

Internet Services and Mobile Technologies

Fastrack REVISION

- ▶ **Information Retrieval:** The process of **finding and acquiring specific information** from a collection of vast information resources on the web is known as information retrieval.
- ▶ **Search Engine:** A search engine is a software on the internet that will conduct a search of its own database of websites based on the terms you have entered. Some popular search engines are **Google, Yahoo! Search, Bing,** etc.
- ▶ **Crawling:** A search engine uses an application program known as **Bot/Spider/Web Crawler** to find the information on the vast platform of WWW. The process of searching the information is referred to as crawling.
- ▶ **Indexing:** After completing the process of crawling, the bot stores the page in the search engine database. This process is referred to as indexing.
- ▶ **Google Groups:** It is one of the most popular search engine to find information about people.
- ▶ **Pipl:** Pipl.com is a people search engine that is used to find information about people.
- ▶ **Wink:** It searches across what you would find using a regular search engine as well as across social communities, online profiles, etc.
- ▶ **Facebook:** It is one of the world's largest social networks with millions of people on this platform, on a daily basis. You can use Facebook to search your school/college friends, as well as work colleagues and relatives.
- ▶ **LinkedIn:** It is also a social networking platform, which can be used to search through professional networks.
- ▶ **E-mail:** It stands for **electronic mail**. It is a communication system that **sends and receive messages** via Internet, by using specific e-mail address known as **e-mail ids**. It is widely used Internet based communication tool.
- ▶ **E-mail Message Components:** E-mail message comprises of different components: **e-mail header, text** and **signature**.
 - **E-mail Header:** The first five lines of an E-mail message form the E-mail header. The header part comprises of following fields:
 - **From:** This field indicates the sender's address *i.e.* who sent the e-mail.
 - **Date:** This field indicates the date when the e-mail was sent.
 - **To:** This field indicates the recipient's address *i.e.* to whom the e-mail is sent.
 - **Subject:** The Subject field indicates the purpose of e-mail. It should be precise and to the point.
 - **Cc:** Cc stands for **Carbon Copy**. It includes those recipient addresses whom we want to keep informed but not exactly the intended recipient.
 - **Bcc:** Bcc stands for **Blind Carbon Copy**. It is used when we do not want one or more of the recipients to know that someone else was copied on the message.
 - **Text:** It represents the actual content of the message.
 - **Signature:** This is the **final part of an e-mail message**. It includes Name of Sender, Address and Contact Number.
- ▶ **Advantages of E-mail:**
 - Reliable
 - Convenience
 - Speed
 - Generality
 - Inexpensive
 - Printable
 - Global
- ▶ **Disadvantages of E-mail:**
 - Forgery
 - Overload
 - No response
 - Misdirection
 - Junk
- ▶ **Chat:** It is a **real-time communication** between two users over the Internet. Online chat may address **point-to-point communication** as well as **multicast communications** from one sender to many receivers and voice and video chat, or may be a feature of web conferencing service.
- ▶ **Instant Messaging (IM):** A communication service over the Internet which allows an instant transmission of text-based messages from the sender to receiver is known as **instant messaging**.
- ▶ **ICQ (I SEEK YOU):** It is an extremely useful communication program that allows you to message, send files, send URL's, and many more. It is a free program that can easily be downloaded from the Internet.
- ▶ **Internet Relay Chat (IRC):** It is a system for chatting that involves a set of rules, conventions and client/server software.
- ▶ **Video Conferencing:** Video conferencing allows people at two or more locations to communicate and interact with



one another via audio and video transmission. It makes use of computer networks to send audio and video data from one place to another.

- ▶ TeamViewer, Skype, Zoom Meeting, GoToMeeting are some examples of video conferencing software.
- ▶ **E-Learning:** It is the term used to explain the scenario where teaching-learning process takes place online using the Internet and communication technology. It is WWW the use of technology to enable people to learn anytime and anywhere.
- ▶ **E-Banking:** It is a service provided by almost each and every bank today that **enables you to access bank accounts** and to carry out online banking service, 24 hours a day.
- ▶ **E-Shopping:** It refers to the process of **searching for and purchasing goods and services over the Internet**, through the use of a web browser.
- ▶ **E-Reservation:** It is the process of **booking tickets** such as for movies, airlines, buses and trains using the Internet.
- ▶ **E-Group:** It is a term which refers to an **online group of people who interact with each other**. E-mail groups offer a convenient way to connect with others who share the same interests and ideas.
- ▶ **E-Governance:** E-governance or **electronic government** can be defined as use of information and communication technology by government sectors to enhance the range, quality of services and information provided to the citizens in a cost-effective manner.
- ▶ **Types of interaction in E-Governance:**
 - ▶ G2G (Government to Government)
 - ▶ G2C (Government to Citizen)
 - ▶ G2B (Government to Business)
 - ▶ G2E (Government to Employees)

- ▶ **Social Networking Sites:** Online communities that let people come together, communicate and share things such as pictures, videos, projects, etc. are known as social networking or social media sites. **Facebook, Twitter, LinkedIn, Instagram**, etc. are some examples of popular social networking sites.
- ▶ **Cloud Computing:** It is a type of Internet based computing, and it consists of every situation where the use of IT resources can be made by an entity, including a person or an organisation.
- ▶ **Web Services:** These are XML-based information exchange systems that use the Internet for direct application-to-application interaction. These systems can include programs, objects, messages, or documents.
- ▶ **Mobile Technology:** It is a system that is mostly used for cellular communication and other various applications.
- ▶ **SMS (Short Message Service):** It is a text messaging service element of mobile devices. It uses standard communication protocols to enable mobile devices to exchange short text messages.
- ▶ **MMS (Multimedia Messaging Service):** It is a standard way to send message that includes multimedia content to and from mobile phones over cellular networks.
- ▶ **3G Mobile Telecommunication Technology:** It is the third generation of wireless mobile telecommunication technology. It is the advancement of 2G network, allowing faster Internet speeds.
- ▶ **4G Mobile Telecommunication Technology:** It is the fourth generation of wireless mobile telecommunication technology. It succeeds 3G and 2G technologies. Standard 4G, or 4G LTE (Long Term Evolution), is around five to seven times faster than 3G, providing theoretical speed of around 150 Mbps.

Practice Exercise

? Multiple

Choice Questions

- Q 1. Which of the following is an example of a search engine?
- a. www.bing.com b. www.rediffmail.com
c. www.flipkart.com d. www.twitter.com
- Q 2. Which of the following is an example of chat service?
- a. Hike b. Gmail.com
c. Wikipedia.com d. None of these
- Q 3. From which website you can download "I seek you" chat messenger?
- a. www.icu.com b. www.jqc.com
c. www.irc.com d. www.icq.com
- Q 4. An e-mail address is made up of:
- a. four parts b. two parts
c. single part d. three parts



TIP

Students are advised to learn the details of e-mail address.

- Q 5. E-mails are stored in this folder before they are sent.
- a. Inbox b. Sent
c. Outbox d. Message box
- Q 6. Which of the following options allows you to write a new e-mail to someone?
- a. Reply e-mail b. Send e-mail
c. Compose e-mail d. None of these
- Q 7. Which of the following is not used for finding lost friends on the Internet?
- a. TruePeopleSearch.com
b. Google Groups
c. FindPeopleSearch.com
d. Gmail.com



- Q 8. Which service allows you to perform your banking transactions online?
 a. E-shopping b. E-governance
 c. E-banking d. Video conferencing
- Q 9. Which one of the following is an e-shopping website?
 a. Flipkart b. Amazon
 c. Snapdeal d. All of these
- Q 10. Web address of national portal of India is:
 a. India.gov.in b. GOI.gov.in
 c. Ncert.nic.in d. None of these
- Q 11. A website used to provide online information and services to the citizens is an example of:
 a. e-business b. e-mail
 c. e-governance d. e-learning
- Q 12. Who is the founder of Facebook?
 a. Jack Dorsey b. Mark Zuckerberg
 c. Sir Tim Berners-Lee d. Javed Karim
- Q 13. Which service allows you to send short text message?
 a. SMS b. MMS c. 3G d. 4G
- Q 14. A search engine is a program to search:
 a. for information
 b. web pages
 c. web pages for specified index terms
 d. web pages for information using specified search terms
- Q 15. Which of the following statements about search engine is true?
 a. Search engines discriminate between good and bad sites.
 b. Search engines have fixed hours, when we can use them.
 c. Search engines are waste of time as they do not provide relevant information.
 d. Search engine is a program designed to search for information on the web using keywords.
- Q 16. A software that searches through a database of Web pages for particular information is known as:
 a. Domain b. E-mail client
 c. Modem d. Search engine
- Q 17. Which software browse the Internet in a systematic manner?
 a. Web crawler b. Web browser
 c. Indexing software d. Search algorithm
- Q 18. Shri wants to search about computer vendor in Meerut excluding Dell category. Which of the following search query best suits his requirements?
 a. Computer vendor Meerut Dell
 b. Computer vendor Meerut not Dell
 c. Computer vendor + Meerut – Dell
 d. Computer vendor + Meerut + Dell
- Q 19. Which of the following would you use to transfer files over the Internet?
 a. FTP b. E-mail c. HTTP d. Browser
- Q 20. FTP is referred to as:
 a. Force Transfer Protocol
 b. File Transport Protocol
 c. File Transfer Partition
 d. File Transfer Protocol
- Q 21. Image files uploaded and downloaded over the Internet can be processed with a compression application. Why are image files compressed before transmitted over Internet?
 a. To increase security
 b. To make them easier to open
 c. To reduce transmission time
 d. To improve the quality of images
- Q 22. Identify the software that helps you in sending and receiving an e-mail:
 a. MS-Office b. Internet Explorer
 c. MS-Outlook d. None of these
- Q 23. Bcc field contains the list of recipients. Bcc stands for:
 a. Basic carbon copy b. Blind carbon copy
 c. Blind client copy d. Basic client copy
- Q 24. A two way video conversation among multiple participants is called:
 a. Video chatting b. Video talking
 c. Video conferencing d. Video watching
- Q 25. services typically include reviewing account activity and balance, sending electronic payments and transferring funds between accounts electronically.
 a. E-banking b. E-reservation
 c. E-posting d. E-mail
- Q 26. Which of the following sites, would you prefer to buy books? (CBSE 2011)
 a. www.yahoomail.com b. www.sun.com
 c. www.msn.com d. www.amazon.com
- Q 27. E-reservation is a process of making reservations of:
 a. tickets b. hotel rooms
 c. tourists packages d. All of these
- Q 28. Search engine is used for finding about a specific topic.
 a. information b. content
 c. knowledge d. None of these
- Q 29. The first search engine that was developed was
 a. Google Chrome b. Mozilla Firefox
 c. Opera d. Archie
- Q 30. The search engine assigns ranking to the links using a
 a. subtracting algorithm
 b. sorting algorithm
 c. searching algorithm
 d. All of the above
- Q 31. Most search engines include with search results.
 a. packaging b. advertisements
 c. programming d. All of these
- Q 32. can be used to search through professional network.
 a. Instagram b. Twitter
 c. Facebook d. LinkedIn
- Q 33. checks the databases of websites like Pinterest and LinkedIn.
 a. SeekYou.com b. PeekYou.com
 c. ReekYou.com d. NeekYou.com



? Fill in the Blanks

Type Questions

- Q 34. Search engine is used for finding about a specific topic.
- Q 35. The first search engine that was developed was
- Q 36. The search engine assigns ranking to the links using a
- Q 37. Most search engines include with search results.
- Q 38. can be used to search through professional network.
- Q 39. checks the databases of websites like Pinterest and LinkedIn.

? Assertion and Reason

Type Questions

Directions (Q. Nos. 40-46): 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 (A) and (R) are true and (R) is the correct explanation of (A).
- b. Both (A) and (R) are true, but (R) is not correct explanation of (A).
- c. (A) is true, but (R) is false.
- d. (A) is false, but (R) is true.
- Q 40. **Assertion (A):** The process of finding and acquiring specific information from a collection of vast information resources on the web is known as information retrieval.
Reason (R): The web browser is the main program using which you can open websites and access Information over the web.
- Q 41. **Assertion (A):** A web server is a software on the Internet that will conduct a search of its own database of websites based on the terms you have entered.
- Reason (R): The first search engine that was developed was Archie, which was used to search for FTP files and the first text-based search engine was known as Veronica.
- Q 42. **Assertion (A):** The process of searching the information is referred to as crawling.
Reason (R): The search engine's index contains all of the pages and documents that the Spiders or Bots have crawled.
- Q 43. **Assertion (A):** Google Groups is one of the most popular search engine to find information about people.
Reason (R): FindPeopleSearch.com checks the databases of websites like Pinterest, LinkedIn, Instagram and more and thus helps in giving the search results.
- Q 44. **Assertion (A):** Wink searches across what you would find using a regular search engine as well as across social communities, online profile, etc.
Reason (R): Facebook is one of the world's largest social networks with millions of people on this platform, on a daily basis.
- Q 45. **Assertion (A):** E-mail is a communication system that sends and receives messages via Internet, by using specific e-mail addresses known as e-mail ids.
Reason (R): An e-mail address identifies a location on the Internet where an e-mail can be send. Free e-mail facility is provided on many websites.
- Q 46. **Assertion (A):** Cc (CARBON copy): Type the e-mail address of the people you want to send a copy of your e-mail to. This feature is used to share a particular message with a large number of people.
Reason (R): Bcc (BLIND carbon copy): If you want to keep somebody invisible from all the other recipients of your message, then his or her e-mail address.

Answers

- (a) www.bing.com
- (a) Hike
- (d) www.icq.com
- (b) two parts
- (c) Outbox
- (c) Compose e-mail
- (d) Gmail.com
- (c) E-banking
- (d) All of these
- (a) India.gov.in
- (c) e-governance
- (b) Mark Zuckerberg
- (a) SMS
- (d) web pages for information using specified search terms
- (d) Search engine is a program designed to search for information on the Web using keywords.
- (d) Search engine
- (a) Web crawler
- (c) computer vendor + Meerut – Dell
- (a) FTP
- (d) File Transfer Protocol
- (c) To reduce transmission time



22. (c) MS-Outlook
23. (b) Blind carbon copy
24. (c) Video conferencing
25. (a) E-banking
26. (d) www.amazon.com
27. (d) All of these
28. (a) information
29. (d) Archie
30. (b) sorting algorithm
31. (b) advertisements
32. (d) LinkedIn
33. (b) PeekYou.com
34. information
35. Archie
36. sorting algorithm
37. advertisements
38. LinkedIn
39. PeekYou.com
40. (b) Both (A) and (R) are true, but (R) is not correct explanation of (A).
41. (d) (A) is false, but (R) is true.
42. (b) Both (A) and (R) are true, but (R) is not correct explanation of (A).
43. (c) (A) is true, but (R) is false.
44. (b) Both (A) and (R) are true, but (R) is not correct explanation of (A).
45. (b) Both (A) and (R) are true, but (R) is not correct explanation of (A).
46. (b) Both (A) and (R) are true, but (R) is not correct explanation of (A).

- Q 2. **A search engine is a program to search:**
 - a. for information
 - b. web pages
 - c. web pages for information using specified search items
 - d. web pages for specified index terms
- Q 3. **The words typed in search box are called:**
 - a. Keywords
 - b. Hit words
 - c. Search words
 - d. All of these
- Q 4. **Which of the following is a search engine?**
 - a. Google
 - b. Yahoo
 - c. AltaVista
 - d. All of these
- Q 5. **Which software browses the internet in a systematic manner?**
 - a. Web crawler
 - b. Web browser
 - c. Indexing software
 - d. Search algorithm
- Q 6. **A list of websites that contains the information are known as**
 - a. Success
 - b. Yahoo
 - c. Miss
 - d. Hits
- Q 7. **Which search engine is also known as spider, web scutter, etc.?**
 - a. Yahoo
 - b. Web crawler
 - c. Google
 - d. Hotbot

Answers

1. (a) Search engine
2. (c) web pages for information using specified search items
3. (a) Keywords
4. (d) All of these
5. (a) Web crawler
6. (d) Hits
7. (b) Web crawler

Case Study 2

Read the given passage carefully and answer the following questions:

Chat: It is the online textual or multimedia conversation. It is real-time communication between two users via computer. It is widely interactive text-based communication process that takes place over the Internet.

Chatting is a virtual means of communication that involves the sending and receiving of messages, share audios and videos between users located in any part of the world.

In chatting, you type a message in your chat box, which is immediately received by the recipient, then the recipient types a message in response to your message, which is instantly received by you.

? Case Study Based

Questions

Case Study 1

Read the given passage carefully and answer the following questions:

Search Engine: It is a software that provides the required data on specific topics. It turns the web into a powerful tool for finding information on any topic. Search engine allows users to enter keywords related to particular topics and retrieve information about the websites containing these keywords. It is a program designed to search for information on the web through database of web pages queries or keywords.

When search query is submitted in the search engine by user, the software used for search algorithm scans the index to find the web pages over the Internet.

Q1. A software that searches through a database of web pages for particular information is known as:

- a. Search engine
- b. E-mail client
- c. Domain
- d. Modem



- Q 1. Chat rooms are also known as:**
 a. Talking rooms b. Virtual rooms
 c. Special rooms d. Gossip rooms
- Q 2. A/An is the hub of Internet chatting.**
 a. chat group b. chat place
 c. chat space d. chat room
- Q 3. Which of the following is/are popular chat applications?**
 a. Wechat b. Tango
 c. WhatsApp d. All of these
- Q 4. Which of the following enables communication through sending and receiving text messages?**
 a. Text-based chat b. Multimedia chat
 c. Both a. and b. d. None of these
- Q 5. Chatting is defined as:**
 a. Web service b. Browser service
 c. Server service d. E-mail service
- Q 6. Chat is the online conversation.**
 a. Textual b. Multimedia
 c. Both a. and b. d. None of these
- Q 7. You can share using chat.**
 a. message b. audio
 c. video d. All of these

Answers

1. (b) Virtual rooms
2. (d) chat room
3. (d) All of these
4. (a) Text-based chat
5. (a) Web service
6. (c) Both a. and b.
7. (d) All of these

Case Study 3

Read the given passage carefully and answer the following questions:

E-mail: It is an electronic version of sending and receiving letters. The e-mail is transmitted between computer systems, which exchange messages or pass them onto other sites according to certain Internet protocols or rules for exchanging e-mail. You can send e-mail from your computer at any time to any address around the world and your electronic letter or e-mail will arrive at its destination in seconds after you send it, even if the receiver is not online.

For sending and receiving an e-mail, you must have an e-mail account, which is either a web based online e-mail account or an e-mail account on your ISP server.

Web based online e-mail account can be created through many sites like Gmail, Yahoo mail, Rediffmail, etc.

- Q 1. Which of the following is always a part of E-mail address?**
 a. Period(.) b. Space()
 c. At sign(@) d. Underscore(_)
- Q 2. Which among the following is an area of e-mail that is short description of the message?**
 a. Subject b. Cc
 c. Bcc d. Attachment
- Q 3. Identify the software that helps you in sending and receiving an e-mail.**
 a. MS-Office b. Internet explorer
 c. Gmail d. None of these
- Q 4. Junk mail is also called:**
 a. Crop b. Spoof
 c. Spam d. Sniffer script
- Q 5. An e-mail attachment is referred to as:**
 a. The body of the e-mail
 b. The address of the sender
 c. A document that is sent with an e-mail
 d. Any document that can be attached and sent with an e-mail
- Q 6. Sending an e-mail is similar to:**
 a. Writing a letter
 b. Drawing a picture
 c. Talking on the phone
 d. Sending a package
- Q 7. Which of the following is not an e-mail service provider?**
 a. Hotmail b. Gmail
 c. Bing d. Yahoo Mail

Answers

1. (c) At sign(@)
2. (a) Subject
3. (c) Gmail
4. (c) Spam
5. (d) Any document that can be attached and sent with an e-mail
6. (a) Writing a letter
7. (c) Bing

Case Study 4

Read the given passage carefully and answer the following questions:

E-government and E-groups: Due to the rapid rise of the Internet and digitisation, Governments all over the world are initiating steps to involve IT in all governmental processes. This is the concept of e-government. This is to ensure that the Govt. administration becomes a swifter and more transparent process. It also helps save huge costs. E-Group is a feature provided by many social network services which helps you create, post,

comment to and read from their “own interest” and “niche-specific forums”, often over a virtual network. “Groups” create a smaller network within a larger network and the users of the social network services can create, join, leave and report groups accordingly. “Groups” are maintained by “owners, moderators, or managers”, who can edit posts to “discussion threads” and “regulate member behaviour” within the group.

- Q 1. Define e-government.
- Q 2. What personal information does privacy law is intended to protect?
- Q 3. What does TAN stand for?
- Q 4. Define an e-group.
- Q 5. What type of notification is received by the users of the e-group whenever a new comment is posted?
- Q 6. What is the term used for a two way video conversation among multiple participants?
- Q 7. Define social networking sites.

Answers

1. E-government can be defined as the “application of e-commerce technologies to government and public services.”
2. Personal Information about employees.
3. Tax Deduction and Collection Account Number.
4. An e-group is a collection of users having the ability to access and contribute to forum topics.
5. E-mail notification.
6. Video conferencing.
7. A social networking service or SNS is an online platform which people use to build social networks or social relationships with other people who share similar personal or career content, interests, activities, backgrounds or real-life connections.

Case Study 5

Read the given passage carefully and answer the following questions:

Internet Browsing: Coursera has partnered with museums, universities, and other institutions to offer students free classes on an astounding variety of topics. Students can browse the list of available topics or simply answer the question “What would you like to learn about?”, then when they answer that question they are led to a list of available courses on that topic. Students who are nervous about getting in over their heads can relax.

- Q 1. What do MOOCs stand for?
- Q 2. “A combination of both face-to-face, traditional classroom methods with e-learning to create a hybrid approach to teaching”. What is this type of e-learning?

- Q 3. What type involves allowing participants to complete training in their own time via web-based training i.e., e-mail, blackboard, intranets, and where there is no help from instructors and participants can use Internet as a support tool?
- Q 4. Which training scenarios would e-learning be most suitable and efficient for?
- Q 5. What best describes a virtual classroom?
- Q 6. Give some examples of an e-learning website.
- Q 7. Give two benefits of virtual classroom.

Answers

1. MOOCs stand for Massive Open Online Courses.
2. It is a type of blended learning.
3. Asynchronous learning.
4. Microsoft excel training.
5. It is an online learning environment accessed through the Internet (i.e., webinars).
6. edX, MasterClass and SimplyCoding are some example of an e-learning website.
7. Benefits of virtual classroom are:
 - (i) Teachers interact with students in real line.
 - (ii) Students can voice their questions and interact with peers.

? Very Short Answer

Type Questions

- Q 1. What do you understand by information retrieval?
Ans. The process of finding and acquiring specific information from a collection of vast information resources on the web is known as information retrieval.
- Q 2. What is a search engine?
Ans. A search engine is a software on the Internet that will conduct a search of its own database of websites based on the terms we have entered. An example of a popular search engine is **www.google.com.**
- Q 3. What is Veronica?
Ans. The first text-based search engine was known as Veronica.
- Q 4. What do you understand by google groups?
Ans. Google groups is one of the most popular search engine to find information about people. It has incorporated over 800 million Usenet messages into its database.
- Q 5. What does a minus sign used with keywords in the search box mean?
Ans. The minus sign in front of a word or phrase means that the specified word must not appear in matched documents.
 For example, India – Delhi, will exclude all information from Delhi in the search.



Q 6. How many type of chat services are available online? Name them.

Ans. There are three most common types of chat services available online which are:

- (i) Instant Messaging.
- (ii) ICQ (I Seek You).
- (iii) IRC (Internet Relay Chat).

Q 7. What is IM (Instant Messaging)?

Ans. A communication service over the Internet which allows an instant transmission of text-based messages from the sender to receiver is known as the **instant messaging.**

Q 8. What is an e-mail?

Ans. E-mail stands for Electronic Mail. It is a system that allows text-based messages to be exchanged electronically via Internet.

Q 9. Rashmi has to send an e-mail to Raees. She also wants to send the same e-mail to Vandana but does not want Raees to know about it. Which option out of 'Cc' or 'Bcc' should Rashmi use to enter the e-mail address of Vandana? (CBSE SQP 2019-20)

Ans. Bcc (Blind carbon copy).

Q 10. What do you understand by subject in an e-mail?

Ans. The main idea or purpose behind the message is written in the subject part of an e-mail.

Q 11. What is e-learning?

Ans. E-learning is the term used to explain the scenario where teaching-learning process takes place online using the Internet and communication technology. It is the use of technology to enable people to learn anytime and anywhere.

COMMON ERRORS

Students give the definition of learning instead of e-learning so, the concept should be studied well.

Q 12. Deepak is a student of class X. He has some problems in Science subject but he has no time to go tuition. He wants to study at his place. Which feature of Internet service will help him?

Ans. E-learning will help him to learn about various subjects at his own place.

Q 13. Rahul is an employee of PQRS Company. He needs to do some transactions. But he has no time to go bank for this work. His friend suggest him to use e-banking. What is e-banking?

Ans. E-banking is defined as the automated delivery of new and traditional banking products and services directly to the customers through electronic and interactive communication channels.

Q 14. What social impact does e-governance have on society?

Ans. E-governance has the following social impact on society:

- (i) Efficiency of administration has increased.
- (ii) Reduced cost
- (iii) Corruption has reduced
- (iv) Fast processing

Q 15. What are e-groups?

Ans. E-group is a term which refers to an online group of people who interact with each other. E-mail groups offer a convenient way to connect with others who share the same interests and ideas.

Q 16. How Facebook is different from Twitter?

Ans. Facebook is a social networking site while Twitter is a microblog i.e. a blogging service with limited character posts.

Q 17. What do you understand by Pinterest?

Ans. Pinterest is a free pin board style photo sharing site and application where users can create and manage theme-based image collection like interests, hobbies and recipes, etc.

Q 18. Explain the term mobile technology.

Ans. Mobile technology is a form of technology that is mostly used in cellular communications and other related aspects. It includes General Packet Radio Service (GPRS), Multimedia Messaging Service (MMS), Bluetooth, 3G, 4G, Wi-Fi, etc.

Q 19. What is the use of 4G mobile technology?

Ans. In telecommunication, 4G is the fourth generation of mobile phone communication standards. 4G system provides mobile ultra - broadband Internet access.

Q 20. Give one difference between 3G and 4G.

(CBSE SQP 2019-20)

Ans. The difference between 3G and 4G is as follows:

- (i) The speed of 4G is about 10 times faster than 3G.
- (ii) We can stream audio and video content using 4G.

Q 21. Write the purpose of search engine.

Ans. The main purpose of search engine is to help people to find more information in any topic, which user wants.

Q 22. Give the name of any two websites, which are used as a search engines.

Ans. www.google.com and www.altavista.com

Q 23. What do you understand by uploading a file on Internet? Name software used for it.

Ans. To transfer a file from the computer to a server is called uploading a file on Internet. FTP is the software which is used for it.

Q 24. Distinguish between FTP and Telnet.

Ans. FTP (File Transfer Protocol) facilitates the transfer of files from one point to another while Telnet is a connection protocol that allows a user to connect to a remote server.

Q 25. What do you understand by Telnet?

Ans. Telnet is a protocol that facilitates remote login on a computer.

Q 26. What do you understand by downloading files from Internet?

Ans. Downloading is transferring files from a server to a client's computer.

Q 27. What do you understand by remote login?

Ans. Remote login or remote access is the ability to get access to a computer or a network from a different computer.

Q 28. Give the name of any two Websites which are used to send e-mail.

Ans. www.gmail.com and www.rediffmail.com

Q 29. How can a Word document be send alongwith an e-mail?

Ans. By attaching the Word file with an e-mail.

Q 30. Write one advantage and one limitation of e-mail over traditional mail.

OR

Mention any two advantages of e-mail over conventional mail.

Ans. Advantages:

- (i) E-mail is extremely cost effective.
- (ii) E-mail takes lesser time for transmitting data than conventional mail.

Disadvantage: Need of Internet connection to send/receive mail.

Q 31. How can video conferencing be helpful to teachers?

Ans. Using video conferencing, teachers can communicate with different school teachers and students to discuss different topics or attend seminars online.

Q 32. State one advantage of video conferencing over personal face-to-face business meetings.

Ans. Video conferencing allows us to interact with many people face-to-face without being at same place.

Q 33. How multiple e-mail addresses are defined in to, Cc, Bcc field?

Ans. By using comma between e-mail addresses.

Q 34. In how many forms can e-learning occur?

Ans. E-learning can be CD-ROM based, network based, Intranet or Internet based.

Q 35. Give the name of five websites for locating someone online.

Ans. Facebook, WhitePages, SuperPages, Bing and Yahoo search are five websites for locating someone online.

? Short Answer

Type-I Questions

Q 1. What is the process of finding information on the web known as?

Ans. The process of finding and acquiring specific information from a collection of vast information resources on the web is known as information retrieval.

Q 2. What is a search engine? Explain with example.

Ans. A search engine is a tool designed to search the web for information according to the given keywords. Search engines enable the users to find information and websites of specific interest or use to them. Some popular search engines are Google, Yahoo! Search, Bing, etc.

Q 3. Explain the two elements using which search engine works.

Ans. Search engine works with two elements, which are as follows:

(i) **Web Crawler:** It is a software that browses the internet in a systematic manner. It retrieves the information, which follows every link on the site that are stored by web search engine. It is also known as spider, ant, automatic indexer or web scutter.

(ii) **Indexing Software:** It is a software that receives the list of web documents and addresses collected by web crawler. Some search engines provide proximity search which allows users to define the distance keywords.

Q 4. Why should you try to type correct spellings while conducting a search on a search engine?

Ans. We should type correct spellings for searching the information so as to get appropriate and relevant results. For example, if we type 'nsie plltin' instead of 'noise pollution' as keywords, our search either would turn up empty or non-relevant search results will be displayed.

Q 5. How does Wink perform a search?

Ans. Wink searches across what we would find using a regular search engine as well as across social communities, online profiles, etc. We can also use Wink to manage our online presence by creating a Wink profile.

Q 6. What are the advantages of chat?

Ans. The advantages of chat are as follows:

- (i) Photos can be send using an instant messaging.
- (ii) Emotions can be expressed easily when communicating with a person.
- (iii) We can also chat in groups.
- (iv) Chat makes it possible for users to keep in contact and chat to each other even if, they are in different countries.



Q 7. Write the full form of Cc and Bcc (used in e-mail communication). Explain the difference between them. (CBSE SQP 2020-21)

Ans. Cc: (Carbon copy) In this feature, every recipient can check who else has received the mail.

Bcc: (Blind carbon copy) In this feature, no recipient can check who else has received the mail.

Q 8. How can you reply to an e-mail?

Ans. To reply to an e-mail, we click on the reply button. The reply message window will appear. We type the message and then click on the send button to send the e-mail.

Q 9. What is voice mail?

Ans. Voice mail is a voice message that the caller leaves when the person called is busy in another conversation or not available to pick the call. It is similar to e-mail except that instead of text message, it is a voice message.

Q 10. Give the categories of e-banking.

Ans. E-banking can be broadly classified into two categories, which are as follows:

(i) **Transactional:** It involves performing financial transactions. Transactional activities are as follows:

- (a) Electronic fund transfer.
- (b) Bill payment.
- (c) Loan application and repayments.
- (d) Buying Investments products.

(ii) **Non-transactional:** It involves viewing bank statements. Non-transactional activities are as follows:

- (a) Account balance viewing.
- (b) Bank statement downloading.
- (c) Cheque book ordering.
- (d) Provision of account/bank statement.

Q 11. Write the advantages of e-banking.

Ans. Advantages of e-banking are:

- (i) There are no geographical barriers and the services that can be offered at a minimum cost.
- (ii) Through Internet banking, we can check our transactions at any time and as many times as we want to.

Q 12. Ayush is the owner of a small company that manufactures toys for children. He decided that it would be beneficial to the company to create a website, which would allow customers to order online.

- (i) Give one advantage of using the Internet to purchase goods.
- (ii) Explain how a customer who did not know the company's website address, could gain access to the site.

Ans. (i) E-purchasing is convenient as we can purchase goods 24 hours a day as per our convenience.

(ii) Through search engine, when we will search for company that sells toys for children, it will also provide us link of this company's website.

Q 13. What do you understand by e-reservation?

Ans. E-reservation or online reservation is the process of booking tickets such as for movies, airlines, buses and trains using the Internet.

For example: www.irctc.co.in is an Indian railways' reservation website using which one can book railway tickets online anywhere in India.

Q 14. What is social media?

Ans. Social media refers to any forum used to share information, news or opinions that are accessible by many users.

For example: Group websites, Blogs Forums, Social Networking sites.

Q 15. What are the problems associated with social networking?

Ans. The problems associated with social networking are:

- (i) Virus attack.
- (ii) Cyber blackmailing, Cyber bullying.
- (iii) Online predators.
- (iv) Illusion of security.

Q 16. Mention the features of 3G.

Ans. 3G (Third Generation) has the following features:

- (i) Speed is upto 2 Mbps.
- (ii) Provides faster communication.
- (iii) Large capacities and broadband capabilities.
- (iv) High speed web and more security.

Q 17. Write any four features of 4G.

Ans. The four features of 4G are:

- (i) Capable of providing 10 Mbps - 1 Gbps speed.
- (ii) Provides high quality streaming video.
- (iii) Expanded multimedia services.
- (iv) Combination of Wi-Fi and WiMax.

Q 18. Differentiate between TDMA and CDMA.

Ans. **Difference between TDMA and CDMA**

S.No.	TDMA	CDMA
(i)	TDMA is short for <u>Time- Division Multiple Access.</u>	CDMA is code for <u>Code- Division Multiple Access.</u>
(ii)	TDMA divides the channel into <u>sequential time portions</u> as each user has its respective right turn for channel use.	In CDMA, there is <u>sharing of both i.e. bandwidth and time portions</u> among different stations takes place.



Give the differences in tabular form and not write only the definitions of TDMA and CDMA.

Q 19. When using a search engine, what does a minus sign used with keywords in the search box mean?

Ans. Search engine is a Website that provides the required data on specific content. It also allows users to enter keywords related to particular topics and retrieve information. The minus sign in front of a word or phrase means that it includes first term but not the second term.

Q 20. How does FTP work?

Ans. FTP works on the principle of a client/server model. A FTP client program enables the user to interact with a FTP server program in order to access information and services on the server computer. To access FTP server program, users must be able to connect to the Internet or interact with FTP client program.

Q 21. Why uploading and downloading a file is required? Explain with example.

OR

What is the need of uploading and downloading files?

Ans. When we need a file which is located at the server end, we have to download the file that means transmission of file from server to user's computer. Similarly, if we want to share something like file, picture etc., we have to upload that file or picture on the Internet that means transmission of file from user computer to server.

Q 22. What is chatting? Is it necessary to be online while chatting?

Ans. Chatting is the textual or multimedia conversation over the Internet. It is a real-time communication between two users via computer. It is widely interactive text based communication process that takes place over the Internet. Yes, it is necessary to be online, while chatting.

? Short Answer

Type-II Questions

Q 1. Define the following terms:

- (i) Wink, (ii) Pipl, (iii) PeekYou.

Ans. (i) **Wink:** It searches across what we would find using a regular search engine as well as across social communities, online profiles, etc. We can also use Wink to manage our online presence by creating a Wink profile.

(ii) **Pipl:** It is a people search engine that is used to find information about people.

(iii) **PeekYou:** It checks the databases of websites like Pinterest, LinkedIn, Instagram and more and thus helps in giving the search results.

Q 2. Explain any six elements of e-mail account.

Ans. Some important elements or folders that are used to organise our e-mail message are as follows:

- (i) **Inbox:** It contains all incoming messages.
- (ii) **Outbox:** The message is stored in outbox until, it is successfully sent to the recipient.
- (iii) **Sent mail:** It contains all sent messages.
- (iv) **Draft:** It contains the messages, which are ready to be sent.
- (v) **Trash:** It contains deleted messages.
- (vi) **Spam:** It contains junk e-mails.

Q 3. What do you understand by video conferencing? Also explain its advantages and disadvantages.

Ans. Video Conferencing lets two or more people communicate with each other via audio and video transmission, in any part of the world. Computer networks are used to send audio and video data around the world. Business meetings, conferences, educational trainings, and much more, can be done easily using video conferencing. TeamViewer, Skype, AnyMeeting are some examples of video conferencing softwares.

Advantages:

- (i) There is no need to spend time and money travelling to meetings.
- (ii) Ideas and knowledge can be communicated between all those at the meeting very quickly and responses gathered.

Disadvantages:

- (i) A high bandwidth communication link is required to transmit and receive high quality images.
- (ii) If the hardware breaks down for any of the participants, they cannot attend the meeting.

Q 4. What is e-learning? Mention any two main benefits of e-learning with respect to the use of information technology. (CBSE QP 2021-22)

Ans. Learning with the help of electronic resources like computers, tablets, smart phone, internet, etc., is known as e-learning.

Advantages of e-learning are:

- (i) It is time saving as well as removes the distance barrier between learner and teacher.
- (ii) It has quicker delivery cycle times than traditional classroom-based instruction.
- (iii) It is less expensive to set up an e-learning environment.



Q 5. Write three advantages and three disadvantages of e-shopping.

Ans. Advantages of e-shopping:

- (i) Finding a product online is much easier than looking for it in the local store.
- (ii) Most of the stores provide money back guarantee.
- (iii) If we do not find any product within our country then we can shop online from an international store.

Disadvantages of e-shopping:

- (i) The customers might be worried as to the similarity of the product being ordered and the product being received.
- (ii) We have to wait for delivery.
- (iii) We may be a victim of online fraud.

Q 6. What do you understand by e-group? Also explain its advantages and disadvantages.

Ans. E-group is a term that refers to an online group of people who interact with each other. It allows members of the group to create, post, comment and read posts sent in the group. E-group is a kind of virtual community.

Advantages of e-group:

- (i) E-groups are accessible 24x7 anywhere, as long as there is an Internet connection.
- (ii) Unlike verbal communication, online discussions can be revisited and can be stored for a long time.

Disadvantages of e-group:

- (i) Face-to-face interaction is missing.
- (ii) Some members of e-groups prefer to learn on their own and not participate in discussions.

Q 7. Write a note on mobile technology.

Ans. Mobile technology is a system that is mostly used for cellular communication and other various applications. Mobile technology has evolved from simple devices used for phone calls and messaging into multi-tasking devices like smartphones which are used for GPS navigation, Internet browsing, gaming, instant messaging tools, etc. The diversity of mobile technology is due to the fact that many mobile operating systems are available for smartphones and other mobile devices. All the operating systems have their own uses and unique characteristics.

Q 8. Explain any two differences between 3G and 4G mobile technologies.

Ans. The two differences between 3G and 4G mobile technologies are the speed:

S.No.	3G	4G
(i)	3G, the 3rd generation of wireless mobile telecommunications tech.	4G is the 4th generation of broadband cellular network technology, succeeding 3G.
(ii)	A typical 3G phone can download files at a maximum speed of up to 21 Mbps.	4G phone can download files at speeds of upto 1GBps.

Q 9. What is search engine? What is its usage? Give example.

OR

What is a search engine? Give example of any one search engine.

Ans. A search engine is a website that lets us search the Internet for Websites on specific topics. Search engines turn the Web into a powerful tool for finding information on any topic. There are several benefits of using search engine like, Search engine provides a wealth of information for professional and personal use, e.g., Google.

Q 10. Mention the services which are provided by transactional category of an e-banking.

Ans. Services provided are as follows:

- (i) There are no geographical barriers and the services that can be offered at a minimum cost.
- (ii) Through Internet banking, we can check our transactions at any time and as many times as we want to.
- (iii) If the fund transfer has to be made outstation, where the bank does not have a branch, the bank would demand outstation charges, whereas with the help of online banking, it will be absolutely free for us.
- (iv) Internet banking deploys the Internet as a medium for financial transaction.

For example: A customer login to his or her bank account by accessing the bank website.

Q 11. What do you mean by e-shopping? Give three advantages of it.

Ans. E-shopping or online shopping is the process of buying goods and services from merchants who sell their products on Internet.

Advantages of e-shopping:

- (i) Finding a product online is much more easier than looking for it in the local store.
- (ii) Now-a-days online shopping is very reliable.
- (iii) Most of the stores provide money back guarantee.
- (iv) We have infinite options to choose a product.

Q 12. What is e-mail? Mention any two advantages of using e-mail.

Ans. E - mail or electronic mail is an electronic exchange of message from one computer to another. It has many advantages, some of them are speed, cost, content capacity, etc.

Advantages of e-mail:

(i) Speed: An e-mail is the fastest way of correspondence than an ordinary post. A message can reach any part of the world in a fraction of second through an E-mail.

(ii) Content: The message we want to send via e-mail may consists of only a few lines or several hundred lines of text. Unlike the postal service, the message is not charged by the weight.

? Long Answer

Type Questions

Q 1. How can you send an e-mail?

Ans. The steps to send an e-mail are as follows:

Step 1: Sign in to the e-mail account.

Step 2: After signing in, on the top left of the browser window, select compose. This will open a new window wherein we can start writing the mail.

Step 3: The following columns need to be filled before we begin:

(i) To: Fill the e-mail address of the recipient.

(ii) Cc (Carbon copy): Type the e-mail address of the people we want to send a copy of our e-mail to. This feature is used to share a particular message with a large number of people.

(iii) Bcc (Blind carbon copy): If we want to keep somebody invisible from all the other recipients of our message, then his or her e-mail address will be typed here.

(iv) Subject: The main idea or purpose behind the message is written here.

Step 4: After filling these fields, we can start typing our message in the blank area.

Step 5: After finishing, click on the send option to send the e-mail. A copy of each message we send is saved in the **sent** folder.

Q 2. What is e-learning? Explain in detail.

Ans. E-learning is the term used to explain the scenario where teaching-learning process takes place online using the Internet and communication technology. E-learning is the use of technology

to enable people to learn anytime and anywhere. E-learning can include training, delivery of just-in-time information and guidance from experts. It may also offer courses, learning materials, online exams and practice exercises, live online classes, etc. In case of e-learning, physical interaction between students and teachers is not required, rather they interact online.

There are various websites that offer e-learning. For example, www.w3schools.com is a website that provides tutorial and certification courses for learning HTML and XML, CSS, etc.

This website helps us brush up our web development skills. It offers step by step guided tutorials supplemented with examples that can run online, along with reference materials.

Q 3. Discuss a few disadvantages of e-shopping.

Ans. Some disadvantages of e-shopping are listed below:

(i) Lack of proper inventory management may result in delays in shipment.

(ii) Lack of touch-feel-try creates concern over the quality of the product on offer. Many people do not find online shopping suitable for clothes as they cannot try them on.

(iii) Physical stores allow price negotiations between buyer and the seller. This is not available in case of online shopping.

(iv) A customer has to buy a product without actually seeing how it looks like. The electronic images of a product are sometimes misleading. The colour and appearance in real may not match with the electronic images.

(v) Sometimes, a shopping site may cheat people and shut down.

In addition to the above, online payments are not much secured. The rate of cyber crimes has been increasing, and customers' credit card details and bank details have been misused which raise privacy issues. Customers have to be careful in revealing their personal information.

Q 4. What is e-governance? Explain its types of interactions in e-governance. Also explain its advantages and disadvantages.

Ans. E-governance or electronic governance can be defined as use of information and communication technology by government sectors to enhance the range, quality of services and information provided to the citizens in a cost-effective manner.

Types of interactions in e-governance:

(i) G2G (Government to Government): When the exchange of information and services is within the periphery of the government, it is termed as G2G interaction.

- (ii) **G2C (Government to Citizen):** The interaction between the government and general public is called G2C interaction. Here, an interface is set up between government and citizens, which enables citizens to get access to a wide variety of public services.
- (iii) **G2B (Government to Business):** In this case, e-governance helps the business class to interact with the government.
- (iv) **G2E (Government to Employees):** The government of any country is the biggest employer and so it also deals with employees on a regular basis, as other employers do.

Advantages of e-governance:

- (i) The main advantage of e-governance is that it will be able to improve the efficiency of the current system. This will eventually result in saving time and money.
- (ii) E-governance also offers efficiency, improved services, better accessibility of public services and more transparency and accountability.

Disadvantages of e-governance:

- (i) Cyber-attacks are also a matter of concern in case of e-governance.
- (ii) Managing and maintaining e-governance is an expensive task.

Q 5. Explain mobile technology with advantages and disadvantages.

Ans. Mobile technology is indispensable in the modern workplace. Due to its versatility, it offers a range of benefits, but also comes with considerable risks to the business. It is essential to consider both advantages and disadvantages of using mobile technology in business.

Example of Mobile IT devices include:

- (i) Laptop, tablets and notebook computers.
- (ii) Smartphones.
- (iii) Global Positioning System (GPS) device.
- (iv) Wireless debit/credit card payment terminals.

Advantages:

- (i) Higher efficiency and productivity of staff.
- (ii) Ability to accept payments wirelessly.
- (iii) Improved network capabilities.
- (iv) Quality and flexibility of services offered to customers.

Disadvantages:

- (i) **Cost:** New technologies and devices are often costly to purchase and require ongoing maintenance and upkeep.
- (ii) **Increased IT Security Needs:** Portable devices are vulnerable to security risks, especially if they contain sensitive or critical business data.

Q 6. Answer the following questions:

- (i) **What is GSM?**
- (ii) **What is the difference between 3G and 4G?**
- (iii) **What is an inbox?**
- (iv) **What do you mean by the term indexing?**
- (v) **What is the method of viewing the source code of the current page in web browser?**

- Ans.**
- (i) GSM stands for Global System for Mobile Communications, a technique that uses TDMA which allows 8 simultaneous calls on the same radio frequency.
 - (ii) The speed of 4G is about 10 times faster than 3G.
 - (iii) An inbox is like a postal mailbox that is placed outside our house. Like postal mailbox that stores postal mails that comes to us, inbox stores e-mails that we receive.
 - (iv) After completing the process of crawling, the Bot stores the page in the search engine's database. This process is referred to as indexing.
 - (v) To see the source code, right-click on the web page and then click on the View Source option.

Q 7. When using a search engine to search, then would you use quotation marks around search terms?

Ans. Quotation marks should be used around a phrase or search terms due to the following reasons:

- (i) Surrounding terms with quotation marks limit the search results to only those web pages that contain the exact phrase, we have specified.
- (ii) Doing this ensures that, the concept will be searched for as a whole and not picked apart by the search engine or we can say, without the quotation marks, the results will include any page that contains the words we have used regardless of what order those words are in.

For example: Typing death penalty without quotation marks could potentially retrieve all items that mention death, all items that mention penalty as well as the items about death penalty. This could lead to results that seem to have nothing to do with our topic. For best results, we should write "death penalty".

Q 8. Transferring files through e-mail is restricted due to file size. Justify.

Ans. The given statement can be justified as:

- (i) Over the Internet, a message will often pass through several mail transfer agents to reach the recipients. Each of these has to store the message before forwarding it on and many therefore, need to impose size limits.
- (ii) The result is that while large attachments may internally send within an organisation, they are unreliable when sending across Internet.

For example: In general, 10 MB is considered safe for the maximum size of an e-mail but, Google's Gmail service increased its limit to 25 MB.

Q 9. List some advantages and disadvantages of an e-mail.

Ans. Advantages of E-mail are as follows:

- (i) **Low Cost:** We can send the e-mail to other person at a very low cost. It requires only Internet connection cost to send the e-mail.
- (ii) **Speed:** E-mail can be send at a very high speed.
- (ii) **Waste Reduction:** E-mail goes a long way towards reducing the cluster of papers in the modern office, not to mention saving many trees.

(iv) **Ease of Use:** It is easy to send an e-mail as compared to traditional letter.

Disadvantages of e-mail are as follows:

- (i) **Hardware Requirement:** We need a computer to read or print e-mail.
- (iii) **Impermanent:** Your send mail messages can be altered in all the ways.
- (iii) **A Hasty Medium:** It is a limitation because e-mail is so easy to use, it is also easy to send a message that we later regret.
- (iv) **Hard to Convey Emotions:** Without the extra clues of voice, posture and expression, it is easy to understand what someone really means in a message.

CHAPTER TEST

Multiple Choice Questions

- Q 1. IRC stands for
- a. Internet Relay Chat
 - b. Intranet Relay Chat
 - c. International Relay Chat
 - d. International Relay Chatting
- Q 2. You cannot send more than MB of files in an e-mail.
- a. 35 MB
 - b. 15 MB
 - c. 20 MB
 - d. 25 MB
- Q 3. Inbox consists of all e-mails.
- a. spam
 - b. received
 - c. outgoing
 - d. All of these
- Q 4. allows face-to-face conversation with many persons simultaneously over Internet.
- a. Video conferencing
 - b. E-learning
 - c. Mobile technology
 - d. E-shopping
- Q 5. uses standard communication protocols to enable mobile devices to exchange short text messages.
- a. MIMS
 - b. SIM
 - c. SMTP
 - d. SMS

Fill in the Blanks

- Q 6. Inbox consists of all e-mails.
- Q 7. allows face to face conversation with many persons simultaneously over internet.
- Q 8. Amazon is a site.

Assertion and Reason Type Questions

Directions (Q. Nos. 9-11): 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 (A) and (R) are true and (R) is the correct explanation of (A).

- b. Both (A) and (R) are true, but (R) is not correct explanation of (A).
- c. (A) is true, but (R) is false.
- d. (A) is false, but (R) is true.

Q 9. **Assertion (A):** A communication service over the Internet which allows an instant transmission of text-based messages from the sender to receiver is known as instant messaging.

Reason (R): ICQ is a system for chatting that involves a set of rules, conventions and client/server software.

Q 10. **Assertion (A):** You can share images, text, video and many other things and may send and receive both text and video messages by using skype.

Reason (R): Skype is an online application that provides video chat and voice call services.

Q 11. **Assertion (A):** E-learning is the term used to explain the scenario where teaching-learning process takes place online using the Internet and communication technology.

Reason (R): E-shopping services provided by almost each and every bank today enables clients to access their bank accounts and carry out online banking services, 24 hours a day, 7 days a week.

Case Study Based Questions

Q 12. Read the given passage carefully and answer the following questions:

E-business: It is commonly known as electronic or online business is a business where an online transaction takes place. In this transaction process, the buyer and the seller do not engage personally, but the sale happens through the Internet. In 1996, Intel's marketing and Internet team coined the term 'e-business'.

E-commerce stands for Electronic Commerce and is a process through which an individual can buy, sell, deal, order and pay for the products and services over the Internet. In this kind of transaction, the seller does not have to face the buyer to communicate. Few examples of e-commerce are online shopping, online ticket booking, online banking, social networking, etc.

(i) Which of the following describes e-commerce?

- a. Doing business
- b. Sale of goods
- c. Doing business electronically
- d. All of the above

(ii) Which of the following is not a major type of e-commerce?

- a. C2B b. B2C c. B2B d. C2C

(iii) Which of the following is not considered to be one of the three phrases of e-commerce?

- a. Innovation b. Consolidation
- c. Preservation d. Reinvention

(iv) Which segment do eBay and Amazon belong to?

- a. B2B b. B2C c. C2B d. C2C

(v) The primary source of financing during the early years of e-commerce was

- a. bank loans
- b. large retail firms
- c. venture capital funds
- d. initial public offerings

(vi) The best products to sell in B2C e-commerce are:

- a. small products b. digital products
- c. specialty products d. fresh products

(vii) Which of the following is not a key element of a business model?

- a. Value proposition
- b. Competitive advantage
- c. Market strategy
- d. Universal standards

Q 13. Read the given passage carefully and answer the following questions:

Search Engines allow us to filter the tons of information available on the Internet and get the most accurate results. And while most people don't pay too much attention to search engines, they immensely contribute to the accuracy of results and the experience you enjoy while scouring through the Internet.

Besides being the most popular search engine covering over 90% of the worldwide market, Google boasts outstanding features that make it the best search engine in the market. It boasts cutting-edge algorithms, easy-to-use interface, and personalized user experience. The platform is renowned for continually updating its search engine results and features to give users the best experience.

(i) Define search engine.

(ii) We get a list of sites after typing a word in search bar. What is this word?

(iii) The search results are shown in a line of results. What are these called?

(iv) What type of information search engines are able to search?

(v) With the help of what search engines store information about web pages?

(vi) What is the other name of web crawler?

(vii) What do you mean by the term SEO?

Very Short Answer Type Questions

Q 14. How is newsgroup different from e-mail messages?

Q 15. Give examples of two e-learning sites.

Q 16. What is Telnet?

Q 17. What is FTP?

Short Answer Type-I Questions

Q 18. Differentiate between e-mail and video conferencing.

Q 19. How is video conferencing different from chatting?

Short Answer Type-II Questions

Q 20. Explain the following features of an e-mail program:

- (i) Inbox, (ii) Draft, (iii) Sent.

Q 21. What is a search engine? Give few examples of search engine.

Long Answer Type Questions

Q 22. Discuss the structure of an e-mail message.

Q 23. Write short notes on the following terms:

- (i) Information retrieval
- (ii) E-banking
- (iii) Online shopping
- (iv) E-reservation
- (v) E-groups