c. Antonyms

Choose the word that is most nearly opposite in meaning to the word in capital letters.

1. ASSUAGE

A. mitigate

B. inflame

C. inhibit

D. conciliate

E. aver

2. ROMANTIC

A. frivolous

B. pensive

C. earthy

D. tacit

E. scathing

3. INFIRM

A. hospitable

B. equestrian

C. tremulous

D. robust

E. anemic

4. ANOMALY

A. recurrence

B. aberration

C. recapitulation

D. felicity

E. consistency

5. MELANCHOLY

A. exuberant

B. composed

C. lugubrious

D. fetid

E. esteemed

6. ADROIT

A. gauche

B. lumbering

C. amateurish

D. adept

E. uncouth

7. YOKE

A. mar

B. fell

C. pervert

D. split

E. conjoin

8. INANE

A. tawdry

B. keen

C. vacuous

D. innocuous

E. pellucid

9.INDULGE

A.abstain

B.quaff

C.regress

D.absolve

E.imbibe

10.REPULSION

A.repugnance

B.aversion

C.destitution

D.petulance

E.attraction

A. 1. 3 Tips for cracking antonym tests in competitive exams	
1.	If the word is known to you, choosing an antonym is easy. Very often a synonym of the word is added to the list given. Bear in mind that you are looking for a word with the opposite meaning. You may also have two words which is close but remember, marks are given for the perfect answer only. e.g. BRAVADO – valour, brevity, audacity, cowardice, chauvinism
2.	If you do not know the meaning of a word, try to infer its meaning by looking at the prefixes or roots of the words.
	OVERBEARING – Sly, industrious, servile, subterranean, hortatory.
3.	One way to guess the answer is to see if the given word has positive connotations, if it has, then the answer will be a word with negative connotation. Addition of prefixes such as dis-, ir-,
	e.g - CURB – bridle , ameliorate, encourage, reproach, perjure
	'Curb' means 'to restrict' which has a negative meaning and the only positive word among the given words is 'encourage'
4.	At times when the word you are looking for is not among the answers then look for the secondary meaning of the word, which might reveal the answer.

A.1.4.a Choose the perfect synonym

1. PALTRY

    a) insignificant

    b) unfair

    c) average

    d) slovenly

    e) party
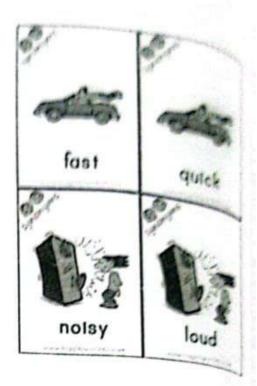
2. DISPARAGE

    a) to scatter

    b) discriminate

    c) belittle

    d) waste

    e) parable

3. OVERTURE

    a) disclosure

    b) apology

    c) request

    d) proposal

    e) vulture

4. LETHARGY

    a) serenity

    b) listlessness

    c) impassivity

    d) laxity

    e) zeal

3. BUOYANT

    A. ebullient

    B. morose

    C. prescient

    D. feral

    E. bland

4. COALESCE

    A. disperse

    B. agglomerate

    C. bamboozle

    D. canalize

    E. moderate

5. MODERN

    A. moribund

    B. antediluvian

    C. salutary

    D. hidebound

    E. burgeoning

6. OVERBEARING

    A. sly

    B. industrious

    C. hortatory

    D. servile

    E. subterranean

7. TRANSPARENT

    A. noisome

    B. preponderant

    C. ineluctable

    D. esoteric

    E. diurnal

8. INQUIETUDE

    A. temerity

    B. punctiliousness

    C. decency

    D. serenity

    E. excision

9. STOLID

    A. tractable

    B. refractory

    C. ineligible

    D. diaphanous

    E. volatile

10. NONCOMBATANT

    A. Correspondent

    B. stalwart

    C. warrior

    D. proletarian

    E. jester

5. TRACTABLE
   a) tillable
   b) easily followed
   c) understandable
   d) docile
   e) adamant

6. NURTURE
   a) to ripen
   b) pamper
   c) nourish
   d) relieve
   e) doctor

7. INCHOATE
   a) loose
   b) implicit
   c) chaotic
   d) incomplete
   e) beginner

8. SATIATE
   a) to glut
   b) comfort
   c) desire
   d) water down
   e) craven

9. OBSESSION
   a) dejection
   b) preoccupation
   c) frustration
   d) suspicion
   e) gaiety

10. APPEASE
   a) to yield
   b) give pleasure
   c) placate
   d) compromise
   e) small

A.1.4.b. Choose the most suitable antonyms

1. INORDINATE
   A. moderate
   B. excessive
   C. venal
   D. mundane
   E. preternatural

2. CONTENTIOUS
   A. irascible
   B. jaundiced
   C. placatory
   D. unrequited
   E. antipathetic

Flow Chart and Bar Chart

1. A flowchart is

(a)an analytical technique used to describe the data flows and sources and destinations and data stores of a system.

(b)an analytical technique used to describe some aspect of an information system in a clear, concise, and logical manner.

(c)a piece of hard plastic used to draw symbols.

(d)a graphical description of the flow of data within an organization and the processes performed on that data, as well as the sources and destinations of data.

2. Which of the following is a guideline for preparing flowcharts?

(a)Flowchart only the normal flow of operations

(b)Assume that the reader will know the direction of the flow.

(c)Identify the entities to be flowcharted

(d) both a and c are correct

3. The symbol ⬦ in flow chart represents

(a) Input

(b) Output

(c) Decision

(d) Termination.

4. The symbol shown in the Figure in flow chart represents ⬭.

(a) In-connector

(b) Out-connector

(c) Output

(d) End.

5. The symbol _____ in flow chart represents
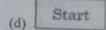
    (a) In connector

    (b) Out connector

    (c) Annotation

    (d) Input/output.

6. Which symbol is used at the beginning of a flow chart?

    (a) ❘ Start ❘

    (b) (Start)

    (c) (Start)

    (d) [Start]

7. Which symbol is used to test conditions in a flowchart?

    (a) ◇   (c) ◯

    (b) ▭   (d) ▭

8. The diamond shaped symbol is used in flowcharts to show the

    (a)decision box

    (b)statement box
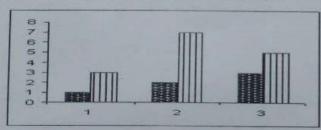
    (c)error box

    (d)if-statement box

9. The symbol used in flowchart such as rectangle with the horizontal lines on two sides is used for

    (a)defined statement

    (b)predefined process

    (c)error fix

(d)variables defined

10. The link with another part of the program or connectors in flowchart are shown in

(a)rhombus

(b)parallelogram

(c)circle

(d)trapezoid

11. A bar chart is:

(a) Used for displaying (for comparison) visual summaries of the distributions of the same variable in different groups or conditions. It can also depict the distribution of a categorical variable

(b)The same as a histogram

(c)Used for depicting the distribution of a continuous variable

(d)Used for comparing the distributions of different variables

12. Complexity in a process is represented by which symbol in a flow chart:

(a)Ellipse.

(b)Loop Back.

(c)Arrow

(d)Diamond.

13. The type of graph presented in the following diagram is a(n)

(a)horizontal bar chart.

(b)vertical bar chart.

(c)comparison chart.

(d)clustered bar chart.

33.(b)purpose

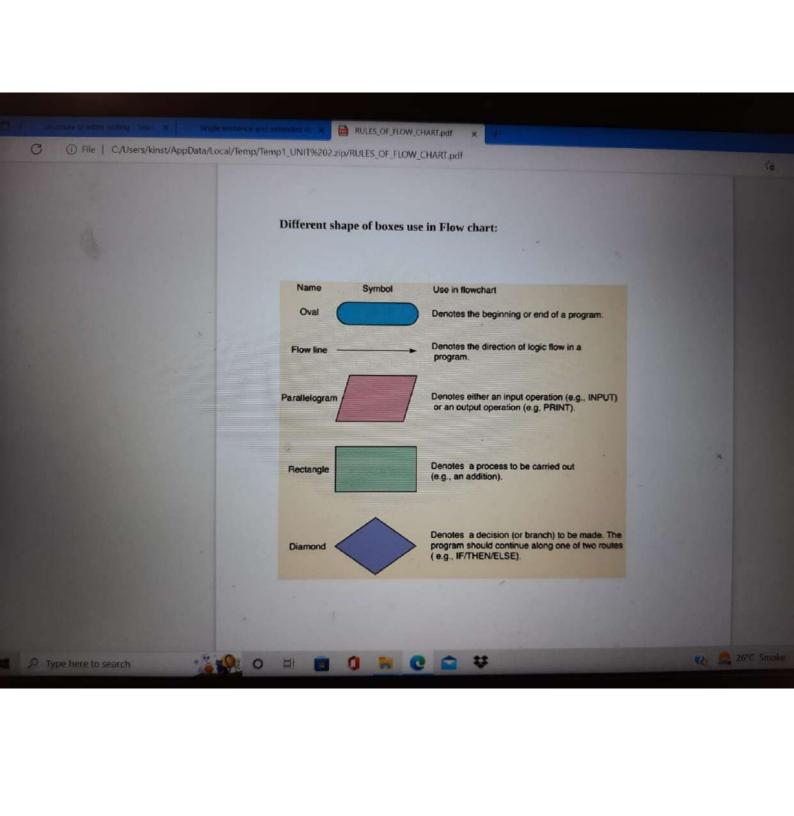34.(d)Maintain eye contact with the speaker

TRANSCODING

Flow Chart and Bar Chart

1. (b)an analytical technique used to describe some aspect of an information system in a clear, concise, and logical manner.

2. (d) both a and c are correct

3. (c) Decision

4. (d) End.

5. (d) Input/output.

6. (c) (Start)

7. (a) ◇

8. (a)decision box

9. (b)predefined process

10.(c)circle

11.(a) Used for displaying (for comparison) visual summaries of the distributions of the same variable in different groups or conditions. It can also depict the distribution of a categorical variable

12.(b)Loop Back.

Note: ▯ The predefined process symbol indicates a complicated process or operation that is well-known or defined elsewhere. This shape is used for a process that has already been defined elsewhere. This indicates that there is another flowchart available for this predefined process, and you should reference that source for more information. The Predefined Process shape is also known as a Subroutine, and typically is used to simplify complex flowcharts by moving a large part of the flowchart to another flowchart. Optionally, you can then hyperlink this shape to the other flowchart.

13.(d)clustered bar chart.

Structure of letter writing - Sear. ×   single sentence and extended cl. ×   RULES_OF_FLOW_CHART.pdf   ×   +

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Different shape of boxes use in Flow chart:

Name	Symbol	Use in flowchart
Oval		Denotes the beginning or end of a program.
Flow line		Denotes the direction of logic flow in a program.
Parallelogram		Denotes either an input operation (e.g., INPUT) or an output operation (e.g. PRINT).
Rectangle		Denotes a process to be carried out (e.g., an addition).
Diamond		Denotes a decision (or branch) to be made. The program should continue along one of two routes (e.g., IF/THEN/ELSE).

Difference between Note taking and Note making

What is Note Taking

Note-taking refers to the process of writing down or recording the main key points of information. This is a significant practice in any research process. For instance, if you are a student, you might be taking down discussion notes or lecture notes, which might serve you as a study aid later. Just imagine how useful the process of note-taking is to you if you are an interviewer who is conducting an interview with a celebrity in order to gather necessary information for a journal article or a book to be published. In note-taking, it is possible to see different note-taking practices. **Outlining** is one of the most frequently used note-taking methods, where the note taker quickly grabs the main points and creates a piece of content in bullet points. **Guided notes** are another note-taking method where the teacher provides the required templates for the students to take their individual notes. **Cornell notes** is another common note-taking method where we divide the page into three main sections: notes, cues, and summary.
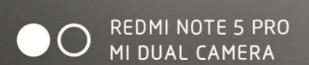
However, compared to note making, the main issue in note-taking is that note-taking usually happens while we are listening, and the objective is to grab the key points quickly and note them down as we hear them in order to refer back to them later. We often use the original author's language as it's easier. But this can result in poor comprehension of the notes when we refer back to them later, and it is possible that we might easily forget the content.

What is Note Making

Note-making involves the process of reviewing, combining, and synthesizing ideas you hear or read. In contrast to note-taking, note-making is a relatively slow process that involves more of our own language rather than someone else's language. Consequently, the content produced in note-making is easier to comprehend and remember.

When we are note-making while reading, we deliberately structure a personal version of what we read. This allows us to remember the information better as it is actively created from our own minds. Therefore, taking time and making enough effort to reword and build the content we are reading allows the information to be absorbed into our long-term memory.

There are three main principles common to any note-making process: rephrasing the original idea, connecting the ideas, and building upon ideas. Keep in your mind that while you are making notes, you should actively engage with them, revisit them, and revise them.

NOTE TAKING
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NOTE MAKING

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NOTE TAKING	NOTE MAKING
Note taking refers to the process of writing down or recording the key points of information	Note making refers to the process of reviewing, combining, and synthesizing ideas you hear or read
Usually happens while listening	Usually happes while reading
Faster than note making	Comparatively slow
Involves more of the original speaker's language	Often involves our own language
Easily forgotten	Not easily forgotten

Pollution

1   Pollution

1.1   Water Pollution (type)

1.1.1   cause

1.1.2   cause

1.1.3   cause

1.2   Noise Pollution (type)

1.2.1   cause

1.2.2   cause

1.3   Environmental Pollution (type)

1.3.1   — cause

1.3.2   → cause

1.3.3   — cause

Abbreviation
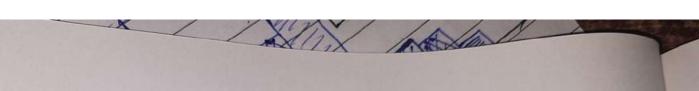B/w   Between
e.g. — for example

Summary

Note Making: Yoga in Daily Life

To live in harmony with oneself and the environment is the wish of every human. However, in modern times greater physical and emotional demands are constantly placed upon many areas of life. More and more people suffer from physical and mental tension such as stress, anxiety, insomnia, and there is an imbalance in physical activity and proper exercise. This is why methods and techniques for the attainment and improvement of health, as well as physical, mental and spiritual harmony, are of great importance, and Yoga meets this requirement. The word "Yoga" originates from Sanskrit and means "to join, to unite". Yoga exercises have a holistic effect and bring body, mind, consciousness and soul into a balance. In this way Yoga assists us in coping with everyday demands, problems and worries. Yoga helps to develop a greater understanding of our self, the purpose of life and our relationship with God. On the spiritual path, Yoga leads us to supreme knowledge and eternal bliss in the union of the individual Self with the universal Self. Yoga is that supreme, cosmic principle. It is the light of life, the universal creative consciousness that is always awake and never sleeps, that always was, always is, always will be.

Many thousands of years ago in India, Rishis (wise men and saints) explored nature and the cosmos in their meditations. They discovered the laws of the material and spiritual realms and gained an insight into the connection within the universe. They investigated the cosmic laws, the laws of nature and the elements, life on earth and the powers and energies at work in the universe—both in the external world and on a spiritual level. The unity of matter and energy, the origin of the universe and the effects of the elementary powers have been described and explained in the Vedas. Much of this knowledge has been rediscovered and confirmed by modern science. From these experiences and insight a far-reaching and comprehensive system known as Yoga originated and gave us valuable, practical instructions for the body, breathing, concentration, relaxation and meditation. The system "Yoga in Daily Life" is taught worldwide in Yoga Centres, Adult Education Centres, Health Institutions, Fitness and Sports Clubs, Rehabilitation Centres and Health Resorts. It is suitable for all age groups—the name itself indicates that Yoga can be and should be used "in Daily Life".

The exercise levels have been worked out in consultation with doctors and physiotherapists and can therefore — with observation of the stated rules and precautions—be practiced independently at home by anyone. "Yoga in Daily Life" is a holistic system, which means it takes into consideration not only the physical, but also the mental and spiritual aspects. Positive thinking, perseverance, discipline, orientation towards the Supreme, prayer as well as kindness and understanding form the way to Self-Knowledge and Self-Realisation.
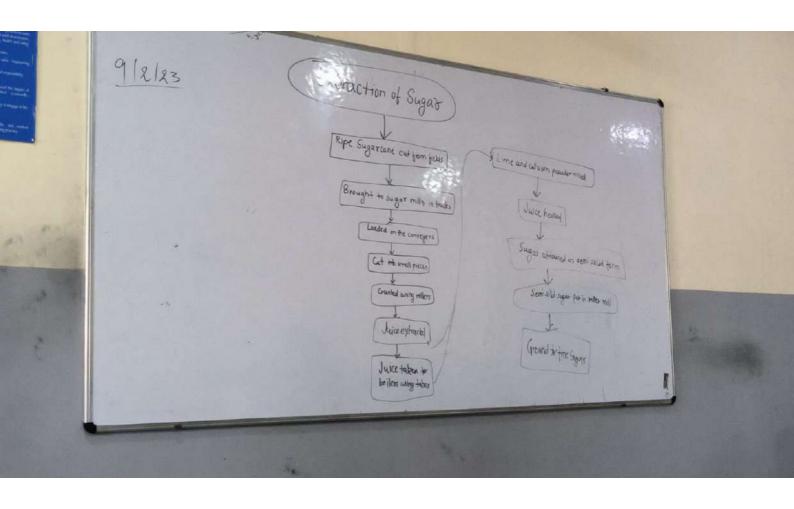
Example

Sugar is the one of the most essential commodities. It is not very easy to get the sweet product. The farmers have to wait for one year to cut the ripe cane. Using huge manpower, the cane is shredded and loaded in trucks. They carry the cane to the nearby sugar mills. Large cranes unload the cane and put it on the moving conveyers. The conveyers take the cane to the moving blades. The heavy blades cut the cane into small pieces and the same is taken to crushers. Juice is extracted by pressing. The juice is then piped to the hot boilers. After being heated for some time the semi solid sugar is dried and then transported to roller mills. The dried sugar cubes are ground to granule and filled in sacks.

Extraction of suga

Flow Chart

Flow chart is also a code but different from the codes mentioned so far. Flow chart is not about the statistical figures that represent growth, production or sales. It is a sequential representation of a process. Any complicated process can be explained in a series of steps which will make it easier to understand. Engineers like you would be dealing with various processes and representing them in flow charts. This is an integral part of your profession. Each and every activity involves a process. For instance, the process involved in the preparation of lime juice is as follows:

9/2/23

Extraction of Sugar

```
Ripe Sugarcane cut from fields          Lime and calcium powder mixed
         ↓                                        ↓
Brought to sugar mills in trucks          Juice heated
         ↓                                        ↓
Loaded on the conveyers           Sugar obtained in semi solid form
         ↓                                        ↓
Cut into small pieces             Semi solid sugar put in roller mill
         ↓                                        ↓
Crushed using rollers                Ground to fine Sugar
         ↓
Juice extracted
         ↓
Juice taken to
boilers using tubes
```

3. How does television affect our lives? It can be very helpful to people who carefully choose the shows that they watch. Television can increase our knowledge of the outside world; there are high quality programmes that help us understand many fields of study, science, medicine, the different arts and so on. Moreover, television benefits very old people, who can't leave the house, as well as patients in hospitals. It also offers non-native speakers the advantage of daily informal language practice. They can increase their vocabulary and practise listening.

On the other hand, there are several serious disadvantages of television. Of course, it provides us with a pleasant way to relax and spend our free time, but in some countries people watch television for an average of six hours or more a day. Many children stare at the TV screen for more hours a day than they spend on anything else, including studying and sleeping. It's clear that TV has a powerful influence on their lives and that its influence is often negative.
Recent studies show that after only thirty seconds of television viewing, a person's brain 'relaxes' the same way that it does just before the person falls asleep. Another effect of television on the human brain is that it seems to cause poor concentration. Children who view a lot of television can often concentrate on a subject for only fifteen to twenty minutes. They can pay attention only for the amount of time between commercials.
Another disadvantage is that television often causes people to become dissatisfied with their own lives. Real life does not seem so exciting to these people. To many people, television becomes more real than reality and their own lives seem boring. Also many people get upset or depressed when they can't solve problems in real life as quickly as television actors seem to.

Before a child is fourteen years old, he or she views eleven thousand murders on the TV. He or she begins to believe that there is nothing strange about fights, killings and other kinds of violence. Many studies show that people become more violent after viewing certain programmes. They may even do the things that they see in a violent show.

C.Writing

C.1 DEFINITIONS

Science writing and Technical writing are areas offering many job opportunities for people with a good command over the English language and a basic knowledge of science. It is essential that professionals working in such fields understand the importance of defining things. Students have been learning definitions in order to pass exams ...but how does one write them?
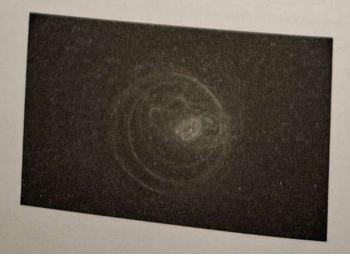
For example, The term Big Bang Theory is well-known today, thanks to the popular TV serial but do we know what the Big Bang Theory actually is ?

It is not enough to say that it is a scientific term and has to do with the origin of life.

Being professionals we have to be more specific and say that:

Big Bang theory is the theory that the universe was once clustered and at the 'beginning' it exploded out, as shown by the fact that objects are still moving out from the center.

During interviews too, the interviewer often starts with very simple questions related to the field such as What is ...?. Students should be very careful in their reading and should understand the minute details of any concept they come across in simple terms so that it can be retained in memory for future use. Though it may seem very simple but only by constant practice can one define any term in an easy way.

C.1.1.Single Sentence Definition:

Step I		Step II		Step III
thing to be defined	=	what is it /group to which the thing belongs/	+	specific details that separate it from other things in its group
Technology	is	the application(the study and use) of scientific knowledge	to	practical purpose.
Laboratory	is	a place	to	conduct experiments
Transformer				
	is	an electrical equipment	to	change (to step up or step down)the voltage of current.
Calculator	is	an electronic device	for	making arithmetical operations
Mortar				
	is	the mixture	of	cement, sand, bluemetal and water in the right proportion used for construction.

Following are a few examples for single sentence definition:

Dynamo: Dynamo is an instrument for generating electricity by transforming mechanical energy into electrical energy.

Icon: Icon is a small symbol on a computer screen representing a programme that a user may choose.

Airbag: Airbag is a safety device which will cause an air filled pillow to prevent one from hitting the dashboard.

Scanner: Scanner is a device which analyses an image and then captures and processes it so that it can be saved to a file on a computer.

Road roller: Road roller is a machine with heavy wide smooth rollers used in road making to make the surface smooth.

Shock absorber: Shock absorber is an oil filled device used to control the movement of the springs in the suspension system.

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Turbine: Turbine is an engine or motor in which the pressure of liquid or a gas turns a wheel, usually to produce energy.

Radar: Radar is a system for finding out the position and movement of solid objects, especially aircraft and ships, when they can not be seen, by sending out short radio waves which the objects reflect.

C.1.1 For Practice

Define the following terms in a sentence each.

Engineering

science

ballast

rheostat

cloning

word processor

seismograph

gobar gas

plant

compiler

machine code

Chamfer

kerf

C.2 Extended Definition

Sometimes definitions might be much longer than one sentence, in which case one is still trying to answer "what is it?" but will be using most other patterns to help answer it: and can be defined by describing, classifying, comparing, etc.

Laser Technology: is a kind of modern technology using sophisticated equipments, involving high cost, designed and operated by highly skilled professionals used in various areas particularly in the medical field to diagnose, operate and provide laser treatment to complicated and serious diseases.

Appropriate Technology: is a kind of technology that is used within the resources available. It is otherwise called as low cost technology. For example, Gobar gas is produced using the local resource cow dung that is easily available. In practice, this technology uses the simplest form of technology to achieve the intended purpose in a suitable location.
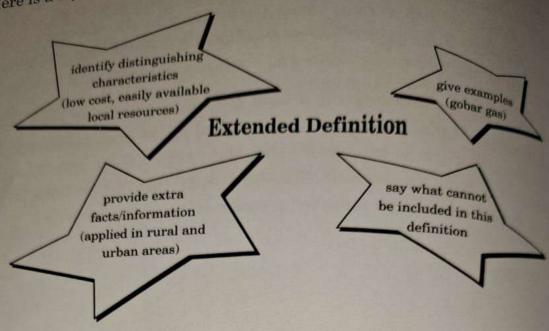

Wind mill, an appropriate Technology

Nanotechnology: is the study of the control of matter on an atomic and molecular scale. Generally nanotechnology deals with structures of the size 100 nanometers or smaller, and involves developing materials or devices within that size. Nanotechnology is very diverse, ranging from novel extensions of conventional device physics, to completely new approaches based upon molecular self-assembly, to developing new materials with dimensions on the nanoscale, even to speculation on whether we can directly control matter on the atomic scale.
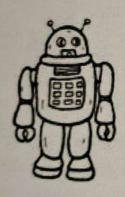
Nanotechnology has the potential to create many new materials and devices with wide-ranging applications, such as in medicine, electronics, and energy production.

Here is a lay out of an extended definition for your understanding.

identify distinguishing characteristics (low cost, easily available local resources)

give examples (gobar gas)

Extended Definition

provide extra facts/information (applied in rural and urban areas)

say what cannot be included in this definition
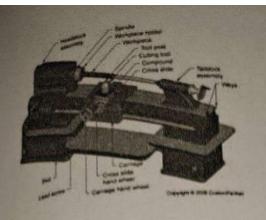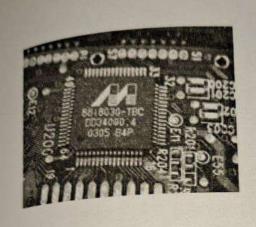
C.2.1 For practice

a. Identify the pictures and define the objects in a sentence each.

b. **Attempt to write extended definitions for the following; if required, refer to the dictionary or the internet.**

Artificial Intelligence

Virtual Reality

Junk food

Bio-technology

Wi fi,

Satellite communication,

Bluetooth

Cloning

Aeronautical Engineering

Information technology

e-learning

Podcast

Dragnet

Matrix

cloud computing

antibiotic

Practical-1
Introduction to Phonetics

Why Phonetics need to be taught to technocrats?

Firstly, with a large number of engineers and technologists going abroad, with a heavy expatriation of software Engineers to different countries like U.S.A., Australia, etc...there is a need for these professionals to use effective communication skills. During recent times, more number of students are going abroad for higher studies with research prospects in fields like genetics, biotechnology, bio-informatics, etc. When these students enter the classrooms abroad, the intelligibility between student and professor should be given considerable importance.

Secondly, with the emerging trends of telephonic interviews for selecting Engineers and professionals of different fields there is an emphasis on the verbal communication skills. Telephonic interviews provide little scope for non-verbal communication. In such a scenario, Spoken English plays a vital role for the success of these engineers and technologists.

Lastly, with multinational companies (MNCs) setting their eyes on India as a long-term investment avenue, it is quite obvious that their major work force requirements have to be met by the qualified Indian youth. Choosing to work for MNCs, where there is a higher probability of interaction with people from different cultures and languages, one cannot remain complacent with one's minimal ability to use intelligible English. The job opportunities outside one's region force one to get out of the region; this in turn necessitates the use of language in a manner intelligible to others (to those who do not belong to that region).

Therefore it is important and imperative that the people involved in a social business transaction are intelligible to each other. It is noted that a host of these factors mentioned such as pronunciation, culture, and the context, come in the way of intelligibility. Thus, speech intelligibility would prove to be a fascinating area of study.

Why should Phonetics be taught in Engineering Colleges?

In India, English is considered as the language of the elite and fluency in English is considered as a sign of culture and status in life. This is also one of the important parameters that makes the youth employable. Proper pronunciation of English words would make them global. In India we have so many regional languages. Hence, there is every need to teach phonetics in India.

Firstly, the sound system of Hindi or Telugu is different from that of English. In English we have 26 letters and these 26 letters produce 44 sounds. Whereas, Telugu has an equal number of letters and sounds (56). Similarly, in Hindi we have 52 letters and 52 sounds.

The various speech organs are described as follows:

Alveolar ridge: It is also referred to as the (alveolar process) the teeth ridge. This inferiorly directed ridge of the maxilla houses the upper teeth.

Soft palate: The soft palate is also referred to as the velum. This musculo-tendious structure extends posterior from the hard palate and acts to modify the communication between the oral cavity below and nasal cavity above.

Teeth: The teeth are embedded in the alveolar process of maxilla and mandible.

Lips: The lips from the orifice of the mouth comprise of muscle fibres from a number of different facial muscles.

Oral cavity: The oral cavity is also referred to as the mouth. It is a resonating chamber whose shape is modified by articulation to produce the various oral and nasal speech sounds.

Epiglottis: The epiglottis is a leaf shaped cartilaginous structure located behind the thyroid bone and at the root of the tongue.

Vocal folds: Pair of vocal folds is located in the larynx, coursing from the thyroid cartilage interiorly to the arytenoid cartilages. The vocal folds vibrate to create the sounds for vowels & voiced consonants.

Pharynx: The pharynx is a resonating cavity or chamber lying above the hard & soft palate.

Mandible: It is also known as the lower jaw. The mandible houses the lower teeth. The tongue and lower tip also reside on the mandible.

Hard palate: The hard palate forms the roof of the mouth along with the soft palate.

Tongue blade: It is the part of the tongue lying just above the upper alveolar ridge.

Tongue back: It is the part of the tongue lying below the soft palate.

Tongue tip: (apex):- It is the part of the tongue lying closest to the front teeth.

Mechanism of Sound production: When speech organs activate in a set pattern, the sounds are produced depending on the articulation. The sounds in English language are divided into 2 types based on the position of vocal cords,
1. Voiced 2. Voiceless

The Mechanism of Production

Consonants: The consonants can be described based on their **place of articulation, manner of articulation** and whether the sound is **voiced or voiceless.**

1. Manner of articulation: Manner of articulation refers to how the sound is produced and the way the air stream is modified as it passes through the vocal folds.
It is of 6 types.
  a. **Plosives:** It is a consonant characterized by complete obstruction of the outgoing air stream by one of the articulators, a build of intra oral air pressure and a release.
  b. **Fricatives:** It is a consonant produced by forcing the breath stream through a construction formed by the articulators in the vocal folds.
  c. **Affricates:** It is a consonant characterized by having both Plosive and fricative manners of production.
  d. **Nasals:** It refers to a consonant produced with a complete closure of the oral cavity along with a lowered velum to allow air flow through the nasal cavity.
  e. **Lateral:** It is a genetic label used to classify two approximate English consonants /r/ and /l/.
  f. **Semi Vowels:** It is a consonant characterized by a continuous gliding motion of the articulators into the following vowel also referred to as semi-level /j/ and /w/.

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  a. **Bi-labial:**-It refers to a speech sound, produced by the contact of the upper and lower lips.
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  e. **Palato-alveolar:** It is produced by the tongue contacting hard palate.
  f. **Velar:** It refers to a consonant produced by the tongue contacting the velum.
  g. **Glottal:** It is a place of articulation referring to a consonant that is produced by completely or partially contacting the glottis.

Voice of articulation: Voicing refers to either vocal folds or their vibration during the production of a consonant. It is of two types.
1) **Voiced:** A voiced sound is produced by the vibration of the abducted vocal folds in the larynx.
2) **Voiceless:** Voiceless sounds are produced without vibration of vocal folds.

Secondly, in English there is a mismatch between the spelling and the pronunciation. For instance the spelling -**ough** is pronounced in different ways, in words like -throughl, -thoroughl, -cough, etc. Whereas, in Hindi, we don't have any difficulty in pronouncing the words because we read what we write.
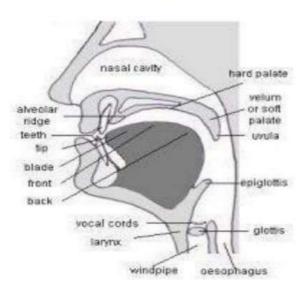
Thirdly, there are a few sounds in English that are absent in Hindi, example, the sound Z in zero is pronounced as /dz: r9ʊ/. The sound /æ/ in -bank is pronounced as /bja: nk/.

Finally, unlike Hindi and Telugu, we have many silent letters in English which are spelt, but not pronounced. Example: subtle, psychology etc.

Phonetics: Phonetics is defined as the scientific study of speech sounds.' It is a branch of linguistics that deals with pronunciation. Every language has a set of sounds produced with the air that we breathe out. Different sounds are produced with different parts of the mouth. The throat takes different positions and the air (breath) comes out through these positions. Phonology is the study of sounds within a language system.

Organs of Speech: The organs that are involved in the production of speech sounds are called -phonatory organsl.
A diagram showing the various speech organs or phonatory organs is displayed below:

The various speech organs are described as follows:

Alveolar ridge: It is also referred to as the (alveolar process) the teeth ridge. This inferiorly directed ridge of the maxilla houses the upper teeth.

Soft palate: The soft palate is also referred to as the velum. This musculo-tendious structure extends posterior from the hard palate and acts to modify the communication between the oral cavity below and nasal cavity above.

Teeth: The teeth are embedded in the alveolar process of maxilla and mandible.

Lips: The lips from the orifice of the mouth comprise of muscle fibres from a number of different facial muscles.

Oral cavity: The oral cavity is also referred to as the mouth. It is a resonating chamber whose shape is modified by articulation to produce the various oral and nasal speech sounds.

Epiglottis: The epiglottis is a leaf shaped cartilaginous structure located behind the thyroid bone and at the root of the tongue.

/eɪ/	A glide from a front unrounded vowel just below half-close to a centralized front unrounded vowel just above half-close.	Ale, make
/aɪ/	A glide from a front – open unrounded vowel to a centralized from unrounded vowel just above half-close.	Ice, mike
/ɔɪ/	A glide from a back rounded vowel between open and half-open to a centralized front unrounded vowel just above the half-close position.	Oil, boy
/aʊ/	A glide from the back open unrounded position and moves in the direction of RP. (u)	About, mouth
/əʊ/	A glide from a central unrounded vowel between half-close and half-open to a centralized back rounded vowel just above the half-close position.	No, old
/ɪə/	A glide from a centralized front unrounded vowel just above half-close to a central unrounded vowel between half-close and half-open.	Serious, period
/ʊə/	A glide from the centralized back rounded vowel just above half-close to a central unrounded vowel between half-close and half-open.	Poor, cure
/eə/	A glide from a front half-open unrounded vowel to a central unrounded vowel between half-close and half-open.	Air, hair

As you already know, phonetic symbols are a great help when it comes to learning to pronounce English words correctly. Any time you open a dictionary, you can find the correct pronunciation of words you do not know by looking at the phonetic pronunciation that follows the word. Unfortunately, learning the phonetic alphabet is not always the easiest thing to do.

In English, as you know, many words can have the same pronunciation but are written differently with different meanings. For example "to, two, and too" all have the phonetic transcription /tu/. Sometimes, words can be written similarly but have different pronunciations as in the "ough" combinations in the words like thought, though, bough, and through.

The IPA (International Phonetic Alphabet) chart is as follows:

Vowels	
IPA	**words**
/ʌ/	cup, luck
/ɑː/	arm, father
/æ/	cat, black
/e/	met, bed
/ə/	away, cinema
/ɜː/	turn, learn
/ɪ/	hit, sitting
/iː/	see, heat
/ɒ/	hot, rock
/ɔː/	call, four
/ʊ/	put, could
/uː/	blue, food
/aɪ/	five, eye
/aʊ/	now, out
/eɪ/	say, eight
/əʊ/	go, home
/ɔɪ/	boy, join
/eə/	where, air
/ɪə/	near, here
/ʊə/	pure, tourist

consonants	
IPA	**words**
/b/	bad, lab
/d/	did, lady
/f/	find, if
/g/	give, flag
/h/	how, hello
/j/	yes, yellow
/k/	cat, back
/l/	leg, little
/m/	man, lemon
/n/	no, ten
/ŋ/	sing, finger
/p/	pet, map
/r/	red, try
/s/	sun, miss
/ʃ/	she, crash
/t/	tea, getting
/tʃ/	check, church
/θ/	think, both
/ð/	this, mother
/v/	voice, five
/w/	wet, window
/z/	zoo, lazy
/ʒ/	pleasure, vision
/dʒ/	just, large

I. PRACTICE ACTIVITIES

i) Fill the spaces with appropriate consonant sounds and then read the words aloud.

1. Tap /___æ___/
2. Shut /___ʌ___/
3. Budge /___ʌ___/
4. Cross /_____ɔ_____/
5. Dose /___əU___/
6. Sell /___e___/
7. Zoo /___u:/
8. Possible /_____ɔ__l_____/
9. Student /_____u_____/
10. Sure /___Uə/
11. Rat /___æ___/
12. Beat /___i:___/
13. Busy /___i___i:/

/ʊ/	put, could		/s/	sun, miss
/uː/	blue, food		/ʃ/	she, crash
/aɪ/	five, eye		/t/	tea, getting
/aʊ/	now, out		/tʃ/	check, church
/eɪ/	say, eight		/θ/	think, both
/əʊ/	go, home		/ð/	this, mother
/ɔɪ/	boy, join		/v/	voice, five
/eə/	where, air		/w/	wet, window
/ɪə/	near, here		/z/	zoo, lazy
/ʊə/	pure, tourist		/ʒ/	pleasure, vision
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8. Possible   /_____ɔ__l___/
9. Student   /_____u_____/
10. Sure   /___ʊə /
11. Rat   /___æ___/
12. Beat   /___iː___/
13. Busy   /___i___iː /
14. Moss   /_____ɔ_____/
15. Town   /___ __ əʊ___/
16. Soar   / ___ɔ /
17. Teak   /___iː___/
18. Money   /___ʌ___iː /
19. Thanks   / θ æ_____/
20. Yoke   /_____ɔ_____/

ii) Fill in the spaces with appropriate vowel sounds and then read the words aloud.

1. Food   / f__d /
2. Foot   / f__t /
3. Sheet   / ʃ__t /
4. Seven   / s__v n /
5. Mouse   / m__z /
6. Early   /___l__/
7. Trial   / t r__l /
8. Fin   / f__n /
9. Dear   / d__r /
10. Poor   / p_s_ /
11. Apple   /___p l /
12. Zebra   / z__b_____/
13. Loud   / l__d /
14. Gate   / g   t /
15. Ago   /___g__/

Activity sheet

2 types based on the position of vocal cords,
1. Voiced 2. Voiceless

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Classification of Consonants

Place →	Bilabial	Labio-dental	Dental	Alveolar	Post-alveolar	Palato-alveolar	Palatal	Velar	Glottal
Manner ↓	Voiced-Voiceless	v.l. vd	v.l. vd	v.l. vd	vd	v.l. vd	vd	v.l. vd	v.l.
Plosive	p B			t d				k g	
Affricate						tʃ			
Fricative		f v	θ ð	s z		ʃ			h
Nasal	M			n				ŋ	
Lateral				l					
Frictionless Continuant or Glide (Semi-vowel)	W				R		j	(w)	

3.Vowels: Vowel is a sound produced when there is no obstruction to the air stream anywhere in the phonatory organs. A vowel sound is produced without friction. There are twelve (12) pure vowels and eight (8) diphthongs; total: twenty (20). Vowels are divided into two categories based on the sound production. They are Monophthongs (pure vowels) and Diphthongs (vowel glides).

Monophthongs: - Based on the part of the tongue raised and the extent to which the tongue is raised towards the palate, it is of three types:-

    a) **Front:** - A front vowel is produced when the tongue moves forward from its neutral or rest position.

							I				
Lateral											
Frictionless Continuant or Glide (Semi-vowel)	W					R		j		(w)	

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Monophthongs: - Based on the part of the tongue raised and the extent to which the tongue is raised towards the palate, it is of three types:-

  a) **Front:** - A front vowel is produced when the tongue moves forward from its neutral or rest position.
  b) **Central:** - A central vowel is produced with the tongue in its neutral position.
  c) **Back:** - Back vowels are produced by the backward shift of the tongue from its neutral.

Monophthongs

		Examples	Classification of tongue positions for vowels.
1	/i:/	Each, sea	Front close unrounded
2.	/ɪ/	In, pit	Front unrounded vowel between close and half-close
3.	/e/	Egg. Fend	Front unrounded vowel between half-close and half-open
4	/æ/	And, mat	Front unrounded vowel just below the half-open position
5.	/a:/	Ask, flask	Back open unrounded
6.	/ɒ/	Off, lot	Back open unrounded
7.	/ɔ:/	All, tall	Back rounded vowel between half-close and half-open
8.	/u/	Pull, sugar	Back rounded vowel between close and half-close
9.	/u:/	Food, stool	Back close rounded vowel
10.	/ʌ/	Up, fun	Central unrounded vowel between open and half-open
11.	/3:/	Earth, yearn	Central unrounded vowel between half-close and half-open
12.	/ə/	Sofa, alike	Central unrounded vowel between half-close and half-open

Diphthongs: Diphthongs are two different vowels produced consecutively in the same syllable moving articulation smoothly from their positions one after the other. Diphthongs consist of sounds such as:

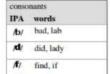| Sounds		Examples
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consonants	
IPA	words
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/d/	did, lady
/f/	find, if

Check List

Objective

To enable the learners to write "yes / no" type of questions in the form of a list which can be used to cross check / cross verify the details after carrying out any practical task.

Checklist is a list that can be made before undertaking any important task and which can be used to verify whether one has done all the things that need to be done after carrying out the task. Using this we can ensure the consistency and completeness in carrying out a task. A checklist is divided into a number of small steps.

Example

Have you enclosed copies of your SSLC mark sheet, transfer certificate and self addressed envelope?

A checklist usually takes care of every small detail. Sometimes a checklist is supplied along with an application form. Before sending the form, one has to make sure that the answer to each question in the checklist is an 'yes'.

Read the following example carefully.

Check list for sending a completed Application Form

1.	Have I filled in all the columns in the form?	Yes / No
2.	Is my name written correctly?	Yes / No
3.	Have I affixed three passport size photographs on pages 1, 3 and 4 of the form?	Yes / No
4.	Have I enclosed a copy of Hr. Secondary mark statement?	Yes / No
5.	Has the mark sheet been attested?	Yes / No
6.	Is there a copy of my birth certificate?	Yes / No
7.	Have I enclosed the D.D?	Yes / No
8.	Have I enclosed a self-addressed envelope for reply?	Yes / No
9.	Have I enclosed the transfer certificate?	Yes / No

inspection tools that help enforce requirements improved grammar for each field of study, as well as academic journal style and word count limits. Furthermore, online grammar checker tools must provide accurate help with academic English writing, technical terminology, scientific expression, and publication readiness.

Six of the Best Grammar Checker Tools for Researchers: -

Recently, several online grammar checker tools have been launched to address advanced features for enhancing your manuscript. Here we will discuss 6 best language enhancement tools for academic and technical writing for authors:

1. Trinka AI

Trinka AI is the world's first grammar and language enhancement tool tailored for writing academic and technical papers. It was created with the intention of improving manuscripts for academic English usage and technical vocabulary and making them publication-ready. In addition, it stands out by working with authors and ensuring holistic language improvement beyond grammar and spelling checks. It adheres to academic style guides while suggesting corrections in your manuscript. Furthermore, it has custom-built features such as maintain academic tone, providing unbiased language, concept clarity, sentence structure, alternative word choice. It provides detailed explanations as to why is a correction suggested. Furthermore, it helps researchers in reducing word count by suggesting

alternatives without changing the context of the matter. More importantly, it allows you to choose between the US and the UK style to make it easily accessible for researchers all over the world.

Developed by a team of linguists, engineers, and data scientists its acts as a writing assistant to support all kinds of people in all kinds of communication, from academics to everyday conversations.

2. Grammarly

Grammarly is a popular online grammar checking tool that can be used with Google Chrome, Firefox, and Microsoft Edge browsers. This is used to check grammar and spelling errors. There is an indicator in the lower right corner of the writing area, on clicking the indicator, it displays the number of errors and suggestions.

One downside of Grammarly is that you have to switch to a text editor for proofing. Also, Grammarly can be upgraded to the paid version, Grammarly Premium, which is a service that detects plagiarism and provides citation suggestions. The free version of Grammarly gives you access to only basic features.

3. Ginger

Ginger is another handy spelling and grammar checking online tool to improve your writing skills. It can be used on-board in the browser and provides a great user experience. Furthermore, it displays a small icon in the lower right corner of the WordPress post editor, compose area, including Gmail, Facebook, and more. It highlights detected errors as you type. This helps in tracking them easily. However, Ginger has several drawbacks, one of which is the need to switch from WordPress to a text editor. The hassle of having to start the Ginger editor separately by clicking on the icon for better proofing is time-consuming.

4. Hemingway

Hemingway is available as a web-based text editor, so it doesn't work directly within the WordPress post editor. However, you can use a free web-based editor to check your articles for readability, grammar, and spelling errors.

You can think of Hemingway as a style checker, not just a grammar checker. This is because it is a tool that helps you improve readability by displaying your text's readability score and suggesting improvements. Hemingway is available through a paid desktop application for Windows and Mac and can be published directly from WordPress.

5. ProWriting Aid

ProWriting Aid is a premium writing editor and grammar checker designed specifically for science bloggers, content writers, etc. This tool allows users to find and to cor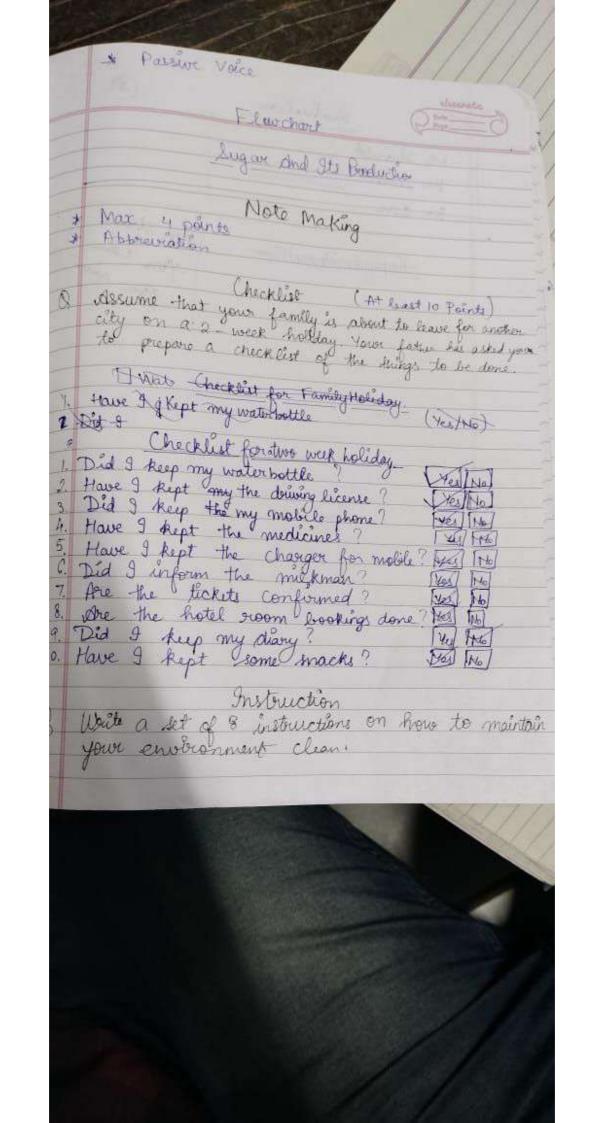rect grammatical and linguistic errors in an automated way. Currently, this tool work on both Windows and Mac, and is also compatible with writing software such as Google Docs and Scrivener. As mentioned earlier, ProWriting Aid can be used for a variety of writing purposes, but it is the field of fiction writing that it really shines in.

6. Typely

Typely is a completely free spell checking tool that requires no sign-up. An online tool that is easy to use and provides the ability to effectively perform grammar and spell check to help you write in a professional way. It provides a report generation function. Additionally, it provides a service for simple language check through a functional design.

Exclusive Strengths of 6 Best Online Grammar Checker Tools: -

1. Trinka AI – As the world's first AI-based grammar and language improvement tool, it is the most suitable tool for writing thesis and academic writing.

2. Grammarly – You can check grammar and spelling errors when writing a post by installing it in your browser.

3. Ginger – A simple way to check grammar and spelling.

4. Hemingway – Not just a grammar checker, but a style checker. A tool that can improve readability, especially for novelists.

5. Pro Writing Aid – Useful for all types of writers, entrepreneurs, and bloggers. It's a helpful tool for fictional writers and novelists.

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* Passive Voice

Flowchart

Sugar And Its Production

Note Making

* Max 4 points
* Abbreviation

Checklist (At least 10 Points)

Q Assume that your family is about to leave for another city on a 2-week holiday. Your father has asked you to prepare a checklist of the things to be done.

Web Checklist for Family Holiday

1. Have I kept my waterbottle (Yes/No)
2 Did I

Checklist for two week holiday

1.	Did I keep my waterbottle?	Yes	No
2.	Have I kept my the driving license?	Yes	No
3.	Did I keep the my mobile phone?	Yes	No
4.	Have I kept the medicines?	Yes	No
5.	Have I kept the charger for mobile?	Yes	No
6.	Did I inform the milkman?	Yes	No
7.	Are the tickets confirmed?	Yes	No
8.	Are the hotel room bookings done?	Yes	No
9.	Did I keep my diary?	Yes	No
10.	Have I kept some snacks?	Yes	No

Instruction

Write a set of 8 instructions on how to maintain your environment clean.

Instruction

we should _____

he must _____

he can _____

— Keeping Enviolenment Clean —

you should } X
you can
you must