vacation among other things.

Communication: Computers as a source of communication. we can transmit sounds, videos and graphics by communicating through computers.

2. IT helps in graphics for animation and for producing special effects in movies, videos, games, etc. All cartoons are a result of computer animation, also known as computer generated imagery (CGI).

Computers are also used to capture human motion and use that information to animate digital characters.

3. Merits of digital India are:
 - i. Transparency in transactions with no delay in the process
 - ii. No corruption, as records can be traced back
 - iii. Improved quality of service
 - iv. Convenient and easy
 - v. Less documentation

Demerits of digital India are:

- i. Hacking poses a threat to digital transactions
 - ii. Lack of affordable smartphones in rural areas
 - iii. Lack of digital literacy
 - iv. Privacy concern
4. Digital India is a campaign launched by the Government of India on July 1, 2015 in the presence of various top industrialists. It is an initiative that ensures the Government's services are made available to citizens electronically by improving online infrastructure, increasing Internet connectivity and by making the country digitally empowered. The three key vision areas of Digital India are:
 - i. To provide digital infrastructure throughout the country
 - ii. To provide good governance and facilitate online services
 - iii. To promote digital literacy and facilitate online submission of documents
5. ITes provide a variety of IT-intensive process and services. It includes BPO and KPO.

E-enabled services radically reduce costs and improve service standards. In short, Internet service provider aims to provide B2B (Business to Business)e-commerce solutions. ITeS offers different services integrated in a single delivery mechanism to end users. The services may include medical transcription, customer relationship management, data entry and data processing, software development, data warehousing, IT help desk services, enterprise resource planning and telecommunication services.

6. The IT and BPM (Business Process Management) industry is the largest contributor to the total exports of the country. It has also provided a wide range of economic and social benefits which includes creating employment, raising income level and promoting export. It has placed India on the world map with an image of technologically advanced and knowledge-based economy.

7. Structure of IT- BPM Industry are:

Multinational Corporation: It is an enterprise that has branches in several countries but is managed from one (home) country. It has its headquarters outside India but operates worldwide including India. They cater to both domestic and/or global clients.

Indian Service Providers: These enterprises have their headquarters in India with offices in multiple locations worldwide. Some of these enterprises cater both global as well as domestic clients, while others serve only the Indian clients.

Global In-house Centers: These enterprises only focus and cater to the needs of their parent company. GIC has an option to keep IT operations in-house and at the same time expand globally for innovation in a cost-effective manner.

8. The use of information system in an enterprise are given below:

Enterprise Resource Planning: It allows information to flow across an organization for managing and coordinating the ongoing activities of the enterprise.

It include complete integration of information systems across departments, better project management, and improved customerservices.

Document Management System: It allows storage and management of company's documents such as word processing documents, presentations, and spreadsheets.

Content Management System: It enables and manages the publishing, modification, organization, and access of various forms of documents and other files, including media and webpages, on a network or the web.

Transaction Processing System: It captures and processes data from day-to-day business activities. Examples of transactions are deposits, payments, orders, and reservations.

Management Information System: It generates accurate, timely, and organized information, so that managers and other users can make decisions, solve problems, supervise activities, and track progress.

Decision Support System: It helps users to analyze information and make decisions. Some decision support systems are company specific and designed solely for managers. Others are available to everyone on the web.

9. Today, educators and schools use technology to assist education. Technology is used for creation and transmission of information in various forms including still pictures, audio, video and animation to the learners. Learning becomes easy and accessible through IT. A lot of teaching resources are now available for teachers to teach in a better way.

There are many ways in which IT is used for education in the classroom, such as:

- i. e-learning
- ii. videos on experiments
- iii. printing of booklets, letters and documents
- iv. learning using the digital media

- v. smartboard presentations
- vi. creation of images and videos
- vii. educational games
- viii. gathering information from the Internet

G. Application Based Questions

1. Entertainment field
2. Multinational Corporation
3. Business Process Outsourcing

PMP

