

MODULE FOR CLASS X
FOOTPRINTS WITHOUT FEET
TABLE OF CONTENT

Sr. No.	Content
1.	A Triumph Of Surgery
2.	The Thief's Story
3.	The Midnight Visitor
4.	A Question Of Trust
5.	Footprints Without Feet
6.	The Making Of A Scientist
7.	The Necklace
8.	The Hack Driver
9.	Bholi
10.	The Book That Saved The Earth

MODULE-1

CLASS X

L-1 - A Triumph of Surgery

Learning Competencies

- Managing and retrieving information
- Creative thinking
- Critical Thinking
- Problem Solving
- Communication

Learning Dimensions

- Global dimensions
- Mathematical
- Environmental
- Demographic
- Technological
- Social Dimension

Continuous Text

MODULE 1.1

Sniffer dog Tucker uses his nose to help researchers find out why a killer whale population off the northwest coast of the United States is on the decline. He searches for whale faeces floating on the surface of the water, which are then collected for examination. He is one of the elite team of detection dogs used by scientists studying a number of species including right whales and killer whales.

Conservation canines are fast becoming indispensable tools for biologists according to Aimee Hurt, associate director and co-founder of Working Dogs for Conservation, based in Three Forks, Montana. Over the last few years, though, so many new conservation dog projects have sprung up that Hurt can no longer keep track of them all. Her organization's dogs and their handlers are fully booked to assist field researchers into 2012.

"Dogs have such a phenomenal sense of smell", explained Sam Wasser, director of the Center for Conservation biology at the University of Washington in Seattle. He has worked with scat-detection dogs since 199(g). Scientists have been using Conservation Canines in their research since 199(g). These dogs have enabled them to non-invasively access vast amount of genetic and physiological information which is used to tackle conservation problems around the world. Such information has proved vital for determining the causes

and consequences of human disturbances on wildlife as well as the actions needed to mitigate such impacts.

The ideal detection dog is extremely energetic with an excessive play drive. These dogs will happily work all day long, motivated by the expectation of a ball game as a reward for sample detection. The obsessive, high energy personalities of detection dogs also make them difficult to maintain as pets. As a result, they frequently find themselves abandoned to animal shelters, facing euthanasia. The programme rescues these dogs and offers them a satisfying career in conservation research

(1) Tucker sniffs for whale_____

(LO: Reads with comprehension the given text materials employing strategies like scanning, inferring and summarising)

(2) The dogs expect_____ as a reward of their hard work.

(LO: Reads with comprehension the given text materials employing strategies like scanning, inferring and summarising)

(3) _____of these dogs make it difficult to keep them as pets.

(LO: Reads silently with comprehension and interprets layers of meanings)

(4) As per the paragraph these dogs find career in

- a) Defence service b) Conservation research
- c) Animal research d) None of the above

(LO: Reads, comprehends, and responds to complex text independently)

(5) Which word in the paragraph means '*painless killing*'.

(LO: Uses words, phrases, idioms and word chunks for meaning make-up in context)

Answer key:

- (1) Farces floating on the surface of water.
- (2) A ball game.
- (3) The obsessive, high energy personalities.
- (4) Conservation research.
- (5) Euthanasia.

Non-Continuous Text

MODULE 1.2

Beauty Box



- Bathing**
- De-Matting**
- Clipping**
- Stripping**
- Toe-Nails**

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More information can be found here:

HarleysDream.org

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1. If you are going for a vacation this summer, where will Robbie (the Parrot) stay, also share the phone number.

(LO: Thinks critically about various issues and concerns)

2. Harleys Dream promotes _____ instead of _____.

(LO: Reads, comprehends, and responds to complex texts independently)

3. If 3 million dogs are living in shelter homes. How many among them are purebred?

(LO: Solves mathematical sums based on the relevant topics)

4. Which shop offers grooming facility? Who can avail the facility?

(LO: Reads, comprehends, and responds to complex texts independently)

5. Raghav is going to Spring Inn and suites, 1117 N, Oaks Road on Saturday night. He has opted for VIP seating, he is also going to take part in auction. Which event is he going to be a part of?

(LO: Analyses and interprets using analytical skills)

Answer Key :

- 1)** Birdie Breaks, Phone Number is 01493603667
- 2)** Adoption , shopping
- 3)** 7.5 lakh or 7,50,000
- 4)** Beauty box, the facility is available for cats and dogs.
- 5)** Appreciation Dinner and Benefit

MODULE- 2

CLASS X

L-2 - The Thief's Story

Learning Competencies

- Managing and retrieving information
- Creative thinking
- Critical Thinking
- Problem Solving
- Communication

Learning Dimensions

- Global dimensions
- Mathematical
- Environmental
- Demographic
- Technological
- Social Dimension

Module 2.1 Continuous Text

Philosophy of Education is a label applied to the study of the purpose, process, nature and ideals of education. It can be considered a branch of both philosophy and education. Education can be defined as the teaching and learning of specific skills, and the imparting of knowledge, judgment and wisdom, and is something broader than the societal institution of education we often speak of.

Many educationists consider it a weak and woolly field, too far removed from the practical applications of the real world to be useful. But philosophers dating back to Plato and the Ancient Greeks have given the area much thought and emphasis, and there is little doubt that their work has helped shape the practice of education over the millennia.

Plato is the earliest important educational thinker, and education is an essential element in "The Republic" (his most important work on philosophy and political theory, written around 360 B.C.). In it, he advocates some rather extreme methods: removing children from their mothers' care and raising them as wards of the state, and differentiating children suitable to the various castes, the highest receiving the most education, so that they could act as guardians of the city and care for the less able. He believed that education should be holistic, including facts, skills, physical discipline, music and art. Plato believed that talent and intelligence is not distributed genetically and thus is be found in children born

to all classes, although his proposed system of selective public education for an educated minority of the population does not really follow a democratic model.

Aristotle considered human nature, habit and reason to be equally important forces to be cultivated in education, the ultimate aim of which should be to produce good and virtuous citizens. He proposed that teachers lead their students systematically, and that repetition be used as a key tool to develop good habits, unlike Socrates' emphasis on questioning his listeners to bring out their own ideas. He emphasized the balancing of the theoretical and practical aspects of subjects taught, among which he explicitly mentions reading, writing, mathematics, music, physical education, literature, history, and a wide range of sciences, as well as play, which he also considered important.

During the Medieval period, the idea of Perennialism was first formulated by St. Thomas Aquinas, in his work "De Magistro". Perennialism holds that one should teach those things deemed to be of everlasting importance to all people everywhere, namely principles and reasoning, not just facts (which are apt to change over time), and that one should teach first about people, not machines or techniques.

During the Renaissance, the French sceptic Michel de Montaigne (1533 - 1592) was one of the first to critically look at education. Unusually for his time, Montaigne was willing to question the conventional wisdom of the period, calling into question the whole edifice of the educational system, and the implicit assumption that university-educated philosophers were necessarily wiser than uneducated farm workers, for example.

1. What is the difference between the approaches of Socrates and Aristotle?

- a) Aristotle felt the need for repetition to develop good habits in students; Socrates felt that students need to be constantly questioned
- b) Aristotle felt the need for rote-learning; Socrates emphasized on dialogic learning
- c) There was no difference
- d) Aristotle emphasized on the importance of paying attention to human nature; Socrates emphasized upon science

(LO: Reads, comprehends, and responds to complex text independently)

2. Why do educationists consider philosophy a 'weak and woolly' field?

- a) It is not practically applicable
- b) Its theoretical concepts are easily understood
- c) It is irrelevant for education

d) None of the above

(LO: Reads silently with comprehension and interprets layers of meanings)

Q3 What do you understand by the term 'Perennialism', in the context of the given comprehension passage?

- a) It refers to something which is of ceaseless importance
- b) It refers to something which is quite unnecessary
- c) It refers to something which is abstract and theoretical
- d) It refers to something which existed in the past and no longer exists now

(LO: Uses words, phrases, idioms and word chunks for meaning make-up in context)

Q4. Were Plato's beliefs about education democratic?

- a) He believed that only the rich have the right to acquire education
- b) Yes
- c) He believed that only a select few are meant to attend schools
- d) He believed that all pupils are not talented

(LO: Reads, comprehends, and responds to complex text independently)

Q5. Why did Aquinas propose a model of education which did not lay much emphasis on facts?

- a) Facts are not important
- b) Facts do not lead to holistic education
- c) Facts change with the changing times
- d) Facts are frozen in time

(LO: Reads, comprehends, and responds to complex text independently)

Answer Key:

1. **a)** their approaches were different and this difference is quite explicitly explained in the fourth paragraph
2. **a)** because educationists believe that philosophical abstractions are not suitable for practical application.
3. **a)** because the term comes from the root word 'perennial' – which means ceaseless.
4. **b)** Plato's beliefs were democratic but not his suggested practices
5. **c)** facts do change with the changing times, hence, they are not of the utmost importance when aiming for holistic education.

Non Continuous Text

Module 2.2

Read the data given below and answer the questions which follow.

Crimes against women, theft on the rise

IPC Crimes, 2018	Cases, in '000	Crime Rate (per lakh)	% change from 2017
Murder and culpable homicide	32.7	2.5	0
Attempt to murder & CH	59.5	4.5	-0.1 ↓
Rape	33.4	5.2	0
Assault on women with intent to outrage her modesty	89.1	13.8	6.4 ↑
Dowry death	7.2	1.1	-0.1 ↓
Other crimes affecting human body	818.3	61.8	1.9 ↑
Offences against public tranquillity and state	77	5.8	-0.3 ↓
Theft	625.4	47.3	1.6 ↑
Burglary	99.9	7.6	-1 ↓
Robbery	30.8	2.3	-0.1 ↓
Other crimes against property	46.2	3.5	0
Offences relating to documents & property marks	135.8	10.3	0.3 ↑
Other IPC crimes	1,077.70	81.4	-3.3 ↓
Total Cognisable IPC crimes	3,133	236.7	-1 ↓



1. From the table given above which category of crime has the maximum increase in percentage in the year 2018?

(LO: Interprets and analyses from a mathematical bent of mind)

2. How many total cases were registered under cognisable IPC crimes in the year 2018?

(LO: Solves mathematical sums based on the relevant topics)

3. Out of theft, Burglary and Robbery which crime had recorded a positive trend in 2018? And what was its percentage change from 2017?

(LO: Interprets and analyses from a mathematical bent of mind)

4. In comparison to the year 2017, the total cognisable IPC crimes in the year 2018 had _____

- a) increased b) decreased c) remained unchanged 4) none of the above

(LO: Reads with comprehension the given text materials employing strategies like scanning, inferring and summarising)

5. What according to you could have been done to curb the cases of burglary and robbery?

(LO: Experiential learning; organises and structures thought, presents information and opinion in a variety of oral and written forms for different audiences and purposes)

Answer Key :

1. Assault on women with intent to outrage her modesty.
2. 31,33,000
3. Theft with 1.6 % increase
4. (B) Decreased
5. Response depends upon the personal experience of the learner of his day to day life, logical enough to the context.

MODULE- 3

CLASS X

L-3 - The Midnight Visitor

Learning Competencies

- Managing and retrieving information
- Creative thinking
- Critical Thinking
- Problem Solving
- Communication

Learning Dimensions

- Global dimensions
- Mathematical
- Environmental
- Demographic
- Technological
- Social Dimension

Continuous Text

Module 3.1

Read the paragraph and answer the following

Something is very wrong," says the detective. "I know!" says Ms. Gervis. "It is wrong that someone has stolen from me!" The detective looks around Ms. Gervis' apartment. "That is not what I am talking about, ma'am. What is wrong is that I do not understand how the robber got in and out." Ms. Gervis and the detective stand in silence. Ms. Gervis' eyes are full of tears. Her hands are shaking. "The robber did not come through the window," says the detective. "These windows have not been opened or shut in months." The detective looks at the fireplace. "The robber did not squeeze down here." The detective walks to the front door. He examines the latch. "And since there are no marks or scratches, the robber definitely did not try to break the lock." "I have no idea how he did it," says a bothered Ms. Gervis. "It is a big mystery." "And you say the robber stole nothing else?" asks the detective. "No money, no jewelry, no crystal?" "That's right, detective. He took only what was important to me," Ms. Gervis says with a sigh. "There is only one thing I can do now." "And what is that?" the detective asks with surprise. "I will stop baking cakes," Ms. Gervis says. "They are mine to give away. They are not for someone to steal." "You can't do that!" says the detective with alarm. "Who will bake those delicious cakes?" "I am sorry. I do not know," says Ms. Gervis. "I must solve this case immediately!" says the detective.

1) Where does this story take place?

- a) In a bakery
- b) At the police station
- c) In Ms. Gervis' house
- d) In Ms. Gervis' apartment

LO: Reads, comprehends, and responds to complex text independently)

2) Near the beginning of the story, "Ms. Gervis' eyes are full of tears. Her hands are shaking." How does Ms. Gervis probably feel?

- a) She is upset.
- b) She is tired.
- c) She is hungry.
- d) She is confused.

(LO: Reads with comprehension the given text materials employing strategies like scanning, inferring and summarising)

3) What makes the detective sure that the robber did not come through the windows?

- a) The windows are locked.
- b) The windows face the police station.
- c) The windows have not been used in months.
- d) The windows are too small for a person to fit through.

LO: Reads, comprehends, and responds to complex text independently)

4) "And the robber definitely did not use the front door." Which is the best way to rewrite this sentence?

- a) "And the robber may not have used the front door."
- b) "And the robber probably did not use the front door."
- c) "And the robber was not able to use the front door."
- d) "And the robber certainly did not use the front door."

(LO: Reads silently with comprehension and interprets layers of meanings)

5) What else could the detective have asked Ms. Gervis in order to solve the mystery?

- I. Which types of cakes does Ms. Gervis know how to bake?
- II. Does someone else have a key to the apartment?
- III. Does Ms. Gervis ever leave the door unlocked?

- a) I only
- b) I and II

c) II and III

d) I, II, and III

(LO: Reads silently with comprehension and interprets layers of meanings)

Answers

1) d

2) a

3) c

4) d

5) c

Non-Continuous Text

Module 3.2



How to use DigiLocker: Upload Driving License, Pan Card and Aadhaar Step by Step Guide

In this Guide, Learn **How to use DigiLocker, an online document storage**, initiated by Govt. Of India, as a part of Digital India, to help it's citizens to securely save their Important documents like **Driving License, Pan Card, Aadhar Card** and Other documents and Certificates issued by different Universities and Govt departments, in a secure Cloud platform, which can be easily accessible from anywhere with a net connection.

ie; With DigiLocker, you can **Save documents Online Free of cost under Government initiative.**

What are the Advantages of DigiLocker Account

- The main benefits of DigiLocker (**Digital Locker System**) is that you can upload all your important documents to a Secure Online Platform initiated by Government of India.
- Indian Railways accepts digital Aadhar and Driver License as valid ID proof. These documents can be accessed from anywhere when you need it. So you don't have to carry your important documents when you travel.
- Another advantage of DigiLocker is that we can now drive hassle free, as we don't have to carry **original driving License or RC Book**. You can show the Driver License and RC book from your DigiLocker account. Digital Driving License and RC Book is accepted all states in India.
- More than Twenty Crore Educational Certificates are now available in DigiLocker. You can save your Schools (**10th Mark sheet, 12 th Marke sheet** etc) and College certificates in your Digital Locker Account Safely. So you can easily share the certificate copies when you attend an interview or when you need it very urgently. More over your documents are safe from natural calamities like Floods, Earth quakes etc.

1 The Digilocker is a _____ initiative?

- a) Government Initiative b) Private initiative
c) NGO's initiative d) None of the above

(LO: Thinks critically about various issues and concerns)

2 Digilockers are available at _____

- a) bank b) cloud Platform c) post office d) none of the above

(LO: Reads with comprehension the given text materials employing strategies like scanning, inferring and summarising)

3 Which program of Govt. Of India promotes the Digi lockers?

(LO: Reads, comprehends, and responds to complex text independently)

4 What number of educational certificates are available in Digi locker?

(LO: Reads, comprehends, and responds to complex text independently)

5 What according to you is the only limitation to access the Digilocker?

- a) The key b) The net connection
c) The locker booklet d) none of the above

(LO: Reads, comprehends, and responds to complex texts independently)

Answer Key :

- 1: (a) Government Initiative
2: (b) Cloud Platform
3: Digital India campaign
4: Twenty crore
5: b) The net connection

MODULE- 4

CLASS X

L 4 - A Question of Trust

Learning Competencies

- Managing and retrieving information
- Creative thinking
- Critical Thinking
- Problem Solving
- Communication

Learning Dimensions

- Global dimensions
- Mathematical
- Environmental
- Demographic
- Technological
- Social Dimension

Continuous Text

Module 4.1

Read the paragraph given below and answer the questions which follow

Why does a person become overconfident? The reason lies in over assessment of his capabilities. Sometimes people over assess their competence and jump into situations that are beyond their control. Napoleon Bonaparte who became Emperor of France would say that the word 'impossible' was common only amongst fools. The overconfident Napoleon invaded Russia in the winter of 1812. This proved to be a big disaster.

Overconfidence generally leads people into misadventures, endangering their chances in life. It is wisely said that any achievement is a result of two factors- one's personal planning and support from the external world. People, take into account only their planning, generally ignoring external factors. As a result they are unable to foresee future developments. Hence, a great risk of failure.

Then there is the question: how can one manage overconfidence? The formula is very simple. Before taking a decision discuss the matter with other informed people with an

objective mind and when it is proved that you are about to go off the path, accept reality and say without delay, "I was wrong".

Overconfidence is a flaw characterizing people who lack the virtue of modesty. Modesty makes you a realist; you become a person who is cut down to size. People of this kind become very cautious; before taking an action they assess the whole situation. They adopt a realistic approach.

Overconfident people live within their own thoughts. They know themselves but they are unaware of others. Living inside their own cell they are unable to make use of the experiences of others. This kind of habit is highly damaging to all concerned.

There is a saying that the young man sees the rule and the old man sees the exception, with a slight change, I would like to say that the overconfident person sees the rule and the confident person sees the exception. Overconfident people are always at risk. It is said that taking risk is good but it must be well calculated otherwise it becomes very dangerous.

Answer the following questions:

1. Why does a person become overconfident?

(LO: Reads, comprehends, and responds to complex texts independently.)

2. What does overconfidence generally lead people to?

(LO: Responds to questions based on textual and non-textual materials.)

3. How can one manage overconfidence?

(LO: Uses the word according to the context and delineate it in speech and writing.)

4. What kind of person does 'modesty' make you?

(LO: Responds to questions based on textual and non-textual materials.)

5. Find a word which means 'threatening' from the passage given above:

- a) Misadventure
- b) Endangering
- c) Assess
- d) Objective

(LO: Appreciates nuances and shades of literary meanings, allusions, and poet's point of view)

Answer Key Module 4.1:

1. A person becomes overconfident because he/she over-assesses his/her capabilities and jump into situations that are beyond his /her control.
2. Overconfidence generally leads to misadventures endangering people's chances in life.
3. One can manage overconfidence by following a simple formula: before taking a decision, discuss the matter with other informed people with an objective mind and when it is proved that you are about to go off the path, accept reality and say without delay, "I was wrong."
4. Modesty makes us a realist; we become a person who is cut down to size.
5. b. Endangering.

Non-Continuous Text

Module 4.2

SOLUTION:

- CORPORATE SOLUTION
- FACTORY SOLUTION
- OFFICE SOLUTION
- HOME SOLUTION

SERVICES:

- INTRODUCTION ALARM
- ATTENDANCE SYSTEM
- ACCESS CONTROL
- LAPTOP/FIREWALL/ACCESSORIES



DIGITECH SOLUTION
 1015/9 , Govindpuri, Kalkaji,
 New Delhi - 110019
Mobile: +91 9871115371



1 Which sectors are covered by the 'Digital Solution'?

- a) Corporate b) Defense c) Domestic d) None of the above

(LO: Evaluates content presented in print media, and in different genres)

2 The Domestic security surveillance covers_____

- a) Motion Sensor b) Laser Sensor
c) Alarm panel d) All of the above

(LO: Reads, comprehends, and responds to complex texts independently)

3 Which of the following service is not offered by Digitech solution ?

- a) Biometric service b) Computer peripherals c) Surveillance d) Valet parking

(LO: Evaluates content presented in print media, and in different genres)

4 If a burglar tries to break into your house, what will be the prompt reaction of the security system?

- a) The CCTV operator will be notified.
b) User will get theft alert on phone.
c) Nearest security service shall be intimated.
d) All of the above

(LO: Evaluates content presented in print media, and in different genres)

5 As per the advertisement given above, in order to save and secure data on computer or laptop which service do we need to install?

(LO: Organizes and structures thoughts, presents information and opinions in a variety of written forms.)

Answer Key:

- 1) b, Defence
- 2) d, All of the above
- 3) d, Valet parking
- 4) d, All of the above
- 5) Firewall

MODULE 5

CLASS X

L-5 - Footprints Without Feet

Learning Competencies

- Managing and retrieving information
- Creative thinking
- Critical Thinking
- Problem Solving
- Communication

Learning Dimensions

- Global dimensions
- Mathematical
- Environmental
- Demographic
- Technological
- Social Dimension

Continuous Text

MODULE 5.1

Read the paragraph and answer the questions which follows.

In *The Invisible Man* (1897), HG Wells wanted his anti-hero Griffin to be made invisible by a scientifically plausible method rather than mere "jiggery-pokery magic". A more naive writer would have suggested (and some did) that all you needed was to make a person totally transparent, like glass. True, that doesn't sound easy, but Wells pointed out – with only a little bit of artistic licence – that apart from our blood and the pigment in hair, our body tissues are transparent. (Bone scatters light rather as milk does, but never mind.) Griffin gets rid of this pigmentation with a chemical drug he devises – as he's an albino, he doesn't have far to go anyway. Wells realised that this would make a person blind, because the retina has to absorb light to work at all – but he felt he could ignore that.

The bigger problem is that – as we can see with a glass beaker – transparency alone doesn't guarantee invisibility. One problem is that the smooth glass surface reflects light, although our rougher skin might not. But glass also refracts light: it bends the rays that pass through, distorting the image behind it. This is because light travels more slowly in glass than in air, and so to take the quickest possible route from an object to our eye, the light takes a crooked path to reduce the time it spends in the "slow" substance. The amount by which a material slows light is called its refractive index: air has a refractive

index of one, and the index of all ordinary transparent materials, like glass and water, is greater than one.

To eliminate refraction, Wells realised that he had to somehow reduce the refractive index of Griffin's tissues to one. There was no known way to do that, and there still isn't, so Wells had to resort to a bit of magic after all: Griffin uses electrical gadgets to produce a kind of invisible ray, similar to the X-rays discovered only two years earlier, that induces this transformation. All the same, the principle of matching the refractive index of an object and its surrounding medium is sound, and transparent things really can be hidden that way. Place a glass rod (refractive index of around 1.5) into clear baby oil or benzene, which has essentially the same refractive index, and it seems to disappear entirely.

1. What is the special characteristic of HG Wells protagonist?

(LO: Reads, comprehends, and responds to complex texts independently)

2. What according to the author is not transparent in human body?

(LO: Reads silently with comprehension and interprets layers of meanings)

3. What do you mean by refractive index?

(LO: Reads, comprehends, and responds to complex texts independently.)

4. Which out of the following has refractive index of one?

- a) Water b) Blood c) Air d) None of the above

(LO: Reads, comprehends, and responds to complex texts independently.)

5. How did griffin reduce the refractive index of its tissues to one?

(LO: Reads with comprehension the given text materials employing strategies like scanning, inferring and summarising)

Answer Key:

1. The Protagonist of HG Wells as an Anti-Hero.
2. Blood and the pigment in hair
3. The amount by which a material slows light is called its refractive index.
4. Option C, Air.
5. Griffin used electrical gadgets to produce a kind of invisible ray that induced this transformation.

Non Continuous Text

Module 5.2



CALL FOR PAPERS

INDIA INTERNATIONAL SCIENCE FESTIVAL 2019

Young Scientists' Conference

Papers are invited for the "Young Scientists' Conference" as a part of the India International Science Festival 2019 to be held at Biswa Bangla Convention Centre & Science City, Kolkata from 5-8 November, 2019

Papers are invited from young scientists, researchers, innovators, academicians (Age of the presenting author should be below 45 years as on 5 November, 2019)

LAST DATE OF SUBMISSION OF ABSTRACT 30 SEPT. 2019

For guidelines & abstract submission, please visit www.scienceindiafest.org

Young Scientists in the Making of Scientific India

IISF-2019 Secretariat
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Prithvi Bhavan, Lodhi Road, New Delhi-110 003
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Email: ysc@scienceindiafest.org
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SCAN ME

1. If 31st October 2019 was Sunday on which day was 'India International Science Festival' 2019 held?

(LO: Uses language as a skill for real life requirements)

2. Where is the festival going to be held?

(LO: Reads, comprehends, and responds to complex text independently)

3. Rajesh Suri was born on 02 Sept 1974, he sent his proposal to present a paper at the conference but his request was turned down. What according to you is the reason?

(LO: Organizes and structures thoughts, presents information and opinions in a variety of written forms.)



4. How do we retrieve information from this sign?

(LO: Collects evidences and discusses in groups for reading science based text)

5. How can the guidelines be retrieved and abstract be submitted?

(LO: Reads, comprehends, and responds to complex text independently)

Answer Key:

1. Friday, Saturday, Sunday, Monday

2. Biswa Bangla Convention Centre & Science City Kolkata

3. As per the guidelines the maximum age of researcher had to be 45 as on 5 November 2019 and as per Rajesh suri's date of birth he is overage, hence his proposal was rejected.

4. by scanning it.

5. It can be done by visiting official website www.scienceindiafest.org

MODULE- 6

CLASS X

L 6 - The Making of a Scientist

Learning Competencies

- Managing and retrieving information
- Creative thinking
- Critical Thinking
- Problem Solving
- Communication

Learning Dimensions

- Global dimensions
- Mathematical
- Environmental
- Demographic
- Technological
- Social Dimension

Continuous Text

MODULE 6.1

Read the paragraph below and answer the questions that follow:

Who is a Lepidopterist: A person who studies or collects butterflies and moths.

Lepidopterology, a branch of entomology is the scientific study of moths and the three super families of butterflies.

Meet a lepidopterist: Isaac Kehimkar, is the Director of iNatureWatch in Navi Mumbai. He graduated from Mumbai University with a degree in Political Science and Psychology. He landed a marketing job, which he quit opting instead for a job with nature. He joined the Bombay Natural History Society (BNHS) as a library assistant in 1978 and spent time learning from people like Dr. Salim Ali and Vyankatesh Madgulkar who often visited the BNHS library. He also honed his writing skills by publishing several natural history photos and articles in *Sanctuary* magazine.

Today, as the General Manager of Programmes at BHNS and Joint Editor of BHNS's quarterly magazine *Hornbill*, he continues to share this information by writing about the small wonders of nature – butterflies, reptiles, flowers, and plants.

Isaac's work: On weekends, Isaac steps out of his usual routine to photograph and watch butterflies, search for caterpillars, check the plants caterpillars eat and make notes on any unusual sightings of butterflies and their behaviour.

Wildlife restoration and conservation: Isaac's articles, books and nature trails are all about making people fall in love with nature. He believes that once they feel connected to nature they will protect it. He conducts awareness programmes and encourages corporate houses to sponsor plantation habitats and restoration programmes for butterflies.

Up to date: Isaac is in touch with people working on butterflies. Social media helps several groups exchange and share a lot of information. "I could write my latest book on Indian butterflies with help of people from the butterfly groups from India, Pakistan, Bangladesh, Srilanka, Bhutan, Thailand and Hongkong," he says.

1. Which branch of entomology is the scientific study of moths?

(LO: Reads, comprehends, and responds to complex texts independently.)

2. Isaac Kehimkar was initially into _____ but later he opted for the job of a _____ at Bombay Natural History Society (BNHS)

(LO: Collects evidences and discusses in groups for reading literary texts.)

3. What was the routine of Isaac Kehimkar on weekends?

(LO: Reads, comprehends, and responds to complex texts independently.)

4. As per paragraph ,mentioned above who is the Joint Editor of BHNS's quarterly magazine, and what is the name of this magazine?

(LO: listens to and discusses literary /non-literary inputs in varied contexts to infer, interpret and appreciate)

5. "I could write my latest book on Indian butterflies with help of people from the butterfly groups from India, Pakistan, Bangladesh, Srilanka , Bhutan, Thailand and Hongkong," in the lines mentioned above which continent does all these countries belong to?

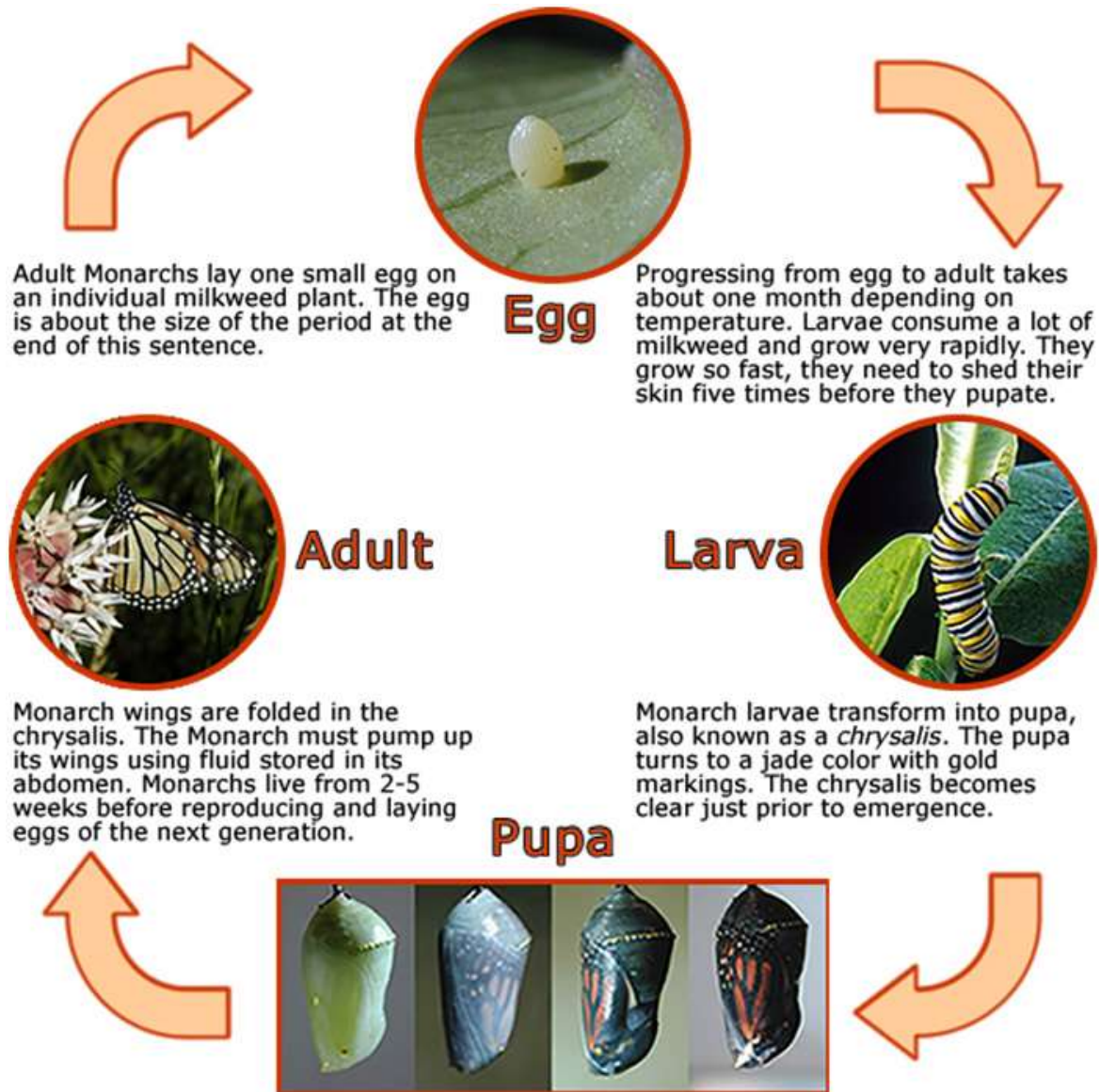
(LO: Collects evidences and discusses in groups for reading literary texts.)

Answer Key:

- 1)** Lepidopterology
- 2)** marketing, library assistant
- 3)** On weekends, Isaac stepped out of his usual routine to photograph and watched butterflies, searched for caterpillars, checked the plants caterpillars had eaten and made notes on any unusual sightings of butterflies and their behaviour.
- 4)** Isaac Kehimkar was the Joint Editor of BHNS's quarterly magazine, called Hornbill.
- 5)** Asia

Non- Continuous Text

MODULE 6.2



1. In the first stage, where are eggs laid?

(LO: Thinks critically, compares and contrasts ideas, themes etc and relates them to life and the environment)

2. Which stage of life cycle of a monarch butterfly is splitting and shredding larval skin is found?

- a) Pupa Stage b) Larva Stage c) Egg stage d) Adult stage

(LO: Collects evidences and discusses in groups for reading and science based literary texts.)

3. After splitting and shredding larva skin the early chrysalis _____

- a) can be seen through b) cannot be seen through
- c) looks white d) none of the above

(LO: Thinks critically, compares and contrasts ideas, themes etc and relates them to life and the environment)

4. The life cycle of a monarch butterfly has to undergo _____

- a) Egg-Pupa-Larva-Adult b) Larva-Egg-Pupa-Adult
- c) Egg-Larva-Pupa-Adult d) None

(LO: Evaluates content presented in print media, and in different genres)

5. How many times does a larvae shred its skin before it pupates?

- a) Two times b) Three times c) Five times d) None of the above

(LO: Collects evidences and discusses in groups for reading and science based literary texts.)

Answer Key:

1: Eggs are laid on milkweed plant.

2: b) Larva Stage

3: b) Cannot be seen through

4: c) Egg-Larva-Pupa-Adult

5: c) Five times

MODULE-7

CLASS X

L 7 - The Necklace

Learning Competencies

- Managing and retrieving information
- Creative thinking
- Critical Thinking
- Problem Solving
- Communication

Learning Dimensions

- Global dimensions
- Mathematical
- Environmental
- Demographic
- Technological
- Social Dimension

Continuous Text

MODULE 7.1

SHE was one of those pretty, young ladies, born as if through an error of destiny, into a family of clerks. She had no dowry, no hopes, no means of becoming known, loved, and married by a man either rich or distinguished; and she allowed herself to marry a petty clerk in the office of the Board of Education. She was simple, but she was unhappy.

She suffered incessantly, feeling herself born for all delicacies and luxuries. She suffered from the poverty of her apartment, the shabby walls and the worn chairs. All these things tortured and angered her.

When she seated herself for dinner opposite her husband who uncovered the tureen with a delighted air, saying, "Oh! the good potpie! I know nothing better than that....," she would think of elegant dinners, of shining silver; she thought of the exquisite food served in marvellous dishes. She had neither frocks nor jewels, nothing. And she loved only those things.

She had a rich friend, a schoolmate at the convent, who she did not like to visit — she suffered so much when she returned. She wept for whole days from despair and disappointment.

One evening her husband returned elated bearing in his hand a large envelope.

“Here,” he said, “here is something for you.”

On the basis of your reading of the passage , answer the questions

1 Loisel always carried the expression of ———

- a) happiness b) unhappiness c) contentment d) none of the above

(LO: The student understands the expressions used by the characters of the story)

2 In contrast to Loisel , the husband is very ———

- a) content b) happy c) sad d) perturbed

(LO The student understands the written context and can comprehend the vocabulary)

3 Why did Matilda think that she was born in a family of clerks due to some error of destiny ?

(LO The student understands the text and can comprehend it)

4 Matilda lived in a world of fantasy. What did she dream of ?

(LO The student can read between the lines given and understand them)

5 What was the difference in the status of Matilda and her friend?

(LO The student can comprehend and understand different layers of meanings)

Answers:

1 unhappy

2 content

3 young, beautiful, realising her dreams are high to fulfil them she could have been born in an affluent family

4 delicacies , luxuries , jewels, dresses

5 Her friend was rich and affluent

Non Continuous Text

MODULE 7.2 THE NECKLACE

Gold Rates - Spot & Futures (.995 purity) (MCX)

Date	Gold Spot Price Rs/10 grms (AHMEDABAD)	Gold Future Price Rs/10 grms Expiry: 05-Oct-2020
28-08-2020	50981	51399
25-08-2020	51440	51004
21-08-2020	52448	51990
19-08-2020	53185	52660

Study the above table and answer the questions

1 According to the table , what is the purity of gold

a 100 b .995 c 100.29 d .997

(LO The student can comprehend the given table and understand what it suggests.)

2 What is the difference in the price of gold in Ahmedabad on August 19 and August 21?

(LO The student can use their mathematical abilities)

3 When was the price of gold minimum and when was it maximum?

(LO The student can comprehends the text and use their analytical abilities)

4 If August 19 , 2020 is Wednesday, what day is August 28,2020?

LO The student uses their abilities to find out the day

5 Gold in its purest form is too soft to be made into jewellery. The jewellery made of gold is alloyed with a mixture of metals .

Choose the correct metals

- a) Iron , silver , copper , platinum
- b) Silver , copper , platinum , zinc
- c) Silver , copper , platinum , mercury
- d) Copper , silver , mercury

LO the student uses the scientific knowledge to attempt

ANSWERS

1 b .995

2 737

3 28 August, 19 August

4 friday

5 b

MODULE-8

CLASS X

L 8 - THE HACK DRIVER

Learning Competencies

- Managing and retrieving information
- Creative thinking
- Critical Thinking
- Problem Solving
- Communication

Learning Dimensions

- Global dimensions
- Mathematical
- Environmental
- Demographic
- Technological
- Social Dimension

MODULE 8.1

"I know Oliver's mother. She's a terror," Bill sighed. "I took a trunk out there for her once, and she almost took my skin off because I didn't treat it like a box of eggs. She's about nine feet tall and four feet thick and quick as a cat, and she sure can talk. I'll bet Oliver heard that somebody's chasing him, and he's gone on there to hide behind his mother's skirts. Well, we'll try her. But you'd better let me do it, boy. You may be great at literature and law, but you haven't had real training in swearing."

We drove into a poor farmyard; we were faced by an enormous and cheerful old woman. My guide bravely went up to her and said, "Remember me? I'm Bill Magnuson, the carter and hackman. I want to find your son, Oliver."

"I don't know anything about Oliver, and I don't want to," she shouted.

"Now, look here. We've had just about enough nonsense. This young man represents the court in the city, and we have a legal right to search all properties for this Oliver Lutkins."

Bill made me sound very important, and the woman was impressed. She retired into the kitchen and we followed. She seized an iron from the old-fashioned stove and marched on us shouting. "You search all you want to — if you don't mind getting burnt first." She shouted and laughed at our frightened retreat.

"Let's get out of here. She'll murder us," Bill whispered. Outside, he said, "Did you see her smile? She was laughing at us."

I agreed that it was pretty disrespectful treatment. We did, however, search the house. Since it was only one storey high, Bill went round it, peering in at all the windows. We examined the barn and stable; we were reasonably certain that Lutkins was not there. It was nearly time for me to catch the afternoon train, and Bill drove me to the station.

On the way to the city I worried very little over my failure to find Lutkins. I was too busy thinking about Bill Magnuson. Really, I considered returning to New Mullion to practise law. If I had found Bill so deep and richly human, might I not grow to love Fritz and Gustaff and a hundred other slow-spoken, simple, wise neighbours? I pictured an honest and happy life beyond the strict limits of universities and law firms. I was excited. I had found a treasure. I had discovered a new way of life.

But if I did not think much about Lutkins, the office did. I found

On the basis of your reading of the passage , answer the questions

1 Oliver's mother was different from others . Give three features that made her different from other women

(LO The student has knowledge of describing words)

2 The following words/ word do not describe Oliver

a) simple b) clever c) trickster d) conman

(LO the student understands the vocabulary used in the passage)

3 Appearances are often deceptive. How far do you think the story justifies the statement?

(LO the student comprehends the different layers of the meanings)

4 I considered returning to New Mullion to practise Law , Why do you think the writer made this statement?

(LO the student understands the context and different situations used in the text)

5 Oliver Lutkins befooled the lawyer and earned money by using unfair means . Do you think this was justified? What precautions do you think one must take to avoid a situation like the one in which the lawyer was placed?

(LO the student applies the textbook knowledge to a real life situation and understand its implications)

ANSWERS

1 nine feet tall , four feet thick , active , aggressive

2 a simple

3 the statement is true

The author is impressed by the pleasant behaviour of Oliver

He understands later that the kind and simple perso was actually a trickster

4 He was impressed by Oliver He thought the people were simple and helpful

5 Oliver was wrong This is not successful in the long run

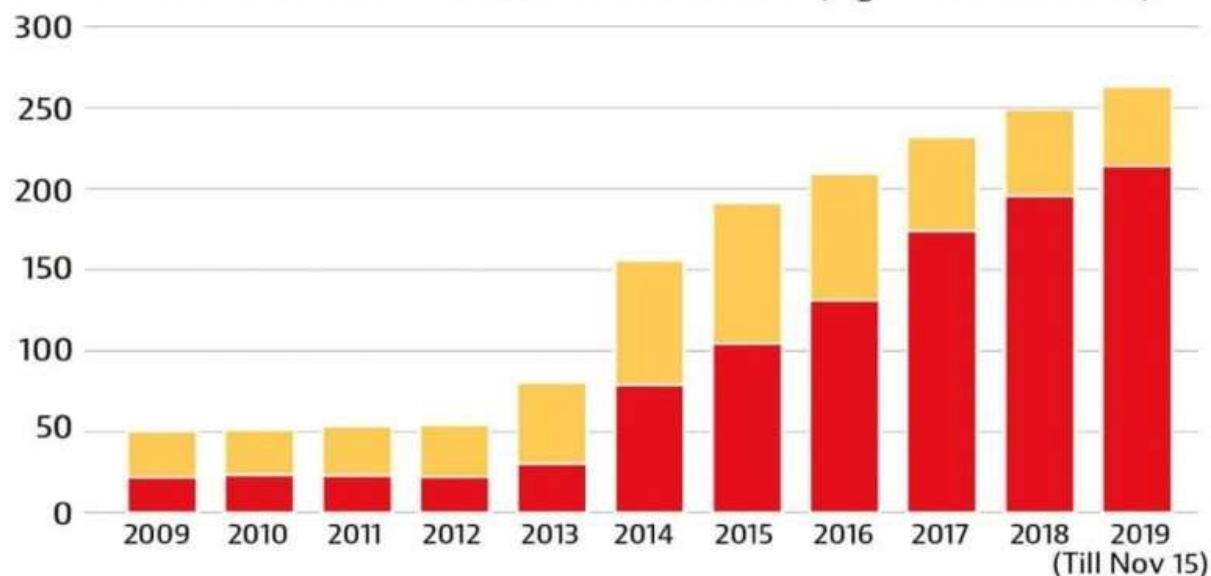
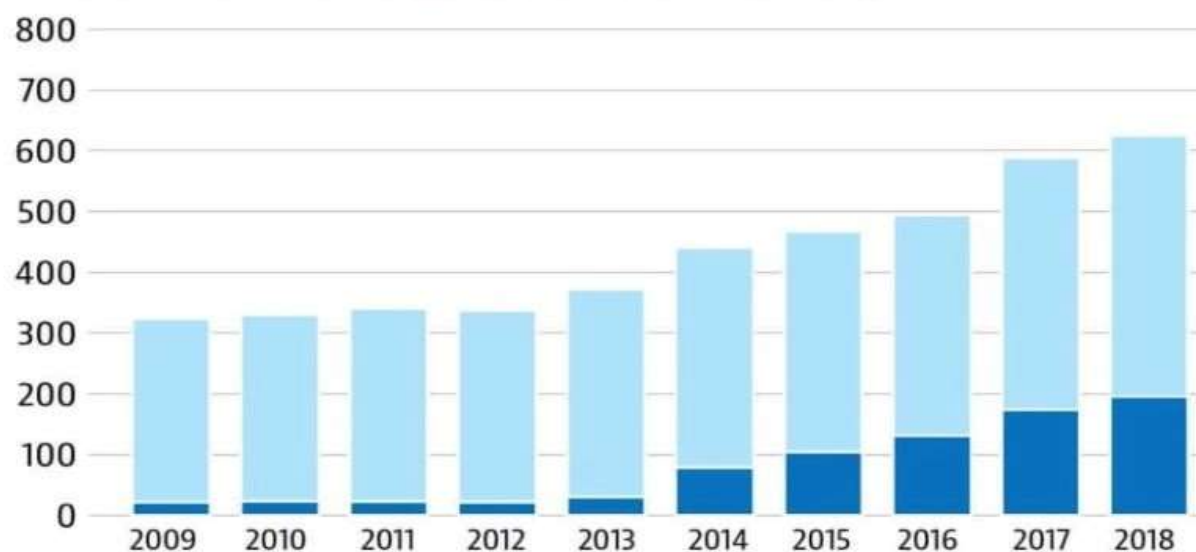
Honesty always pays

One needs to be careful

We cannot judge a book by its cover

MODULE 8.2**THE HACK DRIVER**

Non Continuous Text

CHART 1 Theft now form a bulk of crimes**Number of cases (in Delhi)** ■ Theft ■ Others (Figures in thousand)**CHART 2 Disproportionate share of Delhi****Number of theft cases** ■ Delhi ■ Other states (Figures in thousand)

Study the given tables On the basis of your study , answer the questions

1 What is the difference in number of thefts in Delhi in 2019 as compared to 2009 ?

LO the students will try and understand the graph and figure out the required data

2 The years that saw almost the same number of thefts in Delhi are

a 2009,2010,2011,2012

b 2009,2011,2013,2014

c 2010,2011,2012,2013

d 2013,2014,2015,2016

(LO the students will comprehend the graphical representation)

3 The difference in crimes in Delhi other than the thefts in year 2018 and 2013 is——

(LO the students will understand the graphical presentation)

4 Why are the number of cases in thefts increasing in Delhi?

(LO the students use their previous knowledge to give an answer)

5 You returned home late at night . You noticed some untowards movements in your neighbourhood. You wish to call for help. What number will you call for help ?

(LO the students use the general awareness and abilities)

Answer Key:

1 220-25 (in thousands)

2 a

3 180-25 (in thousands)

4 easy money, unemployment/ any other answer

5 100

MODULE-9

CLASS X

L 9-BHOLI

Learning Competencies

- Managing and retrieving information
- Creative thinking
- Critical Thinking
- Problem Solving
- Communication

Learning Dimensions

- Global dimensions
- Environmental
- Social
- Demographic

Continuous Text

Module 9.1

Read the given extract and answer the questions that follow:

"Bholi was seven years old when Mangla was married. The same year a primary school for girls was opened in their village. The Tehsildar sahib came to perform its opening ceremony. He said to Ramlal, "As a revenue official you are the representative of the government in the village and so you must set an example to the villagers. You must send your daughters to school."

1 What was the purpose of the Tehsildar's village visit?

- A) to inaugurate a girl's school
- B) to address complaints of the village
- C) to meet the people of the village
- D) none of the above

(LO: Reads, comprehends, and responds to complex text independently)

2 What did the Tehsildar ask Ramlal to do?

- A) drop him back to the city
- B) have dinner with him

- C) send his daughters to school
- D) none of the above

(LO: Reads with comprehension the given text materials employing strategies like scanning, inferring and summarising)

3 How did Ramlal's wife react about sending her girls to school?

- A) she laughed
- B) she got angry
- C) no reaction
- D) she cried

(LO: Reads silently with comprehension and interprets layers of meanings)

4 The phrase 'set an example' means

- A) representative
- B) be a role model
- C) listen
- D) set the alarm

(LO: Uses words, phrases, idioms and word chunks for meaning make-up in context)

5 Which are the common practices adopted by youngsters to avoid body shaming?

(Write in 30-40 words)

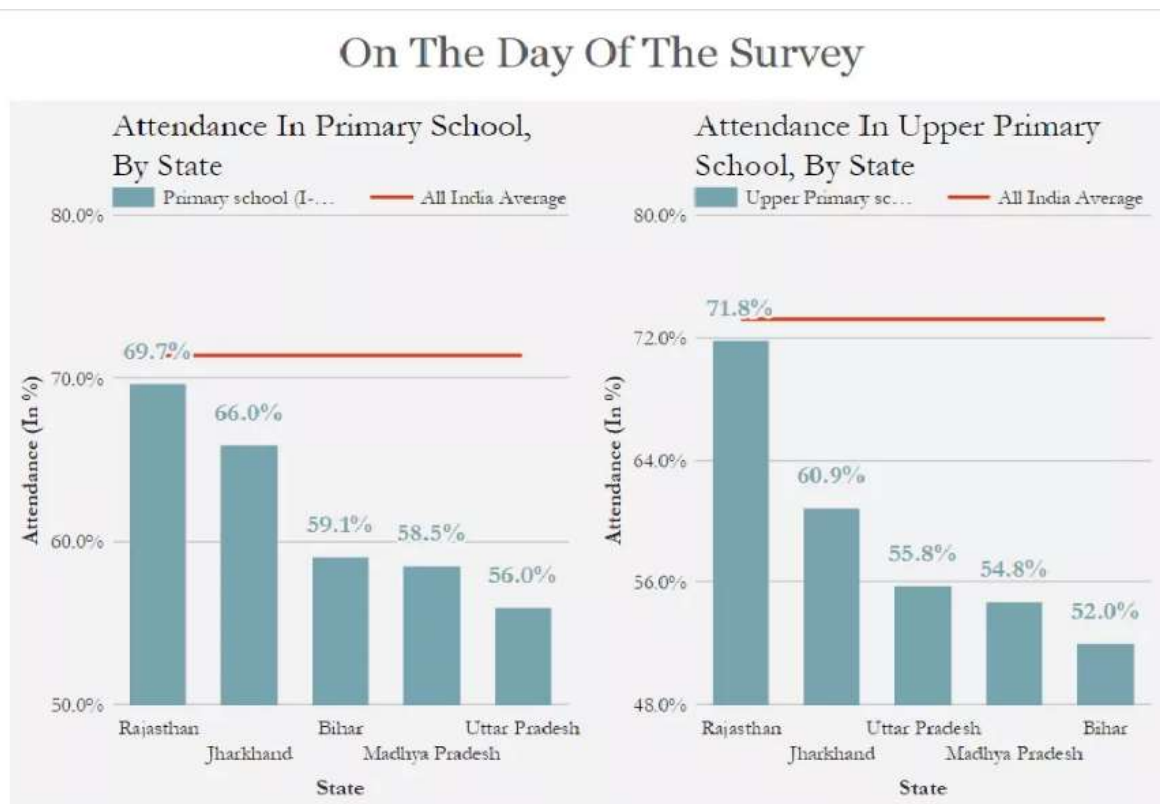
(LO: **Experiential learning;** organises and structures thought, presents information and opinion in a variety of oral and written forms for different audiences and purposes)

ANSWER KEY

1. A) to inaugurate a girl's school
2. C) send his daughters to school
3. D) she cried
4. B) be a role model
5. Individual response with keywords turmeric paste, aloe vera gel, waxing, face masks; avoiding rice and potatoes to liposuction surgery.

Non-Continuous Text

Module 9.2. Given below is a bar graph. Use the information to answer the questions that follow:



1 Which state shows an increase in attendance at the upper primary level?

(LO: Thinks critically about various issues and concerns)

2 If in Jharkhand, the total number of students enrolled at the Primary level is 6250, then how many students are regular in attending school?

(LO: Provides facts and background knowledge areas such as science, social science, mathematics and presents viewpoint)

3 What is the average attendance rate of Uttar Pradesh, Madhya Pradesh and Bihar at the Upper Primary Level?

(LO: Solve mathematical sums based on the relevant topics)

4 Which state had the minimum deviation in attendance from primary to Upper primary level?

(LO: Read, comprehend, and respond to complex texts independently)

5 The state of Bihar has 52% attendance at Upper Primary level. What according to you is the reason for such low attendance in Bihar?

(LO: Analyses and interprets using analytical skills)

ANSWER KEY

1. Rajasthan
2. 4125
3. 54.2%
4. Madhya Pradesh
5. Any suitable response with key words like poverty, illiteracy, lows status of woman, lack of infrastructure.

MODULE 10

CLASS X

L-10 THE BOOK THAT SAVED THE EARTH

Learning Competencies

- Creative thinking
- Critical thinking
- Problem solving
- Communication and Writing

Learning Dimensions

- Global dimensions
- Mathematical
- Environmental
- Demographic
- Technological
- Social Dimension

Continuous Text

Module 10.1

Read the given extract and answer the questions that follow:

Well, sir, I have seen surveyor films of those sandwiches. I noticed that the Earthlings did not eat them. They used them as some sort of communication device.

1 What is the "sandwich" used for on Earth, according to Noodle?

- a) satiating hunger
- b) communication
- c) dessert
- d) none of the above

(LO: Reads with comprehension the given text materials employing strategies like scanning, inferring and summarising)

2 How did they find codes inside the sandwich?

- a) through hearing communication
- b) through eye communication
- c) by tasting it

d) all of the above

(LO: Uses language as a skill for real life requirement)

3 Which "ridiculous little planet" is being talked about?

- a) Mars
- b) Jupiter
- c) Earth
- d) Saturn

(LO: Thinks critically about various issues and concerns)

4 A 'surveyor' is one who

- a) builds fences
- b) constructs buildings
- c) lays bricks on the land
- d) examines the condition of land professionally

(LO: Uses words, phrases, idioms and word chunks for meaning make-up in context)

5 Do you think books are being replaced by the electronic media? Can we do away with the books all together?

(Write in 30-40 words)

(LO: **Experiential learning**; organises and structures thought, presents information and opinion in a variety of oral and written forms for different audiences and purposes)

Answer Key

1. b) communication
2. b) through eye communication
3. c) Earth
4. a) Mother goose

5. Own Opinion-The statement is true but only partially. The electronic media has made its presence felt in a big way. Today, all the information, that was earlier sourced by encyclopaedia, is available at the touch of a button on the electronic media. The visual effect is even better when we watch video pictures than those in the books. Moreover, it saves paper and there is lesser impact on the environment in the form of carbon footprints. Nevertheless, despite the conveniences offered by the electronic media, it cannot replace the printed books. Our paper books have their own special charm and will continue to exist with whatever newer option that may be available.

Non-Continuous Text

10.2 Given below is an excerpt. Use the information to answer the questions that follow:

Other things to include in the survival kit are:

- EXTRA CLOTHING
- FIRST AID KIT
- FLASHLIGHTS
- CAN OPENER
- STERNO OR OTHER METHOD OF HEATING FOOD
- EMERGENCY BLANKETS
- PAPER MAPS OF YOUR AREA
- TENT



Ready America 70280 Grab-n-Go Emergency Kit, 2-Person, 3-Day Backpack

Survival kit for 2 people for 3 days. Includes food, water, and first aid kit.

Amazon Price: \$39.00
List Price: \$49.99

WEAPONS TO DEFEND AGAINST ALIENS

You never know what type of alien you might have to face.

So gathering lots of different weapons is a good idea. Knives, bows and arrows, and even sticks are good.

You can also try to use other unconventional weapons as well. Fire may work with some aliens. Water might even work.



MTECH XTREME USA MX-8027A TACTICAL FOLDING KNIFE 5"

CLOSED Amazon Price: \$3.30
List Price: \$17.99

1. If you live in a family of 8, and need to protect yourself from an alien invasion for 6 days, how many total gallons of water would you need in your survival kit?

- a) 25
- b) 30

- c) 48
- d) 15

(LO: Interprets and analyses from a mathematical bent of mind)

2. If you live in a family of 8, and need to protect yourself from an alien invasion for 6 days, what would be the total cost of survival kits purchased by you if bought through Amazon?

- a) USD 234
- b) USD 312
- c) USD 156
- d) USD 624

(LO: Solve mathematical sums based on the relevant topics)

3. What kind of weapons can be used to defend against aliens?

- a) Bows and Arrows
- b) Fire
- c) Water
- d) All of the above

(LO: Read, comprehend, and respond to complex texts independently)

4. What is the full form of ET?

(LO: Read, comprehend, and respond to complex texts independently correlate the text with scientific and social phenomena)

5. Imagine you are visiting a different planet. Describe what it looks like and elaborate on your encounter with an alien there. (30-40 words)

(LO: Experiential learning; organises and structures thought, presents information and opinion in a variety of oral and written forms for different audiences and purposes)

ANSWER KEY 10.2:

- 1) C. 48
- 2) B. 312
- 3) D. All of the above
- 4) Extra Terrestrial
- 5) Own Opinion - Hints: different temperature, gravity, light and water conditions onto this planet, body structure of alien, language

