

TEACHERS' HANDBOOK ON READING LITERACY

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CHAPTER 1

Introduction

Spoken language is a natural, biological form of human communication that is over six million years old. In contrast, reading is understood to be 6000 years old.

The unique and diverse methods human beings use to communicate through written and spoken language is a large part of what allows us to harness our innate ability to form lasting bonds with one another; separating mankind from the rest of the animal kingdom.

In recent years, screens may have overtaken the printed page in terms of popularity, but one thing is for certain, reading is still a cherished activity and plays a huge part in our lives and will always continue to do so. We enjoy reading as much for the content of what we read as for the contemplative silence it affords us.

There are various ways we might approach a written work:

- Skimming (getting the gist of things)
- Scanning (searching for specific information)
- Reading extensively (reading novels for fun)
- Intensive reading (concentrating on the text)

In the 18th century, Samuel Johnson had laid out a similar set:

- Hard study (done with pen in hand)
- Perusal (searching for particular information)
- Curious reading (when engrossed in a novel)
- Mere reading (browsing and skimming)

It's an accepted fact world over that Reading forms a vital component of a person's overall personality. It is no surprise then that the member countries of the OECD (Organisation for Economic Co-operation and Development) while developing **PISA (Programme for International Students Assessment)**, included Reading Literacy as one of the three parameters, the other two being Mathematical and Scientific literacy.

PISA is the world's biggest international education survey, involving schools and students in over 65 countries. It aims to assess how well a 15 year old child can apply his / her knowledge and skill in mathematical literacy, reading and scientific literacy. The purpose of this reading handbook is to serve as a tool for the teacher to help students with reading and preparing them for PISA style questions and eventually help improve the learning, in the case of students; and teaching, in the case of teachers.

Chapter 2.

INTRODUCTION TO PISA

2.1 What is PISA

The Programme for International Student Assessment (PISA), a project of member countries of the OECD (Organization for Economic Co-operation and Development), is a **triennial international assessment** which **aims to evaluate education systems worldwide** by testing the skills and knowledge of 15-year-old students who are nearing the end of their compulsory education. PISA is designed to assess how well they can apply what they learn in school to real-life situations. Over 90 countries have participated in the assessment so far which has taken place at three year intervals since 2000.

Background

- PISA—PM's approval on 28 Jan'19 for signing MOU between MHRD & OECD for India's participation in PISA
- Schools run by KVS, NVS & schools in UT of Chandigarh will participate.
- OECD has agreed to tweak the test questions to the Indian content

2.2 Why PISA--Objective

PISA, a competency based assessment, has been designed to assist governments in monitoring the outcomes of education systems in terms of student achievement on a regular basis and within an internationally accepted common framework, in other words, to allow them to compare how students in their countries were performing on a set of common tasks compared to students in other countries. In this way, PISA helps governments to not only understand, but also to enhance, the effectiveness of their educational systems and to learn from other countries' practices. It can help policy makers use the results of PISA to make decisions about education, to inform their teaching and set new targets.

Why PISA for India?

- PISA—will help introduce competency based examination reforms in the school system.
- Will discourage rote learning
- Lead to recognition and acceptability of Indian students & prepare them for the global economy of 21st Century.

Given the rapid pace with which changes are happening around us, we need our education to prepare us for the times to come. **Critical Thinking, Problem Solving and Conceptual understanding** must become the key parameters of learning. Relevance of information is losing value but the ways and means of processing that information are progressively becoming more relevant.

Our current education leaves our children far behind in all these aspects and in that light PISA is a welcome change. We need to look at PISA as an intervention which will not only make our education more relevant for current times but also make it **Future Proof**. Activities and concepts in the classrooms need to engage the mind, inspire and become contextual. Evaluation needs to be re-

modeled to incorporate similar thinking. In that light PISA is a very welcome intervention both for educators and educatees.

2.3 PISA Procedure

Every three years, students complete an assessment that includes items testing

Reading literacy, Mathematical literacy and Scientific literacy. In each cycle of PISA, **one of the cognitive areas is the main focus of the assessment, with most of the items focusing on this area and fewer items on the other two areas.** In addition to these three students are tested in an innovative domain such as collaborative problem solving in 2015 and global competence in 2018. **Students** also complete an

extensive background questionnaire, and school principals complete a **survey describing the context of education** at their school, including the level of resources in the school, qualifications of staff and teacher morale. The data collected from the assessment and background questionnaires are analyzed and the results are published a year after the assessment. These studies enable the participating countries to benchmark their students against similar samples of students of other countries.

The Indian Plan for PISA

- CBSE & NCERT -- part of the process & activities leading to the actual test.
- Field Trial(FT) --to be conducted in April 2020.
- 25 schools x 36 students each =900 students to be assessed
- PISA 2021 --officially called Main Survey--to be conducted in April 2021.

2.4 PISA 2021

- India shall be participating for the second time, the first being in 2009.
- 36 OECD member countries and over 50 non-members are expected to participate.
- Each student, selected on the basis of random sampling, will be tested on any two out of the three domains, viz. Reading literacy, Mathematical literacy and Scientific literacy.

PISA 2021

5250 students (150 schools x 35 students) will be assessed on the following subjects in the paper-based assessment:-

- Maths and Science (33% students)
- Maths and Reading (33% students)

Assessment Goals:

- ✓ To evaluate outcomes of learning.
- ✓ To assess how well students can apply what they learn in school to real-life situations.
- ✓ To show what 15 year-olds have learnt inside and outside a classroom.
- ✓ To measure literacy in terms of knowledge, skills and competencies.

The reporting of the findings from PISA focuses on issues such as:

- ✓ How well are young adults prepared to meet the challenges of the future?
- ✓ Can they analyze, reason and communicate their ideas effectively?
- ✓ What skills do they possess that will facilitate their capacity to adapt to rapid societal change?

- ✓ Are some ways of organizing schools or school learning more effective than others?
- ✓ How does the quality of school resources influence student outcomes?
- ✓ What educational structures and practices maximize the opportunities of students from disadvantaged backgrounds?
- ✓ How equitable is the provision of education within a country or across countries?

2.5 Principles of Testing in PISA

I. Paper and-pen assessment

- **Cognitive Assessment** --covers three domains: **Reading Literacy, Mathematical Literacy & Scientific Literacy.**
- The assessment of cross-curriculum competencies is an integral part of PISA.
- Emphasis is placed on the mastery of processes, the understanding of concepts and the ability to function in various situations within each domain.
- Thus PISA test is different
 - Focus is on understanding
 - Proper reading
 - No guesswork
 - Answers may be related to previous answers
- Participating students complete a **two-hour paper and-pen assessment.**

II. Context questionnaire

- ✓ Data is collected through a 35-minute Student Questionnaire which provides an opportunity
 - to investigate factors that may influence performance and
 - give context to the achievement scores.

III. Background Questionnaire

- ✓ Responses to a set of 'core' questions about the student and their family background, (including age, year, level and socio economic status) are collected during each assessment

IV. School Survey

- ✓ Information at the school-level is collected through a 30-minute School Questionnaire, answered by the Principal
- ✓ The questionnaire seeks descriptive information about the school and information about instructional practices.
- ✓ The survey results provide rich context for the achievement data.

Target Group

- Children of age group 15 years 3 months – 16 years 2 months attending any educational institution in the country (selected region), including public, private, aided, international schools.
- Open Schools students are not eligible.
- Students born between Jan 2005 to Feb 2006 as test will be held in April.

The Challenge Ahead

- ✓ 2021--PISA will help reveal where India stands globally as far as learning outcomes are concerned.
- ✓ The participation in PISA 2021 would indicate the health of the education system and would motivate other states in the subsequent cycles. This will lead to improvement in the learning levels of the children and enhance the quality of education in the country.
- ✓ The Challenge before the teaching community is to collaborate, train and brace our students for PISA 2021.

CHAPTER 3

How Reading Literacy is Measured in PISA

PISA acknowledges that readers respond to a given text in a variety of ways as they seek to use and understand what they are reading. The concept of reading literacy in PISA can be described along three dimensions: texts (the range and format of the reading material), aspects (the type of reading task or reading processes involved), and situations (the range of contexts for which the text was constructed).

Texts

Text refers to the type of material that is read. There are four main texts classifications in PISA 2009:

- **Text format** refers whether a text is continuous, non- continuous, mixed or multiple. Continuous texts are formed by sentences that are in term organised into paragraphs (e.g.snewspaper reports, novels). Non-continuous texts, also known as documents, are composed of a number of lists (eg.tables, schedules, forms). Mixed texts contain elements of both continuous and non- continuous formats and are commonly used in magazines and authored web pages. Multiple texts comprise discrete parts that are juxtaposed for a particular occasion or purpose.
- **Text type.** All texts in PISA are classified by text type according to the main rhetorical purpose of the text. This ensures that the assessment includes arranging of texts that represents different types of reading. It is not conceived of as a variable that influences the difficulty of a task. Texts type has been classified into six categories as given below. In the brackets are examples:
 - ❖ Description (process in a technical manual, catalogue, blog,diary)
 - ❖ Narration (novel, comic strip, report in a newspaper)
 - ❖ Exposition (essay, entry into encyclopaedia)
 - ❖ Argumentation (letter to the editor, posts in an online forum)
 - ❖ Instruction (recipe, instructions for operating software)
 - ❖ Transaction (personal letter to share news, text messages to arrange meeting)

- **Medium** refers to the form in which texts are presented – print (paper) or digital (hypertext). Print medium texts appear on paper in many different forms – single sheets, brochures, magazines and books. The static nature of the printed text is usually read in a particular sequence and the total amount of text is visible to the reader.
- **Environment** applies only to digital-medium texts. Two kinds of environments have been identified in PISA: an authored environment (in which the content cannot be modified; e.g. a web page) and a message based environment (in which the reader has the opportunity to add to or change the content; e.g. email, blog). While texts can combine both types of environment, individual tasks in PISA tend to draw on either authored or message based components of the text.

Aspects

Aspects are the cognitive skills that the reader uses in processing texts. Five aspects guided the development of reading literacy assessment tasks: retrieving information; forming a broad understanding; developing an interpretation; reflecting on and evaluating the content of a text; and reflecting on and evaluating the form of a text. For PISA 2009, these five aspects were organised into three broad categories, and are reported as reading subscales. (Fig 3.1):

- Access and Retrieve (navigating a text to locate and retrieve a particular piece of explicitly stated information), Selective reading and locating information are emphasized.
- Integrate and interpret (processing what is read to make internal sense of a text). Effective manoeuvring skills within the framework of the text are emphasized.
- Reflect and evaluate (drawing upon knowledge, ideas or attitudes beyond the texts in order to relate the information provided in the texts to one's own conceptual and experiential frames of reference). Critical thinking and global comprehending skills are emphasized.

These dimensions define the PISA reading literacy framework and formed the foundation used by test developers to construct the tasks that made up the 2009 assessment. Some of the elements in the three dimensions are used as the basis for constructing scales and sub scales, and subsequently for reporting, whereas other elements ensured that reading literacy is adequately covered.

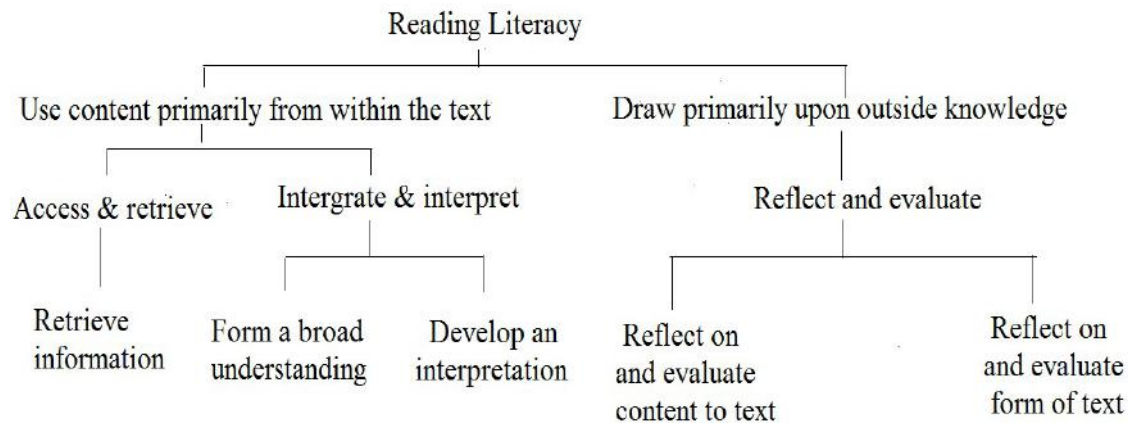


Figure showing Relationship between the Reading framework and the Aspect subscales

Figure: 3.1

Situations

Situations refer to the contexts and purposes for which the text was constructed. Four situations are identified in PISA reading:

- Personal (e.g. letters, fiction, diary- style blogs)
- Public (e.g. public notices, news websites)
- Occupational (e.g. job advertisement in a newspaper or online)
- Educational (e.g. text books, interactive learning software).

These four categories overlap. For example, the purpose of a text might be for both personal interest and for instruction (personal and educational), though the practice has been to identify one over-riding category corresponding to each test item or task.

The Structure of the Assessment

The framework serves as the conceptual basis for assessing students' proficiency in reading literacy. New tasks and questions were developed to reflect the concepts in the framework. The incorporation of digital texts into the framework required two different assessments: a paper-and - pen assessment and a computer-based assessment. Details about the paper-and-pen assessment are included in the current report, whereas the assessment of digital reading has been described in a separate, dedicated report.

CHAPTER4

Different Levels of Reading

Reading is an art. Reading books is a way of learning; with the author being the instructor. It is a combination of several small acts. It cannot be instructed. It has to be practised until one masters it. Reading has been classified into four levels, which are closely related to each other.

- a) **Elementary reading:** This is basic reading(initial reading) of what the symbols literally mean. It is the first level of reading which most readers have achieved. The reader may not be able to comprehend the deeper and varied levels of meaning that the text may convey.
- b) **Inspectional reading:** This level is pre-reading or skimming. At this level the reader quickly reads through the title, preface, the contents, index, blurb, summary etc. to understand the main points and its structure. It is casual superficial reading to get a general idea of the book whether it is worthy of being read.
- c) **Analytical reading:** This is a more demanding and complex level for readers. Analytical reading is hardly ever required, if your goal of reading is simply information or entertainment. This level of reading is pre-eminently for the sake of understanding. It enables the reader to see how organised the book is, which genre the book belongs to and to define the purpose of the book, whether it is significant and its implications.
- d) **Syntopical Reading:** This is the most complex and systematic level of reading. It is also called comparative reading. Here the reader reads different texts on the same subject and compares them to each other to arrive at a holistic and more nuanced understanding of the subject. The ultimate aim of syntopical reading is to understand all the conflicting viewpoints relating to the subject.
- e) **Speed reading with the right brain:** A superior reading skill can give greater access to the expanding cornucopia of information. Visualising is central to the technique of speed reading. Speed reading involves reading whole ideas at each glance, instead of reading word by word. Reading a text in larger chunks will transfer greater amounts of information per glance. Higher reading speed occurs in the right brain. Reading whole ideas, rather

than words is the secret of speed reading. Right side of the brain has a major role in effective comprehension. The right side is where concepts and visual images are formed. Right side allows to handle the higher order cognitive processing. The right side excels at imagination, intuition, facial recognising and artistry.

What are the techniques of Speed Reading?

- Maintain concentration through comprehension and association
- Vary speed depending on reading material.
- Avoid mind wandering, avoiding regression by getting into the rhythm of the reading material.
- Running the finger down the right-hand side of each page or column of text while reading and skipping line ends, assists in enhancing the speed.

When focus of the attention is slightly ahead of each phrase, reading will begin to flow more smoothly, as the next phrase is anticipated. Slowing down may ironically result in faster reading, over all due to the stronger conceptual connection. Reading distance and speeding at the end also determines the speed of reading.

According to Robert Allen the speed barriers can be overcome:

- a) If the reader overcomes his sub-vocalization habits. (reading aloud internally/tongue movement)
- b) With enhanced capability to skim and scan.
- c) Through practicing word chunking, i.e. taking many more words for every eye fixation.
- d) By activating both sides of the brain. Mostly all readers use only the left side but imagination and visualization brings into play the right side of the brain.

Visualization and Conceptualization are vital to speed reading. The latter is generating ideas through words while the former is generating ideas with image and pictures. Visualization, which is often neglected while reading helps in deep emotional connection which in turn helps to retain ideas and experiences. A visual system of a healthy individual processes about 70% of the total sensory output which helps in double coding, i.e. retaining the content both in text and image. High level comprehension can be acquired by expanding our word knowledge or vocabulary, using visualization and association strategies, applying mind mapping, previewing strategy, strengthening our skimming and

scanning technique, reading more and learning more and finally, practising meditation, especially the art of breathing and having healthy food habits.

Wordsworth's poem that speaks about the Solitary Reaper is a good example to enable students to visualize. The teacher may lead the students into an envisioning activity.

“Behold her, single in the field,
Yon solitary Highland Lass!
Reaping and singing by herself;
Stop here, or gently pass!
Alone she cuts and binds the grain
And sings a melancholy strain;
O listen! For the Vale profound
Is overflowing with the sound.”

Comprehension Strategies (Steps involved)

- 1. Comprehension monitoring:** Students determine whether they have understood what they have read. A Reader uses several strategies for monitoring his comprehension such as-
 - (a)** Identify where the difficulty occurs.
 - (b)** Identify what the difficulty is.
 - (c)** Restating the difficult areas in own words.
 - (d)** Looking through the textual content.
- 2. Reflecting:**
 - a)** It determines how well a student has comprehended a specific reading item.
 - b)** Helps in improving comprehension. Example: Story helps in learning to organise and describe events. Some pictures (visual support) can be used to retell a story.
- 3. Developing Vocabulary:**
 - a)** Readers organise vocabulary incidentally through indirect exposure to words, by listening and talking.
 - b)** Extensive reading contributes lots of vocabulary though some of them may be passive vocabulary which the reader comprehends from the context.

- c) Loud reading in the class also enriches the vocabulary collection of the students.

4. Questioning and Answering:

- a) This method helps improving the reading comprehension.
- b) Reading comprehension followed by questions is the best example of this technique.
- c) Questions may vary from open ended to multiple choice questions.
- d) In order to answer these questions the reader has to search, think, interpret and reach to the final answer.

5. Identifying main ideas and details:

- a) When a reader can identify the main ideas and the supporting details of a given text, it can be concluded that the reader has comprehended the text.
- b) The central idea in a paragraph may be stated in the beginning, followed by supporting facts and then the final point of the ideas as the conclusion.

6. Analysing Characters:

- a) Character analysis is the process of evaluating the specific traits of a character.
- b) The reader will be able to give an introduction, appearance, background, behavioural traits etc. of the character if the comprehension is proper.

7. Analysing relationships: One who has properly comprehended a piece of writing would be able to analyse the relationships of the characters in the writing.

8. Inferring:

- a) The reader would be able to figure out something that author doesn't actually say.
- b) You can use the clues that are in the text, and things from your own mind. This is a way of "reading between the lines" and it adds lot of meaning to the story.

9. Summarizing:

- a) Summarization strategy can be used very effectively for comprehension of any content area.
- b) This technique teaches students how to discern the most important ideas in a text, how to ignore irrelevant information and how to integrate the central ideas in a meaningful way.

10. Evaluation:

- a) The systematic determination of subjects' merit work and significance, using a set of standards.
- b) Evaluation gives insight into prior or existing initiatives, enables reflection and assists in identification of future change.

11. Using text features:

- a) Helps the learners build a foundation of comprehension when reading nonfiction text.
- b) This exercise gives the students practice, gaining information from both the text and the text features.

12. Understanding text structures:

- a) Understanding text structures help as this provides lot of primary information.
- b) Students who are more knowledgeable about text structure recall more textual information.

An Exercise in Phrase Reading

The Velveteen Rabbit

There was once Velveteen Rabbit **and in** the beginning, **he was really** splendid. **He was fat** and bunchy, **as a rabbit** should be; **his coat** was spotted **brown and white**, he had **real thread whiskers**, and his ears **were lined** with pink sateen. **On Christmasmorning**, when he **satwedged** in the top **of the Boys'** stocking, **with a sprig** of holly **between his paws**, the effect was charming.

There were **other things** in the stocking, **nuts and oranges** and **a toy engine**, and chocolate almonds **and** a clockwork mouse, **but the rabbit** was quite **the best** of all. **For at least** two hours **the Boy** loved him, **and then** Aunts and Uncles **came to dinner**, and there **was a great** rustling **of tissue paper** and unwrapping **of parcels**, and in **the excitement** of looking **at all** the new presents **the Velveteen Rabbit** was forgotten.

For a long time, he lived **in the** toy cupboard **or on the** nursery floor, **and no one** thought very much **about him**. He was **naturally shy**, and being only **made of Velveteen**, some of **the more** expensive toys **quite snubbed him**. The mechanical toys **were very superior** and looked down **upon everyone else**; they were **full of** modern ideas, **and pretended** they were real. **The model boat**, who had **lived through** two seasons **and lost** most of **his paint**, caught the tone **from them** and never missed **an opportunity** of referring **to his rigging** in technical terms.

The Rabbit could not claim **to be a model** of anything, **for he didn't** know that **real rabbits existed**; he thought **they were all** stuffed **with sawdust** like himself **and he understood** that sawdust **was quite** out of date **and should never** been mentioned **in modern circles**. Even Timothy, **the jointed** wooden lion, **who was made** by the **disabled soldiers**, and should have **had broader views**, put on airs **and pretended** he was connected **with Government**. Between them all **the poor** little Rabbit **was made** to feel himself **very insignificant** and commonplace, **and the only person who** was kind to him **at all** was **the Skin Horse**.

The Skin Horse **had lived longer** in the nursery **than any** of the others. **He was** so old **that** his brown coat **was bald** in patches **and showed** the seams underneath, **and most** of the hairs **in his tail** had been pulled **out to string** bead necklaces. **He was wise**, for he had **seen** a long succession **of mechanical toys** arrive to boast **and swagger**, and by and by **break** their mainsprings **and pass away**, and he knew **that they were** only toys, **and would never** turn into

anything else. For nursery magic **is very strange** and wonderful, **and only** those playthings that **are old** and wise **and experienced** like **the Skin Horse** understand all about it.

“What is REAL?” **asked the Rabbit** one day, **when they** were lying **side byside** near the **nursery fender**, before Nana came **to tidy** the room. “Does it mean **having things** that buzz **inside you** and a **stick out handle**?”

“Real is not how you are made”, Said the Skin Horse. “It is a thing that happens to you. When a child loves you for a long, long time, not just to play with, but Really loves you, then you become Real”,

“Does it hurt?” **asked the Rabbit.**

“Sometimes,” **said** the Skin Horse, **for he was** always truthful. “**When** you are real **you don’t mind** being hurt.”

“**Does it happen** all at once, **like being** wound up,” **he asked**, “Or **bit by bit**?”

“It doesn’t happen all at once,” **said the Skin Horse.** “You become. **It takes** a long time. **That’s why** it doesn’t **happen often** to people **who break easily**, or have **sharp edges**, or who **have to be** carefully kept. Generally, by **the time** you are Real, **most of** your hair **has been** loved off, **and your eyes dropout and you get lose in the joints** and very shabby. **But these things** don’t matter **at all**; because once **you are real** you cannot **be ugly**, except to people **who don’t understand.**”

“I suppose **you are real**?” **said** the Rabbit. **And then** he wished **he had** not said it, **for he thought** the Skin Horse **might be** sensitive. **But** the Skin Horse **only smiled.**

“The boy’s Uncle **made me Real**,” He said. “**That was** a great many years ago; but **you are Real** you cannot become **unreal again.** It lasts **for always.**”

The Rabbit sighed. **He thought** it would be **a long time** before this magic **called Real** happened to him. **He longed** to become Real, **to know** what it **felt like**; and yet **the idea** of growing shabby **and losing** his eyes **and whiskers** was rather sad. **He wished** that he could **become it** without these **uncomfortable things** happening to him.

There was a person **called Nana** who ruled **the Nursery.** Sometimes she took no notice of the play things lying about, and sometimes, for no reason whatever, she went swooping about like a great wind and hustled them away in cupboards. She called this “tidying up”, and the play things all hated it, especially the tin

ones. The Rabbit didn't mind it so much, for wherever he was thrown he came down soft.

One evening, when the Boy was going to bed, he couldn't find the China dog that always slept with him. Nana was in a hurry, and it was too much trouble to hunt for China dogs at bedtime, so she simply looked about her, and seeing that the toy cupboard door stood open, she made a swoop.

"Here," She said, "take your old Bunny! He'll do to sleep with you!" And she dragged the Rabbit out by one ear, and put him into the Boy's arms.

That night, and for many nights after, the Velveteen Rabbit slept in the Boy's bed. At first he found it rather uncomfortable, for the boy hugged him very tight, and sometimes he rolled over on him, and sometimes he pushed him so far under the pillow that the Rabbit could scarcely breathe. And he missed, too, those long moonlight hours in the nursery, when all the house was silent.

CHAPTER 5

Critical Reasoning for Comprehension

Critical thinking, logical reasoning and analysis are focal pyramids of Reading comprehension. The readers are expected to understand the piece of writing and interpret it, use critical and logical reasoning and apply the given information for reaching to certain decision or conclusion. Hence, it is significant for the teachers to orient the students to read critically.

A few, most commonly recurring questions that test one's critical reasoning (CR) skills are on:

- Author's opinion.
- Paragraph Formation.
- Paragraph Completion.
- Identifying the odd sentence among the four given
- Inference.
- Conclusion questions.
- Strength/Weakness of the argument.
- Filling in the blanks

Important Note: to be able to deal with these successfully, one should first understand what '*critical reasoning*' is.

Critical reasoning in reading is the ability that helps one to differentiate and discriminate varied arguments/reasoning contained in the text to reach a logical conclusion.

Basic Concepts of Critical Reasoning:

1. Argument

An argument is an expression through which the author tries to convince the reader about an idea/opinion/claim/suggestion or the conclusion by providing supporting reasons.

2. Conclusions

The main idea that the author is trying to convince the reader about, by providing supporting reasons, is called the conclusion of the argument.

3. Premise

The supporting reasons that the author provides in the argument to support his conclusion is called premise.

Example:

A student X has not performed well in the first written examination since then, in almost all the written exams, his scores/grades have been very poor. This shows that he has consistently failed to perform. Therefore, he should be given special coaching.

The above passage is an argument as we can clearly see that the author finally wants us to believe that the student X should be given special coaching and he supports this by providing relevant reasons.

Hence, the conclusion of the argument is: Student X should be given special coaching.

The premises are:

- a. Student X has performed poorly in the written exams.
- b. His scores/grades have been poor.
- c. He has failed to perform consistently.

Important Note: To be able to deal with any critical reasoning correctly, one should identify the conclusion and the premises correctly, which is not as easy as it may seem.

For, example, a student may now assume that the first sentence or the first few sentences of the paragraph is/are the premise/s, and/or the last sentence of the paragraph is the conclusion, as is the case in the example given above. Well it need not be so. Remember, the paragraph is just the physical representation of the argument WHICH IS A THOUGHT PROCESS. The argument above can also be presented as follows:

I think student X should be given special coaching because he has consistently failed to perform. Take for instance his first written test results which was very bad or the exams later, in which he scored poor grades.

Well, the conclusion of the argument is mentioned in the first sentence of the paragraph. And, the premises follow.

Now, look at this:

Well, student X has consistently failed to perform and so I think he should be given special coaching. Take for instance his first written test results which was very bad or the exams later, in which he scored poor grades.

The conclusion in the above argument follows the first premise. The other premises follow the conclusions. Hence, one should be careful in identifying the conclusions and premises.

How to Identify the Conclusion:

As we have seen above, it is not always so easy to identify the conclusion of the argument. If you are lucky, you may have conclusion indicators-words that indicate that what follows is a conclusion. Consider this:

Student X has consistently failed to perform, therefore, he should be given special coaching.

In the above argument the author said, “therefore, he should be given special coaching”. Here, ‘therefore’ should clearly indicate that “he should be given special coaching” is the conclusion of the argument. Other conclusion indicators are- hence, thus, clearly, in conclusion, finally, that is why, for this reason, it follows that, then, etc.

The type of questions are:

- Which one of the following is a conclusion that can be drawn on the basis of the above paragraph?

A	C
B	D
- Which one of the following is implied by the argument above?

A	C
B	D
- The author seems to suggest that.....

A	C
B	D
- If all the statements above are true, then which one of the following must also be true?

A	C
B	D

- The author of the above passage would most likely agree with which one of the following?

A

C

B

D

How to Identify the Premises.

Again, if you are lucky, you may have premise indicators-words that indicate that what follows is a premise. Look at the following:

Because student X has consistently failed to perform, he should be given special coaching.

In the example above, the word ‘because’ clearly indicates that “Student X has consistently failed to perform” is a premise. Hence, words like **because, as, since, due to, on the basis of, based on the fact that**, etc. are premise indicators.

1. Assumption

We already know what a premise is –a reason the author presents in the argument in support of his conclusion. Well, what if the author takes the support of a reason but doesn’t mention it? Is that possible? Let’s see.....

Example: Rohit is a member of Delhi Sporting Club. Hence, he must be a footballer.

Here the author has assumed it that all the members of Delhi Sporting Club are footballers. However, while making the argument author had not spoken about the very fact that all the members of Delhi Sporting Club are footballers. He could have written it this way

All the members of Delhi Sporting Club are footballers. Rohit is a member of Delhi Sporting Club. Hence, Rohit is a footballer.

This idea that an author takes support of along with the stated premises but doesn’t mention is called an Assumption. The author is said to have assumed it. This is very critical to the argument but is absent in the argument. Therefore, the identification of an assumption is very difficult. To identify an assumption in the argument, simply look at the conclusion and the premises and identify those elements in them that are uncommon. Usually the link between these

uncommon elements is the assumption. However, it requires good practice as assumptions can be simple or difficult.

2. How to identify the tone of the Passage

While going through the reading comprehension the tone of the passage also is very critical to reach to any conclusion or fully comprehend the opinion/idea/argument or the case the author wants to build. The tone that the author uses when making the statement can best be described as adjectives like caustic or critical. The tone refers to the general attitude the author displays towards the topic. The tone of the passage can be best understood by observing the nature of adjectives/nouns/verbs that the author uses to express his views on the topic under discussion so the reader should focus on the statements the author makes, not on the statement the author quotes from somewhere else. Once the reader has found the key adjectives/nouns/verbs he should try to put them in the following categories

- a) Negative words,
- b) Positive words
- c) Mild words
- d) Strong words
- e) Sarcastic words
- f) Ironic words

We can list the above in the following table:

Adjectives that describe various types of tones

1) Adjectives used to describe very negative tones

The tone of passage can be described as being.....
Acerbic, scathing, cutting, biting, vituperative, vitriolic, searing, trenchant, harsh, vicious or caustic
Belligerent, bellicose or aggressive
Derisive, contemptuous, ridiculing, scornful, mocking or disparaging
incendiary or inciting
Provocative

2) Adjectives used to describe moderately negative tones

The tone of a passage can be described as being.....
Angry or indignant
Apathetic or indifferent
Biased, coloured, partisan, prejudiced, bigoted or chauvinistic
Condescending, patronizing, supercilious or disdainful
Cynical
Skeptical
Dogmatic, opinionated or peremptory
Obsequious
Critical
Hypocritical
Sarcastic or sardonic
Satirical
Pessimistic, negative or gloomy

3) Adjectives used to describe positive tones.

The tone of a passage can be described as being.....
Optimistic, positive, sanguine, cheerful or buoyant
Humourous
Introspective or contemplative
Laudatory, acclamatory, complimentary or adulatory
Motivating, inspiring or encouraging
Commiserating or sympathetic

4) Adjectives used to describe tones that are neither positive nor negative.

The tone of a passage can be described as being.....
Neutral
Apologetic
Emotional

5) Other adjectives that can be used to describe the nature or type of a passage

A passage can be said to be In nature
Speculative
Romantic
Humanistic
Technical
Didactic
Narrative
Descriptive
Evocative

Subject Specific Vocabulary

(Cross curricular connects)

Sl No.	Words	Subject / Contextual Meaning	Examples
1	Pitch	Field of Play (Physical Education) Acuteness or graveness of tone (Music)	Pitches with no grass tend to help spinners She was in the middle of every pitch and fully supported each note.
2	Volume	Degree of loudness (Music / General) Amount of space something takes or can be filled with (Science)	Playing music at full volume she fiddled with the volume on the stereo. If you measure the amount the water level increases, you can find the volume of the water pushed out of the way.
3	Division	A calculation in Mathematics of how many times a number is contained in a larger number (Mathematics) The process of separating people or things into smaller groups or parts (General / English)	The symbol for division can be a slash, a line, or the division sign In the past, we simply had division of labour among people.
4	Fraction	A division or part of a whole number (Math's) A small group / part (General)	A common fraction is a fraction in which numerator and denominator are both integers, as opposed to fractions . She spends only a <i>fraction</i> of her earnings.
5	Classical	Relating to the original or traditional standard for something (General)	It's a classic suit that won't go out of style.

		Relating to language, literature, music.	The last time I read classical Japanese literature was in high school.
6	Exercise	Physical activity like walking,jogging.etc. (Physical Education) Learning activity (General) Use of power (Civics / Politics)	The exercise felt good, and he ran and leapt and clambered up trees until he was panting. I completed all the exercises given at the end of the lesson. The Prime Minister exercised his constitutional power to invite the international leader.
7	Maiden	A girl or young woman who is not married (General / English) Maiden over in cricket game (Physical Education) First (Geography / General)	Mildred is the dearest and sweetest little maiden in the world. A maiden over from the best bowler at the end of the game brought the team to success. In 1912 Titanic made the maiden voyage from Southampton to New York city.
8	Digest	When your stomach digests food, it changes into the substances that your body needs (Biology) To understand information when there is a lot of it or it is difficult or unexpected (General / English)	He has trouble digesting certain foods. Stunned, she was silent, trying to digest what he was saying.
9	Friction	Disagreement (General) The physical force that makes it difficult for one surface to move over another (Science)	It was difficult to reach an agreement because of the friction between the two sides. Oil in a car engine reduces friction .
10	Properties	Quality or feature of something (Science)	Combustibility is an important chemical property to consider when

		Things especially valuable things , that are owned by someone. (General)	choosing building materials. We are not responsible for the loss of personal property
11	Solution	A liquid with another substance dissolved in it so that it has become part of the liquid (Science) A way to solve a problem or deal with a bad situation (General) Answer to a question in a puzzle, crossword etc (Academics)	The chemical solution should be handled with care. Putting children in prison is not the solution. Finding solutions for crossword puzzles sharpens brain.
12	Conductor	Substance that allows heat or electricity to pass through it (Science) Someone on a bus or train who checks passengers' tickets.	Metals are good conductors of electricity The bus conductor asked the passenger to produce the ticket.
13	Denominator	The number that is below the line in a fraction (Maths) Common interest /shared trait (General)	In the fraction 2/3 the numerator is 2 and the denominator is 3. I think the only common denominator of success is hard work.
14	Cancer	The parallel of latitude (geography) A serious illness caused by a group of cells (Biology)	The Tropic of Cancer and Tropic of Capricorn each lie at 23.5 degree latitude. She was diagnosed with cancer of cervix.
15	Gravity	The force that makes something fall to the ground (Science) The seriousness or importance of something (General)	The loss of gravity I'm sure you can appreciate the gravity of the situation

16	Vessel	A tube in people, animal or plants through which liquid flows (Science) A large boat or ship	The blood vessels are badly affected in the accident. New Zealand has banned vessels carrying nuclear weapons.
17	Square	A geometrical figure (Mathematics) Square meal (General)	A square of fabric / carpet/ glass Everyone should get at least one square meal a day.

More examples for cross-linked vocabulary

Inflate

1. Objective should be clearly set out so as not to duplicate work and **inflate** costs. (increase)
2. We used a pump to **inflate** the tube. (fill)

Bear

1. The **bear** market is expected to change with the formation of a new government.
2. Polar **bear** can run at a speed of 40 Km/hour.
3. **Bear** in mind that you should drive carefully in mountainous roads.(keep)
4. Farmers had to **bear** the loss of crops due to the heavy rains.(withstand)
5. The bridge collapsed as it could not **bear** the load of traffic (carry).

Stock

1. The **stock** market is moving up after the new RBI policy.
2. The textile store has large **stock** of textiles.
3. She has a **stock** response to all questions.

Dawn

1. He started the journey at **dawn** (break of day).
2. The awful truth was beginning to **dawn** on him(strike).
3. The fall of the Berlin wall marked the **dawn** of a new era in European history. (beginning)

Latitude

1. Toronto shares the same *latitude* as Nice (Grid line)
2. Journalists have considerable *latitude* in criticizing public figures (freedom)

Rate

1. The interest *rate* is cut down by the central bank. (cost)
2. This film is *rated* to be of high standard. (assessed)
3. I cannot do this job at any *rate*.

Bull

1. The *bull* ran around the fields chasing the calves.
2. The *bullish* market may find a slow down with the change of the financial policies of the government.
3. The speech delivered by the comedian was a load of *bull* (complete nonsense) .

Flat

1. The school building is constructed on a *flat* surface. (levelled)
2. The patient answered the questions of the doctor in a *flat* voice. (dull, lacking emotions)
3. He refused my request *flat*. (Outright)
4. My car's tyre got *flat* as I was coming to the office yesterday. (deflated, burst)

Pool

1. Arun had his bath in the *pool*, close to his home, this morning.
2. Five friends *pooled* in their resources to start a new company.
3. The soldier fell from his horse in a *pool* of blood.
4. Car *pools* are available near the airport, for travellers.

Peal

1. Students ran out of their class rooms at the *peal* of long bells.
2. The boys got annoyed over the *peals* of laughter of the girls.

Pinnacle

1. The air crash took his life away when he had reached the *pinnacle* in military career.
2. The side of the ridges and *pinnacles* are bare of vegetation.

Trade

1. He has established himself in financial **trading**.
2. Your action was not accidental but a **trade**.
3. I **traded** with her throughout the journey.

Micro

1. The matter is to be examined at the **micro** level for bringing out solutions.
2. The growth of **micro** organisms has to be checked.
3. He is a **micro** minded person.

Share

1. The company's **share** has been declining.
2. Everyone has his own **share** of good work.

Interest

1. The students have special **interest** in literature.
2. The **interest** due to him was paid.
3. No one should have vested interest.

Star

1. A celestial body e.g. Sun is a **star**.
2. A highly publicised motion pictures performer or a person who is pre-eminent in a particular field.
Virat Kohli is a cricket **star**.
Anushka Sharma is a film **star**.
3. (Verb): to perform outstandingly.
He **starred** in kabaddi and Kho-Kho when he was in school.

Area

1. The surface included within a set of lines e.g. area of a triangle, field.
2. Field e.g. the whole area of foreign policy.

Whirlpool

1. An area of water in a river, stream etc. that moves very fast in a circle.
2. A magnetic or impelling force by which something may be engulfed.
3. The Chief Minister found it very difficult to come out of the **whirlpool** of politics.

Cloud

1. A white or grey mass in the sky that is made of many small drops of water.
2. Something that has a dark or threatening aspect e.g. *clouds* of war, a *cloud* of suspicion.
3. The computers and connections that support *cloud* computing e.g. store files in the *cloud*.

CHAPTER6

Classroom transaction strategies

1. The Guiding Principle:

The teacher has always known his job well. He has always known the expected outcomes/results. Certainly the role, context, content and techniques have changed but the basics have never changed. The guiding principle has always been to prepare the child for future in a way that the knowledge gained in the classroom could be applied or used in real life situations to meet the challenges. This perspective was never challenged-whatever is learnt should be understood, applied in various situations and help the learner create new ways, means and solutions to the multiple challenges of life. PISA seeks nothing other than this. It desires that the perspective discussed above has to be intensive and all pervasive.

2. The Maxim:

The teacher always has some tools, methods, strategies and a thorough knowledge of where, when, how and why to use one or the other to make the learner understand the content and use it in myriad situations of his life with ingenuity of his/her mind, gradually internalizing and evolving his strategies from knowledge to understanding and further to application, and from analysis to evaluation and creativity. It is the training of the teacher that helps the learner to develop the ability to make appropriate choices, nurture and maintain harmonious relationship with his immediate space and the world at large, thus equipping him with the necessary life tools to face the multifarious situations he comes across.

From times immemorial the transaction of classroom direction and culmination have been guided and shaped by the universal maxims of teachings, the gradual shift being from:

- Known to unknown
- Simple to complex
- Analysis to synthesis
- Particular to general
- Empirical to rational
- Induction to deduction
- Psychological to logical

- Actual to representative
- Near to afar
- Whole to part
- Definite to indefinite

The maxims basically set the ball rolling and the teacher further decides the levels-knowledge, understanding, application, analysis, evaluation, creativity- and while in his class he glides through these levels, knowing fully well that knowledge acquired but not understood can never be applied in a different situation in life hence is of no use.

3. Learning Outcomes & Strategies:

The models like the control model, process, product or the epistemological mode; various methods like question box, role play, situation analysis, case studies, value clarification, group discussions, debate, quiz, content etc have always being in vogue to achieve the desired learning outcomes. A variety of teaching styles and learning including following convictions, respecting, committing to others, valuing process, brain storming etc. have been effective tools employed by teachers to have the desired learning outcomes.

Teachers have been using various strategies in the classrooms. Some of these are:

Modeling-which means letting the child know how to do what he is being asked to do.

Visualization-The strategy has always helped to spread vivacity and life to many of the concepts which otherwise would have been abstract, dry and non-tangible.

Co-operative Learning-Teachers have been encouraging students to work in groups and supplement and complement each other's abilities to find understand, apply, create or innovate.

Enquiry Based Instruction-Asking questions which can stimulate thinking in the child. There could be two types of teachers. A teacher who asks/poses thought provoking questions which inspire the students to reflect upon on the other hand - A teacher who encourages the students to reflect upon on the other hand - A teacher who encourages the students to ask, investigate, enquire to improve his understanding over problem solving skills.

4. Core Learning Outcomes:

Briefly we can say that the following empirically valid and pragmatic learning strategies have been in practice across the curriculum for quality output in respect of the learning outcomes.

- a) Actively engage all learners in a classroom
- b) Maximize the student participation
- c) Ensure that diverse learners focus their attention on critical concepts and big ideas.
- d) A gradual evolution to independency of the learner leading to Self-Learning.

5. The Fallacy:

The obvious fallacy our teachers fall into even today, is to assume that all students are the same at skill levels and while doing so the teacher limits the ability of many students to interact with him, think critically or construct new meanings. Many of our teachers are aware that their practices in teaching while transacting under such fallacies do not work and hence the desired results or changes are not forthcoming.

A common practice by teachers in most of the junior grade classes is to allow the students to blurt out answers. The same exceptional or bright students in their enthusiasm and intelligence blurt out the answers as soon as the question is posed. All this happens much before a common student could figure out the question. This behaviour of the bright students could be supported as an indicator of their quick minds; they must have shouted out the answer unwillingly but have deprived their own friends of the thinking time that they need to cognitively process the questions, and construct a viable answer.

Another common practice is Round Robin Reading – one of the most common forms of text reading. Here one student reads the text and the rest follow along. Though this practice is fraught with difficulties-one of which is only one student is actively engaged in reading. While this student is reading the rest of the students are not listening to him, but are busy counting the lines to find the place where he would start reading when his turn would come. They would try to have a quick reading of these lines before their turn actually comes. Some less abled students are anxiety ridden; they wait for their turn and feel humiliated by demonstrating to the whole class their lack of skill in loud

reading. And the one sitting in last bench is also passive as he is sure his turn to read in class wouldn't come that day!

One of the most common practice-giving common homework or assignment to all, especially in science also instils frustration among students who do not have the prior knowledge and skill to derive benefit from the homework or assignment. The oft repeated excuse is to ascribe it to a common syllabus and common books. An intelligent teacher who believes in quality outcomes may differentiate and allow wisdom while assigning home works or assignments.

Sage on the stage is common practice established at secondary level of teaching. The teacher has a belief that teaching is essentially communicating information through oral recitation to a group of students. The strategy limits the opportunity to learn. It is worthwhile to note and record that the ground breaking study documented in 1984 states that nothing much has changed. Choral recitation, chalk & talk and other insulated methods ignore the fact that many diverse learners require the teachers to do more than simply cover their syllabus. The teacher needs to scaffold new information using various instructional strategies and designs to teach the children how to learn. To sum up it can be said that we will have to stop all these common instructional practices as they are ineffective because they assume homogeneity among students, where as in reality every student is a unique entity.

In the above paragraphs we have discussed the non-productive instructional strategies such as Hand rising, blurting out answers, focus on exceptional students, Round Robin Reading etc. The assumption that one size fits all is fallacious. The teachers need clear alternative that increases, assists critical thinking and caters to the need of wide variety of students today.

6. The Instructional Shift:

We may say that these quality instructions have their base somewhere in the co-operative learning, direct instructions and critical thinking. The essence of high quality instructions is the very perspective of the teacher which demands a major change in the role of a teacher from disseminator of information to a choreographer of learning. Today the teaching demands an active or dynamic interaction between the teacher and the learner. Putting it in other words quality instructions encourage the students to Think, Speak, Write, Touch, Build, Listen, Practice, Participate, Introspect and Actively learn.

“The only permanent thing in life is Change,” and this applies to our learning too, and the teacher should understand and appreciate the inherent dynamism in his profession with all its subtleties and nuances. If the teachers’ instructions have to work for all kinds of learners then the teachers’ instructional tool kit must be well stocked with validated strategies that can engage every learner. The teacher must ensure that every child from kindergarten is actively involved in the classroom interaction. This would help the teacher to manage his/her classroom. The students will not only be actively engaged but their achievements would be significantly higher. Moreover the child will develop a habit to be active in his class at an early age. Generally today in a classroom, it has been noticed that the bright or the exceptional children hog all the limelight while the average or the common students remain unattended.

High quality instructional strategies are set of tools that research suggests can significantly assist teachers in meeting the challenge of creating a classroom that truly work for all the students; the mediocre to the exceptional and the less abled too.

7. High Quality Instructional Strategies.

The aim of high quality instructional strategies is to ensure that all the students of the class have a meaningful access to the content of the lesson through active-engagement or active participation in the learning activities. These instructional strategies also assume that the classroom has heterogeneous group of diverse students having varying amounts of prior knowledge about a given topic, varying amount of language proficiency and a wide range of basic skills of reading, writing and mathematics. Further to this the quality of instructional strategies strive to provide a safe, non-threatening environment within which students can actively engage themselves, independently create and develop strategies and provide examples that demonstrate how teachers can incorporate these strategies into their lessons to effectively accommodate the needs of diverse learners.

7. (a) Group Responding or Chorus Response

The teacher may pose a question and ask the students to think and not blurt out the answer. Enough time to think must be given, Classroom research has a very quizzical finding that once a question is asked, even 2-3 seconds are not given to the child before passing it to the next student. The teacher can provide simple oral or visual cue that will signal the students to respond in a group and this age old strategy works well when the answers are short.

The teacher can train the students to think first and speak/respond only after a signal is given by him. The teacher using an overhead projector can point out a word and ask everyone to look at it and think and after some time, signal for thumbs up if they know the answers. The teacher will ask a question and also ask them to think and not blurt the answer till the teacher lowers both his hands as a signal to answer. The teacher must provide enough thinking time and ensure that most of the students have their thumbs up. After confirming that most of the students are ready to answer he must either lower both his hands to get a chorus answer or call a particular student to respond. As discussed earlier, the thumbs up allows the students to show that they know the answer and doesn't deprive the other students of the time they need to cognitively process the question and form an answer. For example, after viewing a video on vehicle emission, a teacher can ask the students to reflect on the critical attributes of a vehicle emission and ask them to put their thumbs up when they have identified at least one. Now he may call upon a particular child to answer or ask the students to share the answer with their partners. The students will be actively engaged in reflecting on the key aspects in a congenial and non-threatening environment, thus allowing every student to actively participate in class discussion.

7. (b) Class Room Whip Around

The teacher may ask an open ended question very short answer type or simply a yes or no type questions and give the students some time to reflect. Partner responses may be used as hints. The teacher can begin anywhere in the class but must whip around the class-room having the students share their answers quickly, without allowing any discussions or comments. Whip around is a fun engaging strategy that provides the students with an opportunity to contribute something, practice summarization and oral recitation in a safe, non-threatening class-room environment. The whip is basically useful for encouraging the students to identify key big ideas, themes and summarize information at the end of a lesson or activity. The teachers can modify the whip by asking the students to write their answers and show the class the written responses.

8. Reading Comprehension – Basics

PISA demands of the readers a basic and universal level of proficiency in reading literacy. A teacher can guide his students to understand the various comprehending intricacies while actively engaging them with the text. A few of the basic strategies are listed below which would enable the teacher to

effectively manoeuvre through the text and facilitate the students to work around with the text.

a. Activation and use of Prior Knowledge :-

Authentic materials are to be used in order to activate the background Knowledge and brainstorming method should be used which will lead to working as a shared activity.

b. Identify Text Structure:-

This shows how the information in a text is organized and the different types of text structures are DESCRIPTION, SEQUENCE, COMPARISON, CAUSE & EFFECT and PROBLEM OR SOLUTION.

- In **Description** the author gives features and examples of a topic
Plants grow on all seven continents.
Plants must have roots.
- In **Sequence** the author lists items or events in order
- **Comparison:** - The author shows how things are similar or different.
- **Cause and Effect:** -The author lists one or more causes and resulting effects.
Keywords: -because, then, therefore, for this reason, as a result, so, since, in order, thus.
- **Problem or Solution:-** The author states a problem and then writes one or more solutions.

c. Make Prediction :-

It is one of the strategies for teaching reading and through demonstrating and coaching, a small group to support predictions can be taken up effectively.

d. Visualization :-

It is one of the key methods in Reading strategy and it helps the reader to improve his reading comprehension.

e. Imagery – “The sky was turning the colour of a fresh bruise”.

f. Make Inference/questioning :-

Teaching of a lesson should grip the attention of the taught and is possible by making varied inferences and through questioning technique from the teacher.

g. Monitor Comprehension: -

Comprehension can be monitored effectively through think Aloud Strategy and trying to relate the reading strategy by citing suitable examples.

h. Summarization :-

It is simple technique but not easy and the question that props is, “**Why summarizing in a necessary professional skill?**” We have to identify elements in an effective summary.

- Summary is a critical skill
- To use writer’s words
- Briefly articulate main idea
- Emphasizes key points supporting main Idea
- Read the article / material to find main idea
- Underline the 1-2 sentences that convey that idea
- Write the idea in your own words.
- Return to material to identify 3-4 key points
- Read over your work for any areas that may need background information.
- Write your summary using your own notes
- Proof read to ensure that you are expressing the authors original intent/
- Revise your clarity, Specificity
- Proof read for grammar and mechanics

i. Thinking aloud :-

To ask student to closely read, understand and determine the central idea of the text. The specific text should also be analyzed. “What is the text all about?” should be the primary concern of the teacher and the students.

j. FREE-RESPONSE THINK ALOUD TEMPLATE

- What are you thinking as you read?
- What are you doing as you read?
- What are you seeing as you read?
- What are you feeling as you read?
- What are you asking as you read?
- What are noticing as you read?

CHAPTER 7

PISA ASSESSMENT

Reading proficiency levels in PISA 2009

In addition to reporting the average(mean) scores for each country, PISA is unable to provide a profile of students' reading, mathematics and science performance using 'proficiency levels', categories that summarize the skills and knowledge that students are able to display. For PISA 2009, the proficiency level scale for reading literacy was expanded at both ends, to provide further information about what the highest and lowest performing students can do(fig.)

	students at this level can....
Level 6	Make multiple inferences, comparisons and contrasts, demonstrate a full and detailed understanding of one or more texts; integrate information from more than one text. The reader may be required to deal with unfamiliar ideas in the presence of prominent competing information.
Level 5	Locate and organise several pieces of deeply embedded information, inferring which information in the text is relevant; critically evaluate or hypothesise, drawing or specialised knowledge.
Level 4	Locate and organise several pieces of embedded information, interpret the meaning of nuances of language in a section of text, demonstrate an accurate understanding of long or complex texts whose content or form may be unfamiliar.
Level 3	Locate, and in some cases recognise the relationship between, several pieces of information, integrate several parts of a text in order to identify a main idea; locate required information that is not prominent or where there is much competing information, demonstrate a line understanding of the text in relation to familiar, everybody knowledge.

Level 2	Locate one or more pieces of information; recognize the main idea in a text, understand relationships, or construe meaning within a limited part of the text when the information is not prominent and the reader must make low level inferences.
Level 1a	Locate one or more independent pieces of explicitly stated information; recognize the main theme or author's purpose in a text about a familiar topic; make simple connections.
Level 1b	Locate a single piece of explicitly stated information in a prominent position in a short, syntactically simple text with a familiar context and text type in which there is a high level of support for the reader.
Below Level 1b	Not demonstrate even the most basic types of reading literacy that PISA measures.

CHAPTER 8

READING SAMPLES FROM PISA

CHAPTER 9

SAMPLE READING ITEMS

1.MEDITATION

Watching is meditation. What you watch is irrelevant. You can watch the trees you can watch the river, you can watch the clouds, you can watch children playing around. Watching is meditation. What you watch is not the point; the object is not the point. The quality of observation, the quality of being aware and alert – that's what meditation is. Remember one thing; meditation means awareness. Whatsoever you do with awareness is meditation. Action is not the question, but the quality that you bring to your action. Walking can be a meditation if you walk alert. Sitting can be a meditation if you sit alert. Listening to the birds can be a meditation if you listen with awareness. Just listening to the inner voice of your mind can meditation if you remain alert and watchful. The whole point is, one should not move in sleep. Then whatsoever you do is meditation.

The first step in awareness is to be very watchful of your body. Slowly, one becomes alert about each gesture, each movement. And as you become aware, a miracle starts happening; many things that you used to do before simply disappear; your body becomes more relaxed, your body becomes more attuned. A deep peace starts prevailing even in your body, a subtle music pulsates in your body. Then start becoming aware of your thoughts; the same has to be done with thoughts, you will be surprised what goes on inside you. If you write down whatsoever is going on at any moment, you are in for a great surprise. You will not believe that this is what is going on inside you. And ten minutes read it – you will see a mad mind inside! Because we are not aware, this whole madness goes on running like an undercurrent. It affects whatsoever you are doing, it affects everything. And the sum total of it is going to be your life! So this madman has to be changed. And the miracle awareness is that you need not do anything except just become aware. The very phenomenon of watching it changes it. Slowly the madman disappears, slowly the thoughts start falling into a certain pattern; their chaos is no more, they become more of cosmos. And then again, a deeper peace prevails. And when your body and your mind are at peace you will see that they are attunes to each other too, there is a bridge. Now they are not running in different directions, they are not riding different horses. For the first time, there is accord, and that accord helps immensely to work on the third step – that is becoming aware of your feelings, emotions, moods. That is

the subtlest layer and the most difficult, but if you can be aware of the thoughts, then it is just one step more. A little more intense awareness is needed and you start reflecting your moods, your emotions, your feeling. Once you are aware of all these three, they all become joined into one phenomenon. And when all these three are one, functioning together perfectly, humming together, you can feel the music of all the three; they have become an orchestra – then the fourth happens, which you cannot do. It happens on the accord. It is a gift from the whole, it is reward for those who have done these three. And the fourth is the ultimate awareness that makes one awakened. One becomes aware of one's awareness- that is the fourth. That makes a Buddha, the awakened. And only in that awakening does one come to know what bliss is. The body know pleasure, the mind knows happiness, the heart knows joy, the fourth know bliss. Bliss is the goal of sannyas, of being a seeker, and awareness is the path towards it.

The important thing is that you are watchful, that you have not forgotten to watch, that you are watching.....watching.....watching. And slowly as the watcher becomes more and more solid, stable, unwavering a transformation happens. The things that you were watching disappear. For the first time, the watcher itself becomes the watched, the observer itself becomes the observed. You have come home.

Questions

1. The whole journey of watching follows a particular order. Arrange the following options in their correct order.

- A. Awareness of thoughts.
- B. Awareness of moods.
- C. Awareness of one's awareness.
- D. Awareness of the body.

- i. D C B A
- ii. D B A C
- iii. D A B C
- iv. A C B D

2. From the passage which of the following statements are true in respect of ultimate awareness.

- A. Constant practice helps us to achieve ultimate awareness.
- B. All those who can watch their moods can attain ultimate awareness.
- C. It is a conscious outcome of our practice of watching
- D. Ultimate awareness is bliss.

- i. All four statements are correct.
- ii. Only three statements are correct.
- iii. Only two statements are correct.
- iv. Only one statement is correct.

3. The author in the passage talks about a mad mind. Which of the following assumption is made by the author?

- A. Minds of all men are mad.
- B. A mad mind cannot be cured.
- C. Not all minds are mad.
- D. A mad mind can be cure.

4. Which of the following titles is definitely true about meditation?

- A. Watching is meditation.
- B. Meditation is watching.
- C. Awareness is meditation.
- D. Awakening is meditation.

5. “Bliss” in the above passage would mean

- A. Awareness of the external environment.
- B. Awareness of the internal self.
 - i. Statement A is true.
 - ii. Statement B is true.
 - iii. Both statements are true.
 - iv. None of the statement is true.

2.ITS NOT JUST SPORTS!

Athletes have been forbidden from using artificial stimulants since 1920s, since the 1970's they had to give urine samples to show they are not pumping up their muscles by injecting anabolic steroids- a class of synthetic drugs that promote tissue growth. But it now appears that runners and jumpers in several countries have been using a hitherto unknown steroid, tetrahydrogestrinone (THG), which is believed to have been designed specifically to evade the sporting authorities' doping tests. In October, America's governing body for athletics, the USA Track and Field (USATF) confirmed reports that four American athletes, as yet unnamed, had tested positive for the drug, Britain's fastest sprinter, Dwain Chambers, also admitted having tested positive for the drug, though he denied having taken it knowingly.

A firm from the San Francisco area BALCO, which supplies nutritional supplements to sports men (including Mr. Chambers), has denied allegations that it concocted and distributed the new drug. A federal grand jury is investigating the firm and had subpoenaed a number of America's best-known athletes, including two base ball stars, Jason Giambi and Barry Bonds, though no allegations of drug abuse have been made against them. Terry Madden, the head of the US Anti-Doping Agency said "I know of no other drug bust that is larger than this, looking at the number of athletes involved."

The THG was unknown until a sports coach anonymously sent a syringe full of the substance to a testing laboratory in the University of California, Los Angeles. A new test to detect the presence of the substance in body fluids was hurriedly developed. Then the World Anti-Doping Agency (WADA), a body set up after a drugs scandal at the 1998 Tour de France, said it had sent details of how to test for THG to all accredited dope-testing laboratories throughout the world.

Anti-doping laws and their enforcement vary widely in different countries and between different sports in the same countries. That is why, a conference of the United Nations body, UNESCO voted to create an international convention against doping, whose aim is to harmonize anti-doping laws around the world. For as long as there have been competitive sports, athletes have taken performance, enhancing substances, going back to the stimulating potions taken by ancient Greek Sportsmen. In the 19th century, cyclists and other endurance athletes kept themselves going with caffeine, alcohol and even strychnine and

cocaine. In 1928, the precursor of the International Association of Athletics Federations (IAAF), became the first world sporting body to forbid stimulants. The invention of artificial hormones in the 1930s made the problem more severe.

In the 1960s, the world bodies for cycling and soccer became the first to introduce doping tests. However, there was no reliable test for steroids until the 1970s. Once it was introduced, there was a big rise in the number of athletes being disqualified, culminating in the scandal of Ben Jonson, who broke the world 100 meter sprint record at the 1988 Olympics, only to be stripped of his gold medal afterwards, when his urine sample showed the presence of steroids. Mr. Jonson insisted that he was far from alone in using banned substances and he seems to have been right: in the 1990s, as improved doping tests made it harder to get away with such cheating, the results achieved by top-level athletes in some sports showed a notable decline.

So far, it is unclear how long athletes have been taking THG, or how widespread is its abuse. The scandal regarding the four American athletes promoted USATF to announce, a “zero tolerance” policy on doping, including plans to impose lifetime bans on athletes caught illegal substance, rather than the current two-year bans.

The side-effects of steroid abuse range from liver and kidney cancer to infertility, baldness and even transmitting of HIV(if the syringes used to inject the drug are shared). But there seems no limit to the lengths that some athletes are driven to by their will to win. In the 1970s, some tried “blood boosting”-reinfusing themselves with their own blood to boost the level of oxygen, a practice banned by the International Olympic Committee in 1986. Some then turned to erythropoietin, a blood enhancing drug. Though this was banned in 1990, a reliable test was not available until the 2000 Olympics. Now, though a test for THG has been developed, there are worries that some athletes are taking human growth hormone. Teams of scientists in various countries are rushing to have reliable test for this substance. Even if they do, the pace of medical discovery means that more new substances capable of boosting athletic performance without detection are bound to follow. The race to keep up with the drug cheats looks like going on forever.

Questions.

1. **“Zero tolerance policy, “towards drug abuse in general implies:**
 - A. Not allowing the athletes to take drugs or performance enhancing substances.
 - B. Framing of strict laws and their enforcement.
 - C. Imposition of bans effectively ending the careers of such drug cheats.
 - D. Showing no leniency even if the athletes accept their mistake for cheating and drug abuse.

2. **‘World records after 1990’s have shown a sharp decline. The reason could be:**
 - A. Drug dependence had weakened the athletes.
 - B. Athletes became aware of the side effects of such drugs.
 - C. New and sophisticated anti-doping tests dissuade such athletes from such drug abuse.
 - D. The athletes were worried about life ban if they were found cheating.

3. **From the passage we can conclude that**
 - A. The author is sure that every athlete who cheats would be caught in future
 - B. The athletes seem to win the race against anti-doping authorities.
 - C. Athletes seem ready to go to any length in order to win.
 - D. New performance enhancing substances will be invented by the next Olympics or World Athletic Championships.
 - i. A and B are true.
 - ii. B and C are true.
 - iii. C and D are true.
 - iv. All options are true.

4. **Mr. X had recently broken the 15 years old US national record in 100 meters sprint. It can be assumed that**
 - A. Mr. X had taken sophisticated performance enhancing drugs which couldn’t be detected during testing.
 - B. The new record can be ascribed to the latest sprint techniques, better training facilities and following a scientific diet.

- i. A is true but B is false.
- ii. B is true but A is false.
- iii. Both A and B are true.
- iv. None of the statements are true.

5. The word 'subpoenaed,' in the passage is a

- A. Medical term.
- B. Sports term.
- C. Legal term.
- D. Financial term.

.....

- 1. Assuming that the two passengers had booked their tickets on the very first day when the booking was allowed for the train, what was the earliest possible date they would have book the ticket?**
 - A. 27th June 2013
 - B. 28th June 2013
 - C. 29th June 2013
 - D. 30th June 2013

- 2. Assume that the two passengers did not travel but they got full refund of the amount minus the clerical charges as applicable. The possible reasons could be:**
 - A. It was announced that the train would arrive at 12pm that day.
 - B. The ticket was cancelled on 25.10.2013.
 - C. The train did not have any air condition coaches that day.
 - D. They cancel the ticket on 20.10.2013.
 - E. The train was cancelled that day
 - F. Due to a massive signal failure the train started from Jalandhar instead of Amritsar.

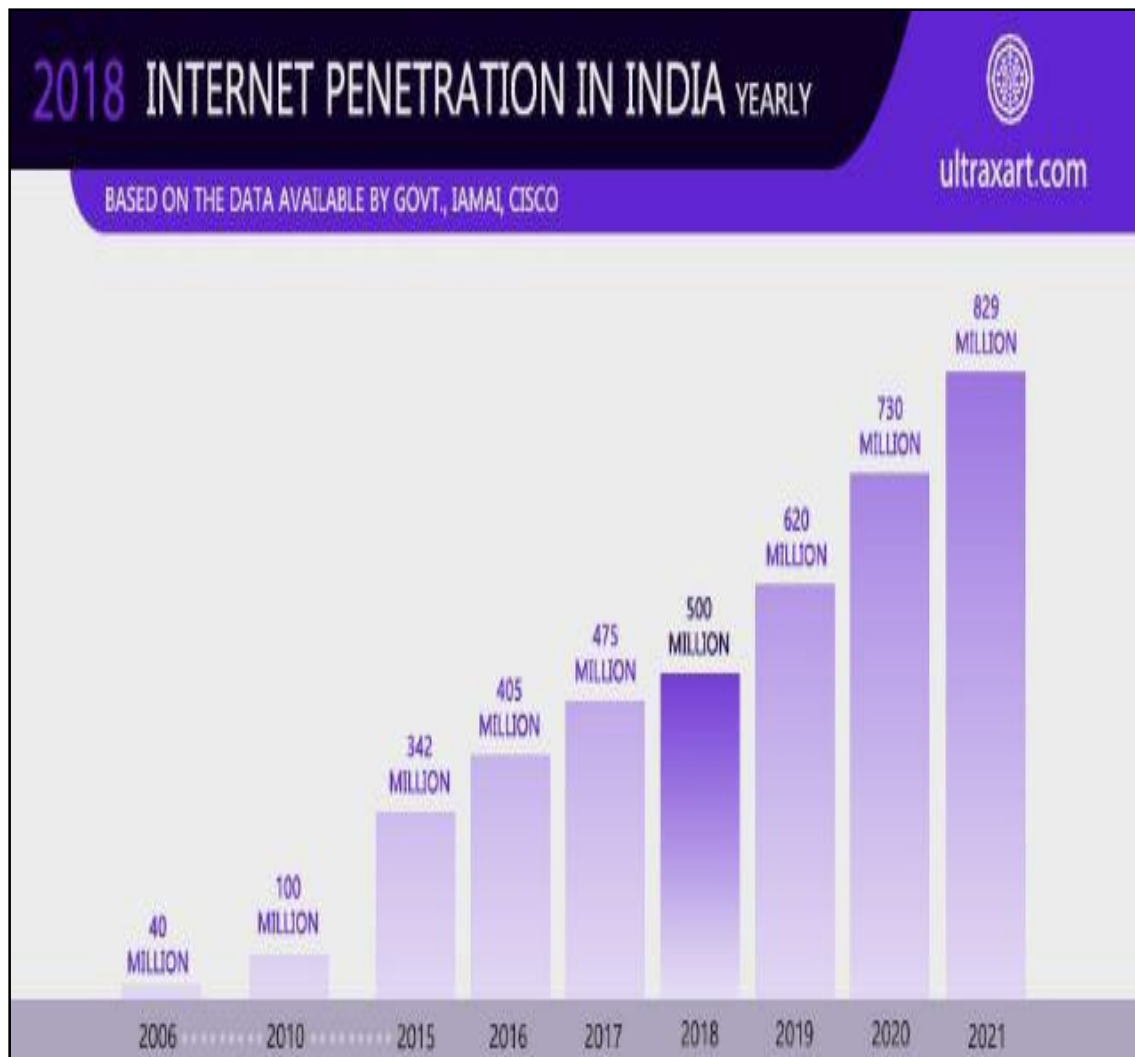
- 3. The train ticket carries a message issued by the ministry of Health and Family Welfare. The reasons for such a message could be:**
 - A. Railway tickets are the best way to popularise such government welfare schemes/programmes.
 - B. Government welfare schemes/programmes could be popularised through a train ticket as railways have a vast reach.
 - C. The Ministry of Railways could earn some revenue through such advertisements.
 - D. It is a convenient way for the Ministry of Health and Family Welfare to announce such welfare schemes/programmes.
 - i. All options are correct.
 - ii. Only three options are correct.
 - iii. Only two options are correct.
 - iv. Only one option is correct.

4. The message by the Ministry of Health and Family Welfare is inserted both in Hindi and English in the Railway tickets. From the bilingual message, it can be safely assumed that:

- A. All those who buy the tickets would read and understand the message.
- B. The bilingual message would help in better dissemination/spread of government welfare schemes/programmes.
- C. These two languages are the most widespread and hence it is inserted in these two languages.
- D. It is a good example of how two Ministries can come together for the welfare of the common man.

4.INTERNET PENETRATION

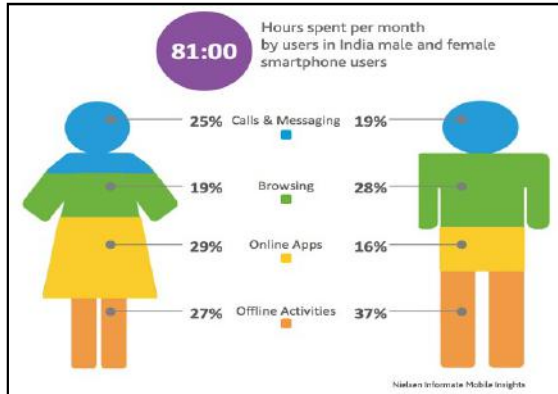
Fifty three percent of Indians are connected to the internet every waking hour which is higher than the global average of 51 percent, a new international study has found. The continuous online connectivity is becoming a phenomenon in India with 53 percent respondents in the country saying they are connected to the internet every waking hour," said the study conducted by a leading global management consulting firm, the London-based AT Kearney Global Research.



"That is higher than 51 per cent global average, 36 per cent in China and 39 per cent in Japan," said the study titled 'Connected Consumers Are Not Created Equal: A Global Perspective.' The study covered 10 countries involving 10,000 respondents in July this year.

The results of the study found that continuous connectivity is having a big impact on online retail in the country with social networks becoming a major influencing factor.

"97 per cent of the respondents from India said they have a Facebook account with 77 per cent saying they logged in to the social network daily," said the study.



According to the study, there are three key motivations for Indian people to be continuously connected to internet. First is interpersonal connection in which 94 per cent of respondents said that connecting with other people is a key motivation for going online. This factor is the highest among Indian respondents.

Second factor, according to the study, is self-expression which is sharing opinions with others through the internet. The study says this factor is particularly strong in emerging markets and places where offline self-expression is limited.

In India 88 per cent of respondents cited this as a factor for staying connected to the internet. It is a big motivator in China as well where 89 per cent cited it as a reason to be connected to the internet compared to the global average of 62 per cent. The third motivation is access to services or products and making purchases online. On this front, 92 per cent of the Indian respondents said they go online to access services or for shopping, the study said.

QUESTIONS

1. In which consecutive years internet penetration growth rates is the highest?

- A. 2017-18
- B. 2018-19
- C. 2019-20
- D. 2020-21

2. The ratio of increase of internet penetration from 2016-17 to 2018-19 is

- A. 40:77
- B. 7:12
- C. 7:11
- D. 12:7

3. What are the motivating factors for the increased use of internet in India?

- A. Sharing opinions with others.
- B. Limitations in other modes of communication.
- C. Interpersonal connection.
- D. Access to services or products.
 - i. A B C are true but D is false.
 - ii. B C D are true but A is false.
 - iii. C D A are true but B is false.
 - iv. All are true.

4. Women outdo men in terms of calls and messaging and use of online apps. The reasons could be

- A. Online shopping saves time and goods and services can be had from the safety of their homes.
- B. As non-working women they have time for such messages and calls.
- C. Calls and messages are better than writing letters.
- D. Their movements are restricted when it comes to going out for shopping and services.
 - i. Only A and B are correct.
 - ii. Only B and C are correct.
 - iii. Only A and D are correct.
 - iv. Only B and D are correct.

5. “Interpersonal connection and relations have widened and becomes stronger with the advent of internet and mobile users in India.” Do you agree?

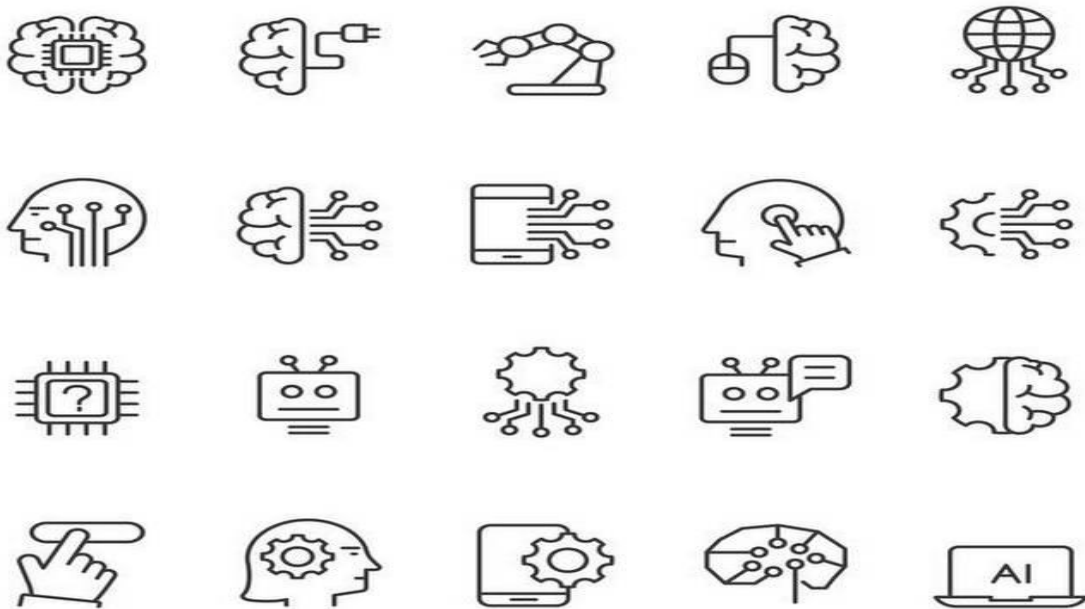
- A. Yes, we can stay connected with our near and dear ones at the press of a button.

B. No, internet has reduced in-person interaction. It has increased communication but not connection.

- i. A is true but B is false.
- ii. B is true but A is false.
- iii. Both A and B are true.
- iv. Both A and B are false.

5. Artificial Intelligence

Is AI a danger to humanity?



We may forget that we humans create technology. AI, by itself, is not looking to destroy humanity

It's well known that we humans are not nearly as good as we think we are when it comes to thinking about the future. From paper to telegraph, from steam engines to computers, human beings have always feared new technology. We have always treated it as the 'other'. Yet, we know from history that we have always embraced technology eventually, to make our life better easier. There's no reason to believe that our future with AI will be any different. What we fail to acknowledge in all the raging rhetoric about AI gods and war machines in the media today is that we are beguiled by the idea of evolution. If we sought to create tools of propaganda and change and ended up using paper widely back in the day, today we seek a life beyond the material, we seek answers to 'what next' for humankind.

Giant leaps

AI is a natural step in the evolution of humankind. With every passing days, we are witnessing the rise of AI in health and medicine. It was recently reported that we can predict heart diseases with machine learning, and the self-healing

electronic skin lets amputees sense temperature on prosthetic limbs. Health care and medicine become affordable and accessible with AI taking centre in telemedicine and quick diagnosis. Water and energy networks become accessible and widely usable when AI can mediate the use of different sources. We don't need humans to physically go to, and service, remote locations.

Like any other technology, AI is a nascent stage and is being shaped by innovators across the world. AI will not be one thing; there will be many kinds of AI and many kinds of species augmented by AI. We'll be witness to both the beauty and the dangers of what a few are creating. That is why it is more important now than ever before to get more people to participate in the building and shaping of AI. Inclusive AI will mean that more of society will be able to enjoy its benefits and participate in shaping the future. Technology inherently does not have agency. Its interaction with us and the life we give it gives it agency.

This will be different as AI grows. We are giving birth to a new world of intelligence, and the process we're giving birth to a new world of intelligence, and the process will be like raising children of a whole new species (or many new species). This species will not be bound by the constraints of the human body and will exist in many forms across the space and time. We could twiddle our thumbs and write about the singularity and its fears. But it is more important for us to seed the world around us with the types of AI we want to see in the future. Today, we have control and can shape AI in its early stages. We need to wrap our heads around what this means to us and the responsibility with which it comes. How do we make it fail-safe? Do we hard code backups/kill switches for situations that have gone bad? Maybe Issac Asimov's three are the sci-fi equivalent that we can drop inspiration from?

It's all in our hands

We forget that we are the creators of technology. AI, by itself, is not looking to destroy humanity. We can't wash our hands of it and question whether AI can destroy humanity, as though we have nothing to do with it. Whether we use AI to augment ourselves, create a new species, or use it to destroy lives and what we have built is entirely in our hands-at least for now.

Questions

1. The advent of AI has

- A. caused fear psychosis
- B. made modern life more complex
- C. addressed many problems and found solutions
- D. enslaved humanity made them dependent on AI

2. What are the solutions to make AI more human friendly?

- A. Create new species.
- B. Include more people in its development.
- C. Just wait and watch.
- D. To have control over its creations.
 - i. A and B are true.
 - ii. A and D are true.
 - iii. C and D are true.
 - iv. B and D are true.

3. The emergence of artificial intelligence means:

- A. Birth of dangerous creatures.
- B. Going beyond space and time.
- C. Solutions to complex problems.
- D. A new responsibility to harness it.
 - i. Only one statement is true.
 - ii. Two statements are true.
 - iii. Three statements are true.
 - iv. All are true.

4. What is the contextual meaning of nascent stage?

- A. Difficult
- B. Crucial
- C. Beginning.
- D. Developed.

5. The tone of the passage could be labelled as:

- A. Critical

B. Appreciative

C. Apprehensive

D. Ironical

- i. A and B are correct
- ii. B and C are correct.
- iii. C and D are correct.
- iv. A and C are correct.

6.INDIAN SPORTS SCENARIO

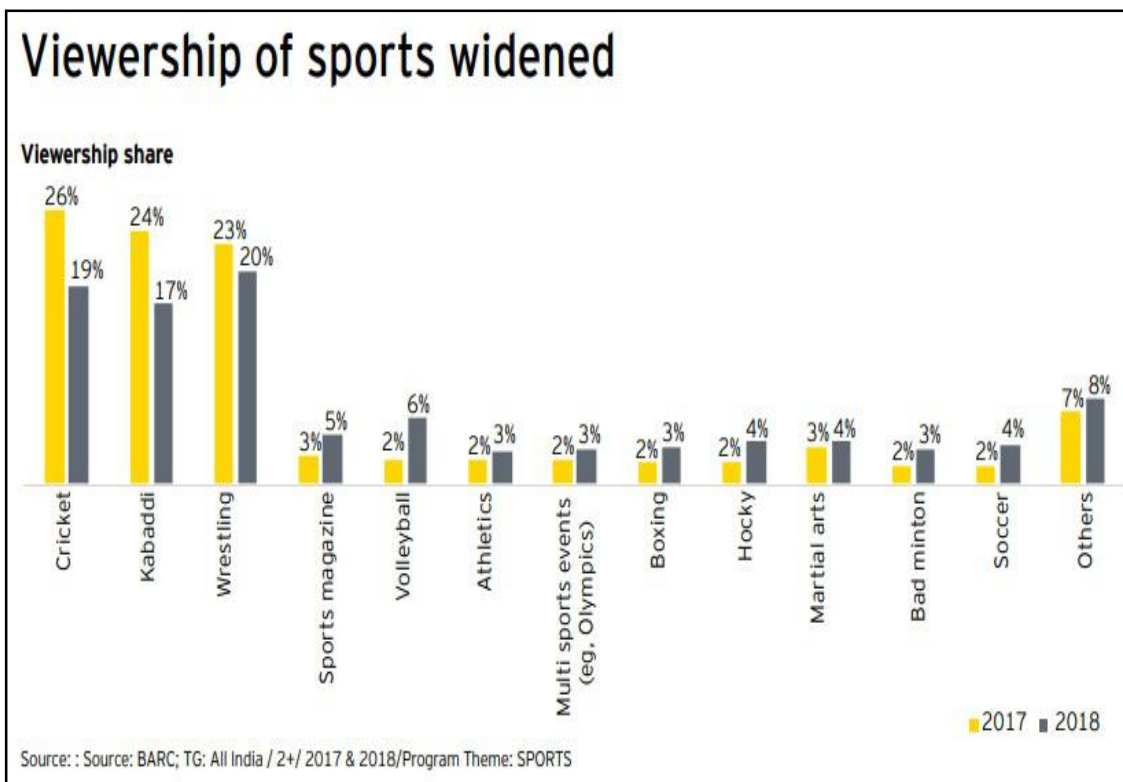
BEYOND CRICKET – Article 1.

The recent defeat in England, I am told, has eroded Indian cricket's huge fan base. TRPs have also slipped. To be honest, I don't think it's a bad thing. It will draw attention to other sports in which India can excel if we were not so obsessed with what was once the gentleman's game. In fact, cricket is closer to entertainment today than sport. No wonder our cricketers are listed among the top entertainers and highest tax payers. They are the new celebrities. That's the stature cricket enjoys. It's unreal and comes from dwarfing all other sport, which is not just unfair but wrong for a nation of our size and talent.

There are many other sports which could do with encouragement. Hockey is an example. For those who are too young to know, India won 11 medals for hockey in 12 Olympic Games, including 6 successive Gold Medals between 1928 and 1956 and 8 in all, a record yet to be equalled by any other nation. There was Dhyan Chand. Many remember him as the greatest hockey player in history. He played in 3 Olympics. India won the Gold in all 3.

We must also remember that Vishwanathan Anand, India's greatest sporting hero today, a Grandmaster at 18 and World Chess Champion at 30 is still ranked among the 5 greatest players of all time. Our boxers, shooters, athletes, wrestlers, golfers, even our football players can do with more attention. Wilson Jones was World Billiards Champion twice. Michael Ferreira and Geet Sethi, thrice. Pankaj Advani, five times. Abhinav Bindra, the shooter, was the first Indian to win an individual Olympic Gold in 2008 in Beijing. Now we have Saina, Sindhu, (Badminton) Neeraj, (Javeline) Hima, (Athletics) Deepa (Gymnastics) to name a few. They are all amazing achievers. What they need is nurturance.

No, I am not saying our cricketers are not great achievers. Some are legends. Dravid, VVS Laxman, Dhoni and Sachin are symbols of national pride. As indeed Kapil, Gavaskar, Kumble and Saurav once were. But is cricket still attracting the right kind of talent?



BEYOND CRICKET-Article 2

Meerut is the ground zero of India's sports goods business. Things are changing here, away from cricket, towards a rainbow of sports.

As the Delhi-Meerut road approaches the Hapur Circle, it gets narrower. Customers queuing up outside the JaganChholeBhature stall spill over on to at least half of the available road space. Amidst the crowd and the chaos, a group of children suddenly comes running out from the left flank, chasing a football. There is neither a goalpost nor a goalkeeper in sight, and all the children are running after the ball in the same direction. But rules don't matter in the gali. In the very next by-lane, another group of children is busy playing kabaddi. Lest we forget, that all-consuming sport—cricket—also makes an appearance, but in some distance and with less fanfare.

Rajiv Saini, the owner of Venus Sports, doesn't find this surprising. "In the last couple of months, we have sold more volleyballs and badminton rackets than cricket bats," says Saini, whose sports goods manufacturing and wholesale unit is nestled in the heart of Meerut's Suraj Kund Road area.

At the Kailash Prakash Stadium nearby, Saini says people can be seen practising even kabaddi these days. Last month, a project was cleared to build a model shooting range at the stadium. According to local media reports, badminton players have been complaining about the lack of courts in the wake of an increase in the number of participants.

"Ten years ago, who knew kabaddi and badminton?" Saini asks.

In the last decade, with the rise of the league format in sports such as kabaddi, football and badminton, and the sudden burst of medals in athletics, non-cricket sports have started gaining momentum. And Meerut lies at the heart of this nascent transformation, due to its unique place in the Indian sporting goods manufacturing landscape.

The Sports Goods Export Promotion Council (SGEPC), a government-sponsored organization whose aim is to spur export of Indian sports goods, has already begun to sense overseas opportunities as Indian athletes begin to acquire global profile. A spokesperson for the council said that the recent success of athletes such as Swapna Barman (heptathlon), Tajinderpal Singh Toor (shot-put) and Neeraj Chopra (javelin thrower), who all used Meerut-made equipment, is a victory for the sport goods makers of the city.

"Cricket is big, but the sports goods industry is moving towards a wide variety of other sports," the spokesperson added.

Questions

1. The two articles and the table in this passage are related in a particular way. Which of the following assumptions are true?

- A. Both the articles and the table complement each other.
- B. Both the articles complement each other.

- i. Assumption A is true but B is false.
- ii. Assumption B is true but A is false.
- iii. Both the assumptions are true.
- iv. None of the assumptions are true.

2. The common issues raised by both the articles are:

- A. Both the articles suggest a developing interest towards non-cricket games and sports.
- B. Article 2 is a probable outcome of the issues raised in article 1.
- C. Both the articles imply a negative attitude towards cricket.
 - i. Statements A and B are correct.
 - ii. Statements B and C are correct.
 - iii. Statements A and C are correct.
 - iv. All the three statements are correct.

3. From article 2 which talks about the increase in sales of non-cricket sports gears, it can be safely assumed that:

- A. The sale of cricket gears has come down sharply.
- B. There is a lot of interest among people towards sports other than cricket.
- C. Recent achievements by our non-cricketing sportsmen has brought about a new interest towards these sports.
- D. The export of cricket gears would slowly decline with the increase in the export of other non-cricket sports gears in the coming days.
 - i. All assumptions are correct.
 - ii. Only three assumptions are correct.
 - iii. Only two assumptions are correct.
 - iv. Only one assumption is correct.

4. In the last couple of months, we have sold more volleyballs and badminton rackets than cricket bats,” implies that

- A. The sale of cricket bats has come down.
- B. The sale of volleyball and badminton rackets have gone up.
- C. The sale of cricket bats has not shown much of a change.
- D. The sale of volleyball and badminton rackets are more compared to cricket bats.

5. In Article 1, the authors view towards cricket can be described as:

- A. Critical
- B. Conciliatory
- C. Condemning
- D. Resignation

7. Is the Earth Getting Hotter?

In 1975, a scientist named Wallace “Wally” Broecker wrote a paper in which he asked a simple question: Was the Earth getting warmer? When the paper was published, some of Broecker’s colleagues laughed at him. Many of them believed that the world was actually cooling.

Historically, there have been periods in which the Earth’s temperature has slowly risen and cooled over thousands of years. This is a natural process that can be caused by many factors, including changes in radiation from the Sun, changes in the Earth’s orbit and volcanic activity.

However, climate change can also be caused by changes in the amount of certain gases in the atmosphere. Broecker had noticed that the amount of carbon dioxide—a colourless, odourless gas—was slowly building up. While some carbon dioxide is produced through natural processes, large quantities of it are also produced by humans. Carbon dioxide is generated in especially large amounts when we burn fossil fuels, such as oil, coal and natural gas. This burning happens when we drive cars, use electricity and make certain products. When released into the atmosphere, carbon dioxide traps heat. Broecker reasoned that if people produced a lot of carbon dioxide, then enough heat would be trapped that the Earth would begin to warm. He called this “global warming”.

Several decades later, many climate scientists agree with Broecker: the Earth is heating up and humans are largely responsible. This warming process is often referred to as “climate change”. More carbon dioxide is being produced than ever before. Every year, humans produce about 8 million metric tons of carbon. 2012 was the hottest year in recorded history. Recently, scientists estimated that more carbon dioxide exists in the atmosphere than has in over three million years.

While scientists understand how climate change works, some of its effects are still difficult to predict. Some scientists expect an increase in so-called “extreme weather” events, such as hurricanes and floods. Others foresee a rise in levels of sea water. While exactly what changes will happen are unclear, Broecker has warned that people should be prepared for some large disturbances. In an interview with the Guardian, a British newspaper, in 2008, he compared the Earth’s climate to a wild animal. Sometimes, when provoked, the animal will react violently and unpredictably.

“If you’re living with an angry beast, you shouldn’t poke it with a sharp stick,” he said.

Why are scientists able to understand some phenomena, like climate change, in a general way, but aren’t able to predict the changes they will have on Earth? Part of the reason is because many large Earth systems involve “feedback loops” – processes that help amplify (positive feedback loops) or diminish (negative feedback loops) certain changes.

Feedback loops can occur in the climate system too. If the temperature of the Earth rises, it can change the environment so that it produces even more heat.

There are a number of different ways in which this phenomenon occurs. Scientists who work in the Arctic, at the northern end of the Earth, have been reporting that, every year, more and more floating sea ice melts. In the last 30 years, more than one-third of the ice that appears in the Arctic during the summer has melted away.

This worries scientists because Arctic ice plays an important role in cooling the Earth – although not in the way you might think. While we add ice to our drinks to make them colder, Arctic sea ice cools the Earth in a different way. Ice, which is white coloured, reflects light. This means that much of the sunlight that hits ice boundaries off and is sent right back to space. Reflecting light away helps keep the Earth cool.

However, as the Earth heats up, ice begins to melt. As ice melts, this reveals more of the darker-coloured land or ocean water, which doesn’t reflect heat, but absorbs it. So, less light is reflected back into space, causing the climate’s temperature to increase. As the world gets hotter, this causes the ice to melt even faster. This increase in temperature causes still more ice to melt, which causes the world to get hotter etc. This is an example of a positive feedback loop, in which heat produces more heat.

1. Which one of the following factors has not contributed to the Earth’s temperature deviations over thousands of years?

1. Changes in radiation from the Sun
2. Changes in historical periods
3. Changes in Earth’s orbit.
4. Changes in Volcanic activity.

2. How does driving a car contribute to global warming?

- a. Carbondioxide traps heat and atmospheric temperature increases

- b. Driving car produces electricity that adds to atmospheric temperature.
- c. Earth traps heat from driving cars to warm the globe.
- d. Burning a fuel generates carbondioxide that traps heat in the atmosphere and helps in global warming.

3. Arctic ice plays an important role in cooling the Earth. Which evidence from the passage best supports this statement?

- a. In the last 30 years, more than one third of the ice that appears in the arctic during the summer has melted away.
- b. Arctic ice reflects the sunlight
- c. When arctic ice melts, it reveals more of the darker-coloured land
- d. Darker-coloured land absorbs the sunlight causing the temperature to increase.

4. Go through the following two examples of feedback loops.

A. As Earth warms, evaporation increases

- Snowfall at high latitudes increases
- Icecaps enlarge
- More energy is reflected by increased albedo of ice cover
- Earth cools
- Rates of evaporation fall.

B. As Earth warms, upper layers of permafrost melt, producing water logged soil above frozen ground

- Methane gas is released in anoxic environment
- Greenhouse effect is enhanced
- Earth warms, melting more permafrost

- i. Statement A is a negative feedback loop and B is a positive feedback loop.
- ii. Statement A is a positive feedback loop and B is a negative feedback loop.
- iii. Both statements A and B are positive feedback loops.
- iv. Both statements A and B are negative feedback loops.

5. “If you are living with an angry beast, you shouldn’t poke it with a sharp stick.” Sharp stick refers to:

A. Violent Earth

- B. Human actions
- C. Earth disturbances.
- D. Climate change

6. Read the following sentences: “Some scientists expect an increase in so called “extreme weather” events such as hurricane and floods. Others foresee a rise in the levels of sea water”. Which word could best replace “foresee” as used above?

- A. Forecast
- B. Glimpse
- C. Pretend
- D. Discover

8.BIODIVERSITY

An article published in The Guardian

The period since the emergence of humans has displayed an ongoing biodiversity reduction and an accompanying loss of genetic diversity. Named the Holocene extinction, the reduction is caused primarily by human impacts particularly habitat destruction. Conversely, biodiversity positively impacts health in a number of ways, although a few negative effects are studied. According to a 2019 report by IPBES, 25% of plant and animal species are threatened with extinction as a result of human activity.

The world must thrash out a new deal for nature in the next two years or humanity could be the first species to document our own extinction, warns the United Nation's biodiversity chief.

Ahead of key international conference to discuss the collapse of ecosystems, Cristiana Pasca Palmer said people in all countries need to put pressure on their governments to draw up ambitious global targets by 2020 to protect the insects, birds, plants and mammals that are vital for global food production, clean water and carbon sequestration.

“The loss of biodiversity is a silent killer,” she told the Guardian. “It’s different from climate change, where people feel the impact in everybody life. With biodiversity, it is not so clear but by the time you feel what is happening, it may be too late.”

Pasca Palmer is executive secretary of the UN Convention on Biological Diversity – the world body responsible for maintaining the natural life support systems on which humanity depends.

The last two major biodiversity agreements - in 2002 and 2010 – have failed to stem the worst loss of life on Earth since the demise of the dinosaurs.

Eight years ago, under the Aichi Biodiversity Targets, nations promised to at least halve the loss of natural habitats, ensure sustainable fishing in all waters, and expand nature reserves from 10% to 17% of the world's land by 2020. But many nations have fallen behind, and those that have created more protected areas have done little to police them. "Paper reserves" can now be found from Brazil to China.

The issue is also low on the political agenda. Compared to climate summits, few heads of state attend biodiversity talks. Even before Donald Trump, the US refused to ratify the treaty and only sends an observer. Along with the Vatican, it is the only UN state not to participate.

Pasca Palmer says there are glimmers of hope, several species in Africa and Asia have recovered (though most are in decline) and forest cover in Asia has increased by 2.5% (though it has decreased elsewhere at a faster rate). Marine protected areas have also widened.

But overall, she says, the picture is worrying. The already high rates of biodiversity loss from habitat destruction, chemical pollution and invasive species will accelerate in the coming 30 years as a result of climate change and growing human populations. By 2050, Africa is expected to lose 50% of its birds and mammals and Asian fisheries to completely collapse. The loss of plants and sea life will reduce the Earth's ability to absorb carbon, creating a vicious cycle.

"The numbers are staggering," says the former Romanian environment minister. "I hope we aren't the first species to document our own extinction."

Despite the weak government response to such an existential threat, she said her optimism about what she called "the infrastructure of life" was undimmed.

One cause for hope was a convergence of scientific concerns and growing interest from the business community. Last month, the UN's top climate and biodiversity institutions and scientists held their first joint meeting. They found that nature-based solutions – such as forest protection, tree planting, land restoration and soil management – could provide up to a third of the carbon absorption needed to keep global warming within the Paris agreement

parameters. In future the two UN arms of climate and biodiversity should issue joint assessments. She also noted that although politics in some countries were moving in the wrong direction, there was also positive developments such as French biodiversity loss. This will be on the agenda of the next G7 summit in France.

“Things are moving. There is a lot of goodwill,” she said. “We should be aware of the dangers but not paralysed by inaction. It’s still in our hands but the window for action is narrowing. We need higher levels of political and citizen will to support nature.”

Questions :

1. What has caused the major decline in Biodiversity?

- a) Extinction of turtles
- b) Loss of human lives
- c) Rise in global temperature
- d) Habitat destruction

2. The possible causes for Holocene extinction in the 21st century could be caused by:

- A. Meat consumption
 - B. Over hunting
 - C. Over fishing
 - D. Increasing human population
- i. A and B are true but C and D are false.
 - ii. C and D are true but A and B are false.
 - iii. Only D is true.
 - iv. All reasons are true.

3. The phrase, “Paper Reserves,” implies

- A. Natural reserves developed for paper production.
 - B. Natural reserves found only in records.
 - C. Producing false records on natural reserves.
 - D. Natural reserves have been destroyed.
- i. Only A B C are correct.
 - ii. Only B C D are correct.
 - iii. Only C B A are correct.
 - iv. All are correct.

4. According to the author, there is still hope for the preservation of Biodiversity. Which is the most important factor out of the following?

- A. Bringing together Climate Agreement and Biodiversity.
- B. Political Will.
- C. New Biodiversity initiatives.
- D. Participation of people.

5. Pick out the appropriate word that means 'relating to sea'.

- A. Species
- B. Mammals
- C. Marines.
- D. Fisheries.

9.YOGA



There is within each individual a spark of the divine, call it the Atman, the soul, the Bothichitta or by whatever name. It is this spark that energizes human consciousness. Every individual has a unique value because he represents a special correlation of forces revolving around a spiritual core of which he may or may not be conscious. Yoga helps us join this inner spiritual core with the all-pervading divine.

Four main paths of yoga are identifiable; the yoga of wisdom or Jnana yoga, of love or Bhakti, of work or Karma and of psycho-spiritual disciplines or Raja yoga.

Jnana yoga involves intellectual discrimination between the real and the unreal, to access reality that lies behind the manifested universe. It is somewhat like the concept of Plato who said that all we see are shadows of reality thrown on the wall of the cave while remaining unaware both of the actual figures and the light that shines on them from behind. This yoga is a movement into a new dimension of awareness in which we see the unity behind the diversity of the world around us. This vision of oneness—which the Upanishads call Ekatvam—transforms the ordinary human being into a seer, one who sees the integral unity behind the multifarious and bewildering multiplicity of our daily existence. Sri Ramana Maharishi was a jnana yogi.

If jnana yoga is the way of the refined intellect, bhakti yoga is the way of the heart lit by love and adoration of a personalised aspect of the divine. The

opening of the heart centre is one of the most powerful methodologies for achieving direct contact with the divine.

Karma yoga's aspects have been expounded in the 'Gita'. The act we must, whether it is the subconscious activities within our bodies or the conscious acts that we perform in our daily lives. Without such action, human civilisation itself would never have developed. But the major question is as to how these actions can be reconciled with the spiritual quest. Karma yoga addresses this concept. Every action that we undertake, big or small, must be dedicated to one's chosen divinity. Every act becomes worship. Rather than being obsessed with the results, we must act from what we consider to be the highest level of our consciousness, inwardly dedicate that act of the divine and leave the results to unfold as they may.

Actions flowing from hatred and fanaticism, cruelty and exploitation, can never be considered karma yoga because by definition they are incapable of being offered to the divine. Again good deeds by themselves, while preferable, do not constitute karma yoga unless there is a clear and unequivocal dedication to one's chosen deity. Swami Vivekananda and Mother Teresa were Karma Yogis.

Raja yoga is the royal path which involves psycho-spiritual practices including physical and breathing exercises that are known as yoga around the world. But only if they are directed ultimately beyond these to the quickening of spiritual consciousness. The basic theory revolves around the existence of a self-conscious spiritual power that is located at the base of the spine. With discipline and practice, this power can start to move up the spine, energising, as it rises, seven chakras or plexuses, which bring about incremental transmutation of consciousness, until finally the blazing light of this power—the Kundalini, the serpent power—pours into the cortex thus completing the process of spiritual transmutation. These four yogas are not necessarily mutually exclusive.

QUESTIONS

(a) Which of the following would you choose as the most distinguishing feature of Yoga?

- i. It helps us to realize God
- ii. It energizes human consciousness
- iii. It connects the inner soul of an individual with the divine
- iv. It has four paths that one can follow

(b) Ekatvam is the principle that

- i. helps a seeker discern the unity behind the diversity of the world
- ii. is required to transform an ordinary being into a seer
- iii. turned Sri Ramana Maharshi into a jnana yogi
- iv. takes us into a new dimension of awareness

(c) Bhakti yoga can be defined as the path which is

- i. followed by those with a refined intellect.
- ii. the path of love and adoration to a personal deity.
- iii. a direct and peaceful way of knowing oneself.
- iv. followed by doing every action as a form of worship.

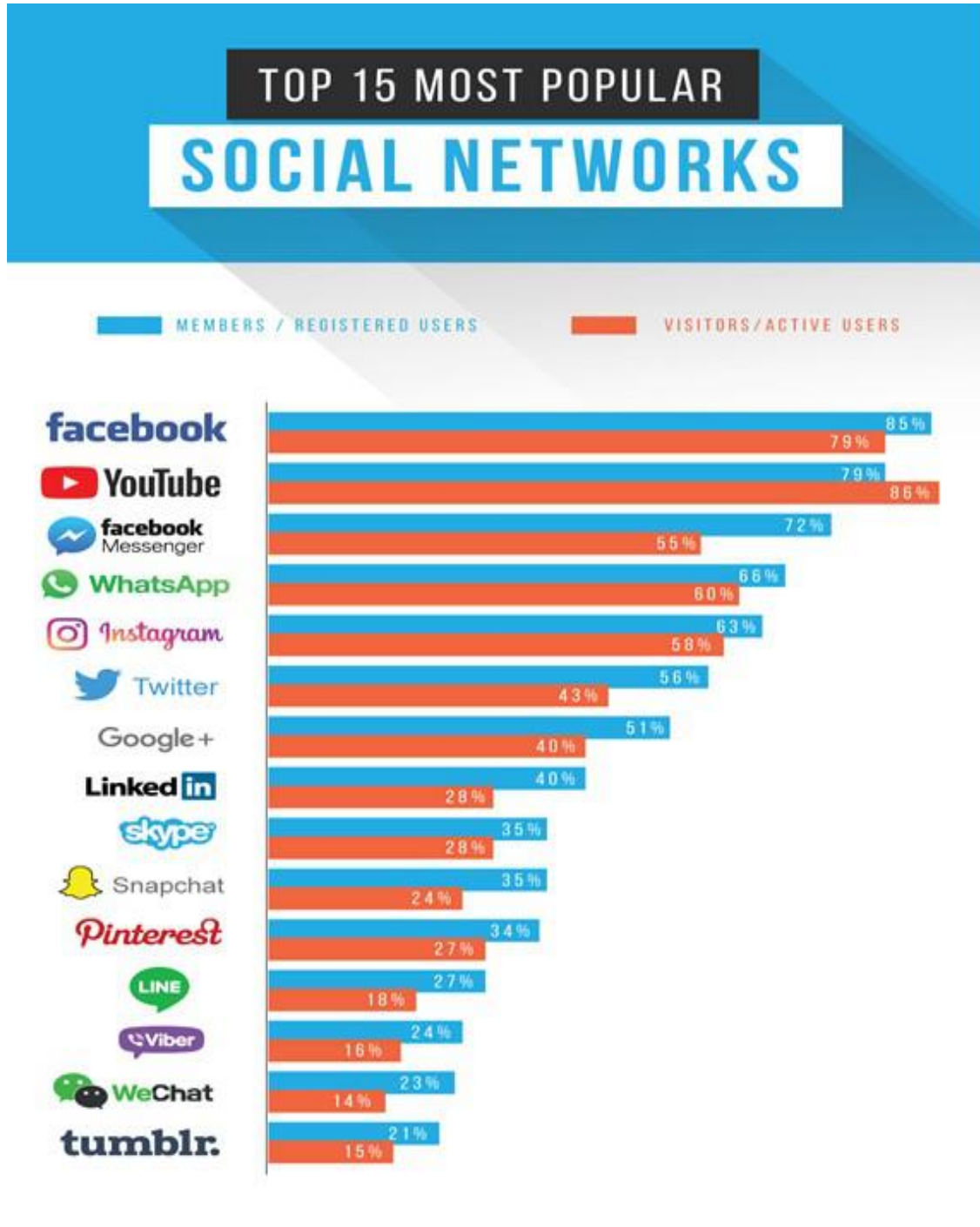
(d) Mahatma Gandhi, the father of our nation was:

- A. Jnana Yogi
- B. Karma Yogi
- C. Bhakti Yogi
- D. Raja Yogi

(e) The asanas and pranayama practiced as part of Yoga today belongs to:

- A. Jnana Yoga
- B. Karma Yoga
- C. Bhakti Yoga
- D. Raja Yoga

10. SOCIAL MEDIA





The DSM-V included IAD (Internet addiction disorder) in 2013



Isolation from the real world as a result of Social Media addiction causes anxiety and depression.



"Facebook addiction" is searched 350x more than "cigarette addiction"



Internet addicts have 10-20% smaller brain areas responsible for speech, memory, motor control, emotion, sensory and other information



of parents believe children are more susceptible to mental health problems due to social media



Only 41% of students get 8 or more hours of sleep



of teens have posted mean information, embarrassing photos, or spread rumors about someone



of teens have had private or embarrassing info made public without their consent



On Average most people spend 8.5 hours looking at a screen vs 20 minutes reading a printed page



There is a dopamine rush given when one receives verification and support via social media platforms



Recommended Treatment for Internet and Social Media Addiction is working directly with an experienced therapist.



"Smartphones have reduced in-person interactions. Technology has made it easier for people to communicate, and harder for people to connect... As we become more disconnected from the world around us, we often lose our psychological support systems... It's time we put technology to work for us, as a tool to help people connect with others who can help."

Shawn Kernes, CEO of LARKR

QUESTIONS

1. Which social media, out of the four given below, can be used without a person registering himself/herself/themselves on it?

- A. Facebook
- B. Twitter
- C. You Tube
- D. Snapchat

2. 81% of parents believe that children are more susceptible to mental health problems due to social media. Why do you think they believe so?

- A. Social media spreads rumors, makes embarrassing comments, damages reputation, emits negative values and makes personal information public.
- B. Social media is interesting, free, liberal, full of entertainment and children spent more hours with social media.
- C. Their children spent less time with them and more time on internet.
- D. None of them.

3. Rohan's medical report says that his brain size has reduced by 15.5%.

This means

- A. He is an addict to internet.
- B. He lives in isolation.
 - i. If A is true.
 - ii. If B is true.
 - iii. IF A and B both are true.
 - iv. IF none of them are true.

4. Has social media addiction reduced the importance of print media?

- A. Yes, people spend more time in front of the screen than in front of the print media.
- B. No, newspaper and other print media have shown increase in circulation and readership.
 - i. Option A is true.
 - ii. Option B is true.
 - iii. Both A and B are true.
 - iv. None of them are true.

5. Miss. X had posted a picture of her birthday party in her facebook account. It can be assumed that (choose the wrong option):

- A. She feels very happy to share such photos with her friend.
- B. She has some mental health problems and keeps posting such pictures.
- C. She wants to share with her friends who couldn't attend the birthday party.
- D. She keeps posting such pictures.

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References

- PISA Official website
- Speed Reading, David Butler
- How to Read a Book, Mortimer J. Adler
- Understanding Text and Readers, Jennifer Serravallo
- The Next Step Forward in Guided Reading, Jan Richardson
- Speed Reading, Robert Allen