Practice Exercise

? Multiple Choice Questions

Q1. ICT stands for:
  a. Information and Communication Technology
  b. Information and Communication Terminology
  c. Information and Common Technology
  d. Information to Communication Technology

Q2. ITeS stands for:
  a. Information Technology enabled Service
  b. Information Technology end Service
  c. Information Technology enabled Server
  d. None of the above

Q3. Computer takes data as ...., processes it and produces the results as ....
  a. output, input   b. input, output
  c. Both a. and b.   d. None of these

Q4. Raw facts and figures is called ....
  a. information   b. processed data
  c. data   d. None of these

Q5. Result of data processing is called ....
  a. data   b. raw data
  c. information   d. None of these

Q6. Which of the following are benefits of IT in business?
  a. IT helps in reaching more potential customers
  b. IT provides better service to customers
  c. Both a. and b.
  d. None of the above

Q7. ITeS is also called .... that cover the entire operations which exploit Information Technology for improving the efficiency of an organisation.
  a. web-enabled services   b. remote services
  c. both a. and b.   d. None of these

Q8. Information Technology that enables the business by improving the quality of service is ....
  a. IT   b. ICT
  c. ITeS   d. None of these

Q9. BPO stands for ....
  a. Business Process Out
  b. Busy Process Outsourcing
  c. Business Process Office
  d. Business Process Outsourcing

Q10. BPM stands for ....
  a. Business Process Manager
  b. Business Process Management
  c. Business Protocol Management
  d. None of the above

Q11. BPO Service Industry is doing exceptionally well in India because ....
  a. BPO service providers in India invest in hi-tech hardware and software.
  b. Government of India is encouraging the BPO Industry in India
  c. Both a. and b.
  d. None of the above

Q12. MNC stands for ....
  a. Multiple National Companies
  b. Multinational Companies
  c. Multinational Credit
  d. None of the above

Q13. IT is used in home to ....
  a. play games   b. surf the web
  c. e-mail   d. All of these

Q14. A PC should have .... to play CD.
  a. CD-ROM drive   b. Sound card
  c. Speakers   d. All of these

Q15. Example of products which have embedded software is/are ....
  a. washing Machine   b. microwave
  c. refrigerator   d. All of these

Q16. We can store .... in our computer.
  a. appointments schedules
  b. list of contacts
  c. important file
  d. All of the above

Q17. Barcode on a book makes it easier for the library ....
  a. to a keep track of books
  b. to check availability of a specific book
  c. Both a. and b.
  d. None of the above

Q18. E-learning and smart-board presentations are showing integration of ICT in ....
  a. library   b. office
  c. classroom   d. None of these

CamScanner

Q 19. LMS stands for ....
  a. Learning Mostly in School
  b. Learning Management System
  c. Life Management System
  d. None of the above

Q 20. Computers are used in business organisations for ....
  a. budgeting and sales analysis
  b. financial forecasting
  c. maintaining stocks
  d. All of the above

Q 21. Business transactions happen through Internet called ....
  a. E-Commerce
  b. E-Business
  c. E-Transaction
  d. None

Q 22. PIN (reference to Credit card) stands for ....
  a. Personal Income Number
  b. Private Identification Number
  c. Personal Identification Number
  d. None of the above

Q 23. Smart cards, such as credit cards and debit cards have a metallic strip which store user's ....
  a. PIN
  b. Account Number
  c. Both a. and b.
  d. None of these

Q 24. .... applications are used for drawing, designing and for simulating and testing the designs.
  a. CAD
  b. CAM
  c. Both a. and b.
  d. None of these

Q 25. CAD stands for ....
  a. Computer Aided Designer
  b. Calculate Aided Design
  c. Computer Aided Design
  d. None of the above

? Fill in the Blanks
Type Questions

Q 26. IT means creating, managing, stunning and exchanging ....

Q 27. ITeS is defined as .... of processes.

Q 28. .... is a method of subcontracting business operations to the third-party vendors.

Q 29. .... is called web-enabled services.

Q 30. The content developer writes .... for the websites.

Q 31. Access to IT tools helps to encourage .... and creativity and is a useful strategy to increase productivity and efficiency.

? Assertion and Reason
Type Questions

Directions (Q. Nos. 32-36): *In the questions given below, there are two statements marked as Assertion (A) and Reason (R). Read the statements and choose the correct option.*
  a. Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
  b. Both Assertion (A) and Reason (R) are true, but Reason (R) is not correct explanation of Assertion (A).
  c. Assertion (A) is true, but Reason (R) is false.
  d. Assertion (A) is false, but Reason (R) is true.

Q 32. Assertion (A): The blackboards are completely replaced by modern IWB boards that are used by the teachers to teach and explain the topics in an interesting manner.
Reason (R): Using information technology, teachers can download videos and other reference materials from the Internet and use these while teaching in order to explain the topics in a better manner.

Q 33. Assertion (A): The information available from corporate data enables managers and employees to make decisions quickly and accurately.
Reason (R): IT applications promote more efficient operations and improve the supply of information to decision-makers. Such systems help to gain a competitive advantage.

Q 34. Assertion (A): Automation is becoming more and more important in assembly-line industries where attention to detail, speed and efficiency are important.
Reason (R): Incorporating technology at the workplace helps the employees do less with more efforts. This saves both their time and energy which they can vest upon some other work.

Q 35. Assertion (A): Computerised libraries have books with barcode associated with it. This makes it difficult to keep a track of books and the availability of a specific book.
Reason (R): IT helps to increase the range of services offered and avoid repetition of efforts within a library.

Q 36. Assertion (A): Computers are used at homes for several purposes such as to do household accounts, play games, home tutoring, social media access, internet access, etc.
Reason (R): GIC cater to the needs of their parent company only and do not serve external clients. This helps to keep IT operations in-house and to take advantage of expanding globally.

Answers

1. (a)	2. (a)	3. (b)	4. (c)	5. (c)
6. (c)	7. (c)	8. (c)	9. (d)	10. (b)
11. (c)	12. (b)	13. (d)	14. (d)	15. (d)
16. (d)	17. (c)	18. (c)	19. (b)	20. (d)
21. (a)	22. (c)	23. (c)	24. (c)	25. (c)

26. information
27. outsourcing
28. BPO
29. ITeS
30. content
31. innovation

32. (a)	33. (b)	34. (c)	35. (d)	36. (b)

? Case Study Based
√ Questions

Case Study 1

Information technology in the modern world has evolved so much that you can enjoy it in all the places. Think about cars with satellite navigation built in, think about climate control and think about digital displays within your vehicle- these all have been possible by information technology. It has even changed the way we buy things. Long have the days gone that you needed a cash machine or ATM to withdraw cash and purchase everything with cash. Now, you can purchase using a PDQ machine/ Chip and Pin machine or credit card. It has definitely made our lives so much easier.

IT has introduced the internet system and turned a new era in the field of E-commerce. E-commerce is a system of buying and selling goods through online. With extremely busy lifestyles and a lack of time, E-commerce has changed the way we purchase things. It has changed so much that businesses are forever investing in online strategies from online shops to Search Engine Optimisation and Search Engine Marketing strategies.

Q 1. Which of the following is not the factor for hiring BPO?
   a. Costly for client
   b. Growth of economy
   c. Reduce business risk
   d. Advanced proficiency

Q 2. Which of the following is the full form of IT?
   a. Information Technology
   b. Information and Technology
   c. Information and Teaching
   d. None of the above

Q 3. Who develops web pages and websites?
   a. Hardware engineer   b. Animator
   c. System analyst   d. Web developer

Q 4. Which of the following is not an example of IT in entertainment?
   a. Playing online games
   b. Watching videos
   c. Playing music
   d. Printing newspaper

Q 5. Which machine is used to record the activities of the brain?
   a. ECG   b. EEG
   c. MRI   d. CAT

Answers

1. (a)	2. (a)	3. (d)	4. (d)	5. (b)

Case Study 2

Information technology has entered and benefited all sectors of industry. IT professionals design, support and maintain computer hardware and software for various industrial and individual applications and are much sought after for their expertise and experience.

The National Association of Software and Service Companies has predicted a 12% increase in Indian software exports in 2015-16 to $112 billion. Probably, the only, or at least the biggest, hurdle in the country achieving this growth rate is the shortage of skilled and competent IT professionals.

Information technology careers are available in every sector of the economy. Careers in IT involve the design, development, support and management of hardware, software, multimedia and systems integration services. The information technology industry is a dynamic and entrepreneurial field that continues to have a revolutionary impact on the economy and on the world.

Q 1. Who are Software quality assurance engineer?
Q 2. Who are Hardware engineer?
Q 3. What is mean by the term CAE?
Q 4. Define CAM.
Q 5. Who is a software engineer?

Answers

1. A software quality assurance engineer is involved in tasks that include software design, writing source code, controlling of source code, reviewing code, configuration management, change management, program testing, integration of software and release management process.

2. A hardware engineer is the person who develops from the lowest levels of the circuit design to the large system design and see those systems all the way through to high-volume manufacturing.

3. Computer Aided Engineering (CAE) software even allows designers to specify the type of material to be used for different parts of a product.

4. Factories use computerised robotic arms to do physical work that is highly repetitive and unsafe. Automobile units use robots for doing tasks such as painting, welding, blending metal, etc. Manufacturing using computers and Robotics is known as Computer Aided Manufacturing (CAM).

5. A software engineer is a licensed professional engineer who is skilled in the application of engineering discipline for the creation of the software.

? Very Short Answer
Type Questions

Q 1. Define Information technology.

Ans. Information Technology (IT) refers to the development, maintenance and use of computer software, systems and networks. It includes their use for the processing and distribution of data.

Q 2. Write the use of information technology.

Ans. Information technology process information at high speed and are commonly used in automation, transaction processing, knowledge processes, decision making, problem solving, control systems, robotics, data analysis, information access and entertainment.

Q 3. What is mean by the term ITeS?

Ans. Information Technology enabled Service (ITeS) is defined as outsourcing of processes that can be enabled with information technology and covers diverse areas like finance, healthcare, HR, administration, manufacturing, telecommunication, etc. These services radically reduce costs and improve service standards.

Q 4. Write other names of ITeS.

Ans. ITeS are also called web-enabled services or remote services or tele-working services.

Q 5. Define BPO Service.

Ans. BPO Services Business Process Outsourcing (BPO) is a business practice in which one organisation hires another company to perform a task that the hiring organisation requires for its own business to successfully operate. It is a method of subcontracting various business-related operations to the third-party vendors.

Q 6. What is BPM?

Ans. Business Process Management (BPM) is a process in which people use various methods to analyse, measure, improve and optimise the process. The foremost aim of a BPM is to improve the corporate performance by managing the business processes.

Q 7. Define IT role in communication.

Ans. Due to advancement in technology, communication has become faster, easier and more efficient. IT plays a crucial role in this regard. Nowadays, computers are used for e-mail, chatting, FTP, telnet and video-conferencing.

Q 8. How the IT is helping the teacher?

Ans. Using information technology, teachers can download videos and other reference materials from the Internet and use these while teaching in order to explain the topics in a better manner.

Q 9. Define IT in Insurance.

Ans. IT has a huge impact on the insurance industry. It improves every aspect of the data management system and processes in insurance. Insurance companies keep all records up-to-date with the help of computer database.

Q 10. Discuss the role of IT in Healthcare and Medicine.

Ans. IT has led to the invention of wearable gadgets such as FITBITs that assist you in maintaining your fitness and health regime. IT enabled facilities have become indispensable in the field of healthcare and medicine. Nowadays, we can get our medical reports online, or even go for an online check-up and consultation.

Q 11. Discuss the role of IT in Animations and Films.

Ans. IT is widely used by films and animation industries for making animated films and for performing tasks, such as giving special effects, managing lights and controlling environment. A variety of different hardware and software platforms are available to help and assist people in making films and TV shows, cartoons, animated films, etc.

Q 12. Define Web Developers.

Ans. A web developer is someone who develops web pages and websites. A web developer is more focused on the way a website works than how it looks. They typically use HTML text editors and work with databases and programming languages as well as HTML.

? Short Answer
Type Questions

Q 1. What are the various career option provided by the ITeS?

Ans. Information Technology enabled Service (ITeS) provide a wide range of career options that include opportunities in call centers, medical billing and coding, medical transcription, IT help desk services, back office operations, revenue claims processing, data entry and processing, legal databases, content development, payrolls, logistics management, GIS (Geographical Information System), HR services, web services, etc.

Q 2. Write some of the main factors for hiring BPO.

Ans. Some of the main factors for hiring BPO are as follows:
- (i) Cost effective for client
- (ii) Growth of economy
- (iii) Reduce business risk
- (iv) Advanced proficiency
- (v) Employment expansion

Q 3. What are the services provided by the BPO services?

Ans. Some of the BPO services are as follows:
- (i) Financial and accounting services
- (ii) Taxation and insurance services
- (iii) E-publishing and web promotion
- (iv) Legal services and content writing
- (v) Multimedia and design services
- (vi) Document management services
- (vii) Software testing services
- (viii) Health care services

Q 4. How IT-BPM industry has been playing an important role in fueling India's growth?

Ans. The IT-BPM industry has been playing an important role in fueling India's growth. The growth of this industry has contributed a lot towards the country's Gross Domestic Product (GDP) and exports. Apart from this, the industry has provided India with a wide range of economic and social benefits such as creating employment, raising income levels and promoting exports. It has placed India on the world map with an image of a technologically advanced and knowledge-based economy. IT-BPM sector attracts amongst the largest investments by venture capitalists and has been credited with enabling many of the entrepreneurial ventures in the country. Over the last decade, the IT-BPM industry has almost doubled in terms of revenue and contribution to India's GDP.

Q 5. What are the reasons IT-BPM industry has grown well in India?

Ans. IT-BPM industry has grown well in India due to its following reasons:
- (i) In India, the BPO service providers invest in hi-tech hardware and software to deliver the best, error-free and exceptional services for which they follow quality checks.
- (ii) Government of India is also encouraging BPM industry in India by providing necessary infrastructure and logistical support.
- (iii) In India, the industry is highly developed and is capable of delivering the numerous services with exceptional quality.

Q 6. Define IT at Workplace

Ans. IT has changed the way people used to communicate in the modern workplace. In the office environment, the official works are performed more effectively. The constant flow of innovative technology has influenced much of the workflow in offices. Businesses are now relying more on technology than ever before to thrive in today's competitive market place. This has led to a shift in the prevailing work human nature.

Q 7. Describe the role of IT in business.

Ans. E-commerce and online business are very familiar terms, nowadays. This has become possible by incorporating IT into business. Many new startups and online shopping portals have gained a lot of benefits by setting up their businesses using the IT platform. IT has given benefits not only to the online or e-businesses, but overall business organisations are gaining a lot of benefits by accommodating IT into their businesses.

Q 8. Write some uses of IT in education.

Ans. Some uses of IT in education are as follows:
- (i) Use of IT enabled course materials, such as e-books and online training materials, enhances the process of learning.
- (ii) Interesting visual teaching techniques encourage the students to learn.
- (iii) IT facilitates the acquisition of basic skills.
- (iv) IT enhances teacher training through online resources and sharing of teaching resources among teachers.
- (v) IT enables learning with computers and the Internet, in which the technology facilitates learning across the curriculum.

Q 9. Write some advantages of IT in Governance.

Ans. Some advantages of IT in Governance are as follows:
- (i) Advent of IT has also led to e-governance, which can be defined as the use of information technology by government sectors to enhance the range, quality of services and information provided to the citizens, in a cost effective manner.
- (ii) Using the Internet, government can interact and provide services to people in rural areas also.
- (iii) There is no need to stand in long queues for availing basic services, such as LPG gas booking, paying electricity bills, etc., as these can be done using online services provided by government.

Q 10. Discuss the role of information technology in the field of banking industry.

Ans. The banking industry is totally dependent on the computers for doing many different banking tasks. The launch of digital banking services by different banks has even made our lives easier as we can perform various banking transactions, without even going to a bank, using digital banking anywhere and at any place. Online payments, transfers, managing accounts, fixed deposits opening and ATMs are a few major examples of digital banking.

Q 11. Discuss the role of information technology in Military.

Ans. IT is also used for defence purposes as it plays an important role in the design and development of weapons, other equipment and machinery are even

used for communication in distant and remote areas. The defence also employs computerised control systems, missile control, military operation and planning, and smart weapons.

Q 12. What is mean by the term CAD?

Ans. Computer Aided Design (CAD) software is used for designing objects with a computer. Most companies are using specialised CAD systems to design their products as a product designed with a computer will be far more accurate than if designed with a pencil and paper. Engineers can create an electronic model by describing all dimensions of an object. An object can be seen from different perspectives by displaying different views.

Q 13. Define Network Administrator

Ans. Network administrators are professionals who are responsible for maintaining a computer network. The administrator will oversee the installation and updates to any software as well as install and maintain any hardware needed to operate the network. It is not unusual for a network administrator to be consulted when upgrades in hardware or software are required to create a new network or enhance an existing one.

Q 14. Define the term CIO.

Ans. CIO stands for Chief Information Officer (CIO). A Chief Information officer is an executive responsible for development, implementation and operation of a firm's information technology policy. She/ He oversees all the information systems and infrastructure within the organisation, and is responsible for establishing information related standards to facilitate management control over all corporate resources.

Q 15. Who are Computer and Information Research Scientist?

Ans. Computer and information research scientists invent and design new approaches to computing technology and find innovative new uses for the existing technology. They study and solve complex problems in computing for business, medicine, science and other fields. Some computer and information scientists are involved with programming language design and hardware design. They also develop solutions for problems in the field of computer software and hardware. Some in this occupation work with complex theories.

Q 16. List any five websites of the Indian government which provide IT enabled services to the people.

Ans. Five websites of the Indian government which provide IT enabled services to the people are given below:

(i) https://uidai.gov.in
(ii) https://www.incometaxindia.gov.in
(iii) https://parivahan.gov.in/parivahan
(iv) http://www.upsc.gov.in
(v) https://eci.gov.in

? Long Answer Type Questions

Q 1. Write the structure of organisations under IT-BPM industry.

Ans. The organisations under IT-BPM industry are categorised as follows:

(i) **Multinational Companies (MNCs):** MNCs have their headquarters located outside India, but operate in multiple locations worldwide including those in India. They cater to both domestic and/or global clients and hence, coordinate global management.

(ii) **Indian Service Providers (ISPs):** ISPs started with their operations in India. Most of these have their headquarters in India with offices in various international locations. Some of these organisations serve only the Indian clients while most have both global as well as domestic client base.

(iii) **Global In-house Centers (GIC):** GIC cater to the needs of their parent company only and do not serve external clients. This helps to keep IT operations in-house and to take advantage of expanding globally. Such an organisation also offers opportunities for innovation in a cost-effective way.

Q 2. Write a short note on IT in everyday life with various advantages.

Ans. Over the past couple of years, Information Technology (IT) in our daily life has changed dramatically. It is used in almost every sphere of life such as education, communication, business, commerce, banking, etc. Businesses are invested more heavily into the new technological trends as well as they are offered the chance to operate more effectively through the application of IT. IT is, therefore, playing a very important role in our lives.

Some advantages of IT in everyday life are as follows:

(i) In our daily life, we use washing machines, microwave oven and many other products which have embedded software.

(ii) We can store all our important work, appointment schedules and list of contacts in a computer.

(iii) IT has brought a new dimension in the field of education. We can get any type of information staying at home when we need. The famous books of the world are available and easily accessible via internet.

(iv) IT is now used in e-banking system. We can perform our banking activities online.

(v) Information technology in the modern world have evolved so much that we can enjoy it in all the places. Cars with satellite navigation built in, climate control and digital displays within our vehicle, all have been possible by IT.

Q 3. Write the use of IT in library.

Ans. IT is playing a vital role for developing the libraries. Today, they are equipped to accomplish the newly Information Technology based services which fulfill the information needs of the users at the right time in the right place to the right person. IT application and the techniques are being used by the libraries for information processing, storage, communication, dissemination of information, automation, etc.

Some advantages of IT in library are as follows:

(i) Using IT, it becomes easy to gather different library activities.

(ii) IT provides speedy and easy access of information as well as improves the quality of library services.

(iii) IT helps to increase the range of services offered and avoid repetition of efforts within a library.

(iv) IT improves the quality of library services, status of library and helps to attract the users.

(v) IT technologies provide more up-to-date information and reduce the workload of the library staff.

(vi) IT based systems provide round the clock access to users and to unlimited information from different sources.

(vii) Utilisation of IT in present libraries helps to progress the rank of the library as it is easier to gain right information at the right time, in the right place and at the right cost.

(viii) Computerised libraries have books with barcode associated with it. This makes it easier to keep a track of books and the availability of a specific book. Each book has got a magnetic strip attached to it which is deactivated before the book can be borrowed.

Q 4. Write some advantages of IT at workplace.

Ans. Some advantages of IT at workplace are as follows:

(i) Modern workplace extensively relies on computer-aided tools for efficiency. These tools help to cut down both the time and costs needed for a job. Facilitating the employees with the latest tools help them to be more creative and efficient.

(ii) Incorporating technology at the workplace helps the employees do more with less efforts. This saves both their time and energy which they can vest upon some other work.

(iii) Automation is becoming more and more important in assembly-line industries where attention to detail, speed and efficiency are important.

(iv) Recruiting the correct people for a job is a tough task. But cloud-based tools and social media have solved this issue. Employers can now look for and engage the right person for the job from across the horizon.

(v) Access to IT tools helps to encourage innovation and creativity and is a useful strategy to increase productivity and efficiency.

(vi) IT enables employees to produce better work. This can encourage healthy competition in the workplace and makes the company gain an edge over competing companies.

Q 5. Define IT in Marketing with advantages.

Ans. Marketing professionals use Information technology to plan, manage and monitor campaigns. By analysing and manipulating data on computers, they can personalise customer and prospect communications and improve customer relationship management.

Some of the advantages of IT in marketing are as follows:

(i) In marketing, computers are used for the advertising of products. By using art and graphics facility, it is possible to create interesting advertisements of various products so that the goal of selling can be achieved.

(ii) Marketers are responsible for creating computerised sales and marketing presentations using PowerPoint or other applications.

(iii) Companies use IT tools to keep track of all types of customer contact, including sales calls, presentations, purchases, complaints and more. Marketers need to be able to access information that is in the system as well as input additional data as it becomes available.

(iv) Using e-commerce websites, people can purchase items even sitting at home. This saves their time and efforts and products are reached in a timely and cost-effective manner.

Q 6. What are the various processes of education where IT is used?

Ans. The various processes of education where IT is used are as follows:

(i) **ICT in the classroom:** ICT is used for education in the classroom, such as

(a) E-learning classrooms;

(b) smart-board presentations;

(c) videos on experiments;

(d) creation of images and video;

(e) desktop publishing of magazines, letters and documents;

(f) educational games;

(ii) **Education:** anywhere anytime: Any student can access digital book, videos or any other educational resources from various websites anytime by using internet.

(iii) **Teaching Aids and Media:** ICT is used mostly as a teaching aid in schools to

(a) Use pictures, animations.

(b) Make the lessons interesting.

(c) Organise lessons.

(iv) **Learning Management System (LMS):** A Learning Management System (LMS) is being used by many countries to manage school systems. Using LMS a student can learn lessons anytime and anywhere, submit queries, getting replies, etc.