

NCERT Solutions for 10th Class Foundation of Information Technology -National Council Of Educational Research Internet Basics







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NCERT Solutions for 10th Class Foundation of Information Technology – Internet Basics

Class 10: Internet Basics solutions. Complete Class 10 Internet Basics Notes.

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Question 1. Why is Internet is so popular? CBSE 2004



Answer: Due to its extensible use and sharing of data, Internet becomes so popular.

Question 2. Mention any two major uses of Internet. CBSE 2003

Answer: The two major uses of Internet are as follows:

- 1. For the students and educational purposes, Internet is widely used to gather information so as to do the research.
- 2. We can send/receive the mail all over the world.

Question 3. Write two advantages of using Internet. CBSE 2006

Answer: Advantages of using Internet are as follows:

- 1. It is used for communication, entertainment, searching information and for providing many types of services.
- 2. It provides the facility of E-mail.

Question 4. Name the protocol, which helps you to communicate between a Web server and a Web browser.

Answer: HTTP

Question 5. Write the name of any two Internet Service Provider(ISP) in India. CBSE 2004,02

Answer: MTNL and Airtel.

Question 6. Name any two ways of wireless connections of Internet.

Answer: Wi-Fi and WiMax.

Question 7. Name any two Internet protocols used by Web.

Answer: HTTP and FTP.





Question 8. Name any five DSL broadband service providers in India.

Answer: BSNL, Airtel, Reliance, MTNL and Tata Indicom.

Question 9. What can a user do with WWW?

Answer: Using WWW, a user can download files, listen to music view video files and jump to other documents or websites by using hypertext links.

Question 10. Name any two major services provided by Internet.

Answer: E-mail and WWW.

Question 11. Can we use URL to access a Web page? How?

Answer: Yes, as a location on a Web server, which is called a Website and each Website has a unique address known as URL. So, an URL can be used to access a Web page.

Question 12. Which language is helpful to create Web pages?

Answer: HTML is used for designing Web page.

Question 13. Mr. Lai owns a factory which manufactures automobile spare parts. Suggest him the advantages of having a Web page for his factory.

Answer: The Web page provides the information to the clients about his factory of spare parts. Moreover, he can receive the order on the Internet from the clients using the Web page.

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Question 14. Write the relationship between a Website and a Webserver.





Answer: Web server is a computer on which a Website is hosted.

Question 15. Write the Web extensions (top level domain names) given to a Websites of the following types of organisations. CBSE 2008

- 1. educational
- 2. government

Answer:

- 1. .edu
- 2. .gov

Question 16. Write Web extensions given to sites of the following types of organisations. CBSE 2007

- 1. network organisation
- 2. government agencies

Answer:

- 1. .net
- 2. .gov

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Question 17. Name two Web browsers of Internet.

Answer: Internet Explorer and Google Chrome.

Question 18. Identify Web addresses and E-mail addresses from the following CBSE 2009

- 1. www.scrapbook.com
- 2. aba@scrapbook.com
- 3. www.countrywide.co.in





4. 123@hotshot.co.in

Answer:

- 1. and
- 2. and
- 3. are Web address
- 4. are E-mail address

Question 19. Expand the following Web extensions using with Web addresses.

- 1. .org
- 2. .in

Answer:

- 1. Organisation
- 2. India

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Question 20. Write any two Web extensions used with Web addresses.

Answer: .org and .com

Question 21. Identify Web addresses and E-mail addresses from the following CBSE 2009

- 1. www.kool.com
- 2. Raga100@rediffmail.com
- 3. www.hotspider.co.in
- 4. 123hotshot@elixir.co.in

Answer:

and





- 2. Web address
- 3. and
- 4. E-mail address

Question 22. What is URL?

Answer: URL means Uniform Resource Locator. It is a full unique address of a Web page on the Internet. It specifies the Internet address of a file stored on a host computer connected to the Internet.

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Short Answer Type Questions [2 & 3 Marks each]

Question 1. How did the Internet begin?

Answer: The Internet has gained popularity and emerged as an important and efficient means of communication. The term Internet is derived from the words 'interconnection' and 'networks'. A network is a collection of two or more computers, which are connected together to share information and resources. The Internet is a worldwide system of computer networks, i.e. network of networks. Through Internet, computers become able to exchange information with each other and find diverse perspective on issues from a global audience. Most of the people uses Internet for sending and receiving E-mail and net surfing for retrieving information.

Question 2. Many organisations use both Internet and Intranet. Give some differences between Intranet and Internet.

Answer: Differences between Intranet and Internet are as follows:

- 1. Internet is a Wide Area Network (WAN), while Intranet is a Local Area Network (LAN).
- 2. Greater amount of information is available on Internet, while on Intranet specific amount of information is available.





Internet is not safe as Intranet can be safely privatised as per the need.

Question 3. Write three disadvantages of using Internet.

Answer: The three disadvantages of using Internet are as follows:

- 1. Cyber frauds
- 2. Information misuse
- 3. Computer virus circulation

Question 4. How do Internet help us?

Answer: Internet can be useful for us in following ways:

- 1. Allows organisations to advertise their products.
- 2. Provides information.
- 3. Easily communicate with other people.
- 4. Save paper as we can publish documents on the Internet.

Question 5. What is MODEM? CBSE 2006

Answer: MODEM stands for MOdulator/DEModulator. It is a hardware device that enables a computer to send and receive information over telephone lines by converting the digital data used by your computer into an analog signal used on telephone lines and the converting back once received on the other end.

Question 6. Define home page. Give two advantages of home page.

Answer: A home page is the first page of a Website.

The two advantages of home page are as follows:

- 1. It helps viewers to find out what they can find on that site.
- 2. Publicity of an individual or community.





Question 7. Write a note on IP address and give its characteristics.

Answer: Internet internally follows number based addressing system. Numeric address of a computer is called IP address by a scheme called Domain Name System (DNS). The IP address consists of four numbers from 0 to 255, separated by dots.

The characteristics of an IP address are as follows:

- 1. IP addresses are unique.
- 2. IP addresses are global and standardised.

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Question 8. How do you differentiate between a Web address and an E-mail address?

Answer: The basic differences between a Web address and an E-mail address are as follows:

- 1. E-mail address is a network address whereas Web address is the Internet address.
- 2. An E-mail address always contains the 'at the rate' sign (@) whereas, a Web address never does.

Question 9. What is the significance of HTTP?

Answer: HTTP is a protocol used on Internet. It works in combination with WWW. It allows us to access hypertext documents on WWW. Since, WWW allows us to access or use multimedia files on the Internet and the hypertext files support multimedia.

Long Answer Type Questions [5 Marks each]

Question 1. Why is Internet called 'Network of Networks'?





Answer:

- Internet is called 'Network of Networks' because it is global network
 of computers that are linked together by cables and telephone lines
 making communication possible among them. It can be defined as a
 global network over a million of smaller heterogeneous computer
 networks.
- The network which consists of thousands of networks spanning the entire globe is known as Internet.
- The Internet is a world wide collection of networked computers, which are able to exchange information with each other very quickly.
- Mostly people use the Internet in two ways, E-mail and World Wide Web. In Internet, most computers are not connected directly, they are connected to smaller networks, which in turn are connected through gateways to the Internet backbone.
- A gateway is a device that connects dissimilar networks. A backbone is central interconnecting structure that connects one or more networks.

Question 2. What is DNS and also explain its functions? CBSE 2013

Answer: DNS stands for Domain Name System. It is a hierarchical distributed naming system for computers, services or any resources connected to the Internet or a private network. It associates various information with domain names assigned to each of the participating entities.

The different functions of DNS are as follows:

- It translates meaningful domain names into the numerical IP addresses, which is needed for the purpose of locating computer services and devices world wide.
- It serves as the phone book for the Internet by translating human friendly computer host names into IP addresses.





- The DNS can be quickly updated, allowing a service's location on the network to change without affecting the end users.
- It distributes the responsibility of assigning domain names and mapping those names to IP addresses by designating authoritative names servers for each domain.
- It also specifies the technical functionality of database service. It defines the DNS protocol, a detailed specification of the data structure and data communication exchanges used in DNS, as part of the Internet Protocol Suite (IPS).

Question 3. Give an example of E-mail address and explain each part of it.

Answer: The example of an E-mail address is abc@gmail.com.

The format of E-mail address is username@hostname or domain name. So, as per the above example of E-mail address abc is the username and gmail.com is the name of hosting server or host (domain) name. Thus, we can say that E-mail address has two parts separated by symbol.

- 1. **Username:** On the left side of separator @ is the user name. A user name cannot have blanks.
- 2. **Domain name for the host server:** The portion to the right of @ identifies the server or host network that services your E-mail. It is also known as E-mail server.

Application Oriented Questions

Question 1. Read the following paragraph. Find six network and communication related abbreviations and give their expanded form alongwith a single-line definition of each of them. CBSE 2011

The RBI is planning to expand its connectivity with all major banks of India. The plan includes providing TCP connectivity through HTTP for easy access points and seeks help from some ISPs to join hands in this venture. https://www.indcareer.com/schools/ncert-solutions-for-10th-class-foundation-of-information-tech-nology-internet-basics/





Also, there is a plan to set-up IIS and SMTP servers. Some banks will go for ADSL line while others will use leased line connectivity to access these services.

The RBI is also taking help of IIT professors in this venture.

Answer: Six network and communication related abbreviations are as follows:

- 1. **TCP** (Transmission Control Protocol) A protocol developed for the Internet to get information from one network device to another.
- 2. **HTTP** (HyperText Transfer Protocol) A protocol that transmits hypertext over networks. This is the protocol of the Web.
- 3. **ISP** (Internet Service Provider) An organisation that provides access to the Internet through various connectivity methods.
- 4. **IIS** (Internet Information Server) It is a Microsoft proprietary Web server software.
- 5. **SMTP** (Simple Mail Transfer Protocol) It distributes E-mail messages and attached files to one or more electronic mail boxes.
- 6. **ADSL** (Asymmetrical Digital Subscriber Line) A data communication technology that enables faster data transmission over copper telephone lines than a conventional voice band modem can provide.

Question 2. The following sentences describe the term Web browser.

Web browsers are programs used to explore the (1) A Web
browser is an interface that helps a computer user gain access to all the
content that is on the Internet and the hard disk of the computer. It can view
(2), text documents, audio and video files, games etc. More than
one (3) can also be installed on a single computer. The user can
navigate through files, folders and (4) with the help of a browser.
When the browser is used for browsing (5), the pages may
contain certain links which can be opened in a new browser. Multiple tabs





and windows of the same browser can also be opened. An example of Web browser is **(6)**

Fill in the blanks with words from the list given below:

Internet, TCP, Images, Web browser, Photos, Websites, SMTP, Web pages, Google Chrome

Answer:

- 1. Internet
- 2. Images
- 3. Web browser
- 4. Websites
- 5. Web pages
- 6. Google Chrome

Question 3. Laluma Chakradhar wants a broadband connection to access her mails and stay informed about the latest happening in the field of Biotechnology. Can you suggest two Internet Service Providers (ISPs) of India to be approached for the same? CBSE 2011

Answer: BSNL and Airtel

Multiple Choice Questions [1 Mark each]

Question 1. What can you do with the Internet? CBSE 2011

- (a) Exchange information with friends and colleagues
- (b) Access pictures, sounds, video clips and other media elements
- (c) Find diverse perspective on issues from a global audience
- (d) Internet exchange information, access pictures, find diverse perspective on issue from a global audience.





Answer: (d) Internet exchange information, access pictures, find diverse perspective on issues from a global audience.

Question 2. Each computer connected to the Internet must

- (a) be-a pentium machine
- (b) have an unique IP address
- (c) have a Web browser
- (d) have a modem connection

Answer: (b) Each computer connected to the Internet must have an unique IP address.

Question 3. A set of rules that governs data communication is

- (a) protocol
- (b) information
- (c) HTML
- (d) E-mail

Answer: (a) A protocol is a set of rules that governs the communication between computers on a network.

Question 4. Which communication protocol is used by Internet?

- (a) TCP/IP
- (b) WWW
- (c) HTML
- (d) W3C





Answer: (a) TCP/IP manages the transmission of uata/file document on the Internet.

Question 5. Which part of TCP/IP is responsible for dividing a file or message into very small parts, at the source computer?

- (a) TCP
- (b) IP
- (c) Both (a) and (b)
- (d) None of these

Answer: (a) TCP part breaks the messages into smaller packets that are transmitted over the Internet.

Question 6. In Internet Protocol (IP), data is organised in the form of

- (a) bundles
- (b) packets
- (c) switches
- (d) parts

Answer: (b) IP has the task of delivering packets from the source host to the destination host.

Question 7. Internet E-mail is based on standards known as

- (a) protocols
- (b) networks
- (c) Both (a) and (b)





(d) hardware

Answer: (a) Internet uses all its services like E-mail service through standard protocols.

Question 8. To joint the Internet, the computer has to be connected to a

- (a) Internet architecture board
- (b) Internet society
- (c) Internet service provider
- (d) None of the above

Answer: (c) Internet service provider is used to joint the Internet.

Question 9. The first network was

- (a) ARPANET
- (b) Internet
- (c) NSFnet
- (d) NET

Answer: (a) The Advanced Research Projects Agency NETwork (ARPANET) was the world's first operational packet switching network.

Question 10. Digital information is converted into analog information by the modem at CBSE 2011

- (a) destination computer
- (b) source computer





- (c) Both (a) and (b)
- (d) Neither (a) nor (b)

Answer: (b) Digital information is converted into analog information by modem at source computer.

Question 11. An organisation responsible for providing Internet services to customer is commonly known as

- (a) Government
- (b) ISP
- (c) TCP/IP
- (d) HTTP

Answer: (b) ISP are the companies that register themselves under the government domain according to the copyright law.

Question 12. Nick connects to the Internet at home using a laptop computer with a wireless connection. Nick is going to change to a desktop computer using a 1 Gbps ethernet cable connection.

Which of these should be the result of making the changes?

- (a) Increased portability and decreased speed.
- (b) Decreased portability and increased speed.
- (c) Increased portability and increased speed.
- (d) Decreased portability and decreased speed.

Answer: (b) Decreased portability and increased speed will be the result.

Question 13. Combination of multimedia and hyperlink is called https://www.indcareer.com/schools/ncert-solutions-for-10th-class-foundation-of-information-tech-nology-internet-basics/





- (a) hypermedia
- (b) E-mail
- (c) hypertext
- (d) None of these

Answer: (c) Hypertext refers to the combination of text, graphic images, audio and video tracks and hyperlinks.

Question 14. In URL, http://www.cbse.coin/index.htm, which component identifies the path of a Web page?

- (a) http
- (b) www.cbse.com
- (c) /index.htm
- (d) All of these

Answer: (c) /index.htm, because path name identifies the path of a Web page.

Question 15. A collection of Web pages linked together in a random order is CBSE 2014

- (a) a Website
- (b) a Web server
- (c) a search engine
- (d) a Web browser

Answer: (a) A Website is a collection of Web pages linked together in a random order and displays related information on a specific topic.





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Question 16. In URL, http://www.cbse.com/index.htm, which component identifies the Website?

- (a) http
- (b) www.cbse.com
- (c) /index.htm
- (d) All of these

Answer: (b) www.cbse.com, because domain name identifies the Website.

Question 17. Home page helps viewers to find out what they can find on the particular site? Home page is the

- (a) first page of a Website
- (b) index page
- (c) about page
- (d) None of these

Answer: (a) Home page refers to the initial or main or first Web page of a Website, sometimes called the front page.

Question 18. is an example of text-based browser, which provides access to the Internet in the text-only mode.

- (a) Mozilla Firefox
- (b) Lynx
- (c) Internet Explorer





(d) All of these

Answer: (b) Lynx is a highly configurable text-based Web browser.

Question 19. Which client software is used to request and display Web pages?

- (a) Web server
- (b) Multimedia
- (c) FTP
- (d) Web browser

Answer: (d) A Web browser is a program that your computer runs to communicate with Web servers on the Internet, which enables you to download and display the Web pages that you request.

Question 20. Google Chrome is an example of

- (a) Web browser
- (b) Web server
- (c) HTTP
- (d) WWW

Answer: (a) Web browser is the program that is used to explore the Internet. Thus, Google Chrome is an example of Web browser.

Question 21. Programs that ask servers for services are called

- (a) users
- (b) hosts





- (c) clients
- (d) programs

Answer: (c) In client server model, client is a piece of hardware/software that ask servers for services.

Question 22. A Web page is located using a

- (a) Universal Record Linking
- (b) Uniform Resource Locator
- (c) Universal Record Locator
- (d) Uniformly Reachable Links

Answer: (b) URL (Uniform Resource Locator) specifies the location of a specific Web page on the Internet.

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Question 23. Kirti, a student, has written some points about Web pages and URL. CBSE 2015

- 1. Which of the following statements are true about Web pages?
 - (a) You cannot E-mail a link of Web page.
 - (b) You cannot create a Web page.
 - (c) Web pages are written in HTML.
 - (d) Web pages are viewed through browser.
- 2. Which of the following statements are true about URL?
 - (a) URL means Uniform Resource Locator.
 - (b) You can enter URL into address bar.
 - (c) An example of URL is we@fg.com.
 - (d) It is not necessary for URL to be unique.





Answer: 1. (c) and (d) 2. (a) and (b)

Question 24. An IP address is a string of numbers separated by periods. CBSE 2011

- (a) 3
- (b) 4
- (c) 2
- (d) 5

Answer: (b) An IP address consists of 4 numbers separated by periods.

Question 25. Domain names always have two or more parts, separated by

- (a) commas
- (b) periods (called dots)
- (c) semicolon
- (d) None of these

Answer: (b) A domain name is a hierarchical series of character strings representing different levels of domains separated by dot/period.

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Question 26. A domain name ending with .org belongs to

- (a) an educational institution
- (b) an organisation
- (c) a site that is highly organised





(d) a commercial Website

Answer: (b) On the Internet, all Websites owned and operated by an organisation are part of the .org domain.

Question 27. IP addresses are converted into CBSE 2013

- (a) a binary string
- (b) alphanumeric string
- (c) a hierarchy of domain names
- (d) a hexadecimal string

Answer: (c) DNS translates domain names into their IP addresses and vice-versa.

Question 28. In all computers on the Internet, owned and operated by education institution form part of the

- (a) .com domain
- (b) .edu domain
- (c) .mil domain
- (d) .org domain

Answer: (b) The domain name edu provides domain registration at no cost to educational institutions.

Question 29. Which of these services will not be provided by a typical Internet Service Provider (ISP)?

- (a) An E-mail address
- (b) Modem





- (c) A connection to the Internet
- (d) Technical help

Answer: (a) ISP refers to a company that provides Internet services, modem, connection and technical help. It does not provide an E-mail address.

Question 30. A blog consists of

- (a) images
- (b) text
- (c) links
- (d) All of these

Answer: (d) A blog consists of images, text and links.

Question 31. Online discussion through posts about various topics is called

- (a) E-Discussion
- (b) Newsgroup
- (c) E-mail
- (d) Chat

Answer: (b) Newsgroup helps for online discussion.

Question 32. On Internet, to go to other Web page through button, the user should use CCE 2012

(a) Search tools





- (b) Find and replace
- (c) Search engine
- (d) hyperlink

Answer: (d) On Internet, to go to other Web page available through button, the user should use hyperlinks.

Question 33. HTML is a markup language for describing Web document. HTML uses

- (a) pre-specified tags
- (b) user defined tags
- (c) tags only for linking
- (d) fixed tags defined by the language

Answer: (d) HTML uses fixed tags defined by the language.

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Fill in the Blanks

Q1. Internet is a network of CBSE 2011

Answer: networks

Q2. In Internet, is responsible for handling the address of destination computer.

Answer: Internet protocol

Q3. A is a temporary connection that uses the Public Switched Telephone Network (PSTN) to connect to the Internet.





Answer: dial-up connection **Q4.** allows delivery of voice communications over IP networks. **Answer: VolP** Q5. In WWW a client is called and a server is called Answer: Web browser, Web server **Q6.** Web pages on a site are linked together through a system of **Answer:** hyperlinks **Q7.** Safari is a Web browser developed by **Answer:** Apple **Q8.** is a computer program that provides services to other computer programs. **Answer:** Server **Q9.** refers to the amount of data that a signal or a circuit can carry. CBSE 2013 **Answer:** Bandwidth Q10. The address of location of the document on WWW is called **Answer: URL Q11.** The character based naming system by which server are identified is known as CBSE 2013 **Answer:** domain name system Q12. Abc@mnc.co.in represents an





Answer: E-mail address

Q13. Blogging is the act of posting content on a

Answer: blog

Q14. The bulletin board which produces news over Internet is known as

.

Answer: Newsgroup

Q15. In URL http://www.cbse.nic.in/ is a protocol.

Answer: http

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True or Folse

Q1. TCP helps in converting the digital signal to analog signal and vice-versa.

Answer: False The process of converting digital signal into analog signal is called modulation and is done by a modem.

Q2. WWW is an Internet service.

Answer: True The World Wide Web (WWW) is a set of programs, standards and protocols that allows the multimedia and hypertext files to be created, displayed and linked on the Internet.

Q3. Web pages and Websites are same.

Answer: False Website is the collection of Web pages .

Q4. Website can be accessed by URL.





Answer: True Each Website is accessed by its own address known as URL.

Q5. Home page is the server page of a Website.

Answer: False Home page is the first Web page of a Website. When a Website is opened, its home page is displayed.

Q6. Firefox is a Web server.

Answer: False Firefox is a Web browser.

Q7. URL is an Internet machine.

Answer: False L'RL is the Web address for a Website or a Web page.

Q8. IP address is given to every computer for its unique identification.

Answer: True An IP address serves two principal functions:

1. Host or network interface identification

2. Location addressing

Q9. Domain name .mil describes military address.

Answer: True It is according to domain names.

Q10. .edu is an education domain.

Answer: True .edu is a top level domain for education.

Q11. HTML is used to create Web pages.

Answer: True HTML is a markup language which is used to create Web pages.

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Chapterwise NCERT Solutions for Class 10 Foundation of Information Technology:

- Internet Basics
- Internet Services
- <u>Database Concepts</u>
- Microsoft Access
- HTML (HyperText Markup Language)
- Inserting Images and Links in HTML
- Working with Tables in HTML
- Introduction to XML
- Societal Impacts of IT





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