

UNIT- I

THE RAMAN EFFECT

Explanation:

C.V.Raman's Early Life: Chandrasekhara Venkata Raman was born at Tiruchirappalli in Southern India on November 7th, 1888. His father was a lecturer in mathematics and physics so that from the first he was immersed in an academic atmosphere. He entered Presidency College, Madras, in 1902, and in 1904 passed his B.A. examination, winning the first place and the gold medal in physics; in 1907 he gained his M.A. degree, obtaining the highest distinctions.

Other Scientific Researches: Raman led experiments at the IACS with collaborators, including K. S. Krishnan, on the scattering of light, which is now called the Raman effect. By the year 1921 leading physicists like J.J. Thomson and Lord Rutherford were already acquainted with Raman's significant study in the field of Optics and Acoustics wherein he studied the percussions of instruments like tabla and mridangam and related their sounds to mathematics.

Factors that led to the discovery of Raman Effect: Raman was struck by the blue colour of the Mediterranean Sea. Scientists believed that the blue colour of the sea was actually a reflection of the sky which was confirmed by Physicist Lord Rayleigh. But Raman was not convinced by this explanation. To verify his speculations he used polarized Nicol Prism on sea water sample to show light was scattered by water molecules-a phenomenon that he called molecular diffraction.

Raman Effect: Raman initiated research in three areas: the scattering of light by liquids, the scattering of x-rays by liquids and the viscosity of liquids. Of these three areas the scattering of light by liquids fetched him the Nobel Prize. Later for seven years he conducted many experiments along these lines with his associates KR Ramanathan and K S Krishnan. The team had indisputable proof about the modified radiations observed in scattering experiments due to molecular fluctuations. The discovery was announced through the Associated Press on 29th February and 8th March. In this regard with a sense of affirmation he addressed the gathering at the south Indian association on 16th March 1928. He proposed the new kind of radiation or light emission from atoms & molecules. His experiments and findings were confirmed and he was conferred the Nobel Prize. Raman had confidently announced at a meeting of Royal society of Fellows in 1924 that he would win the Nobel Prize in Physics.

Awards: In 1930 Raman won the Nobel Prize in Physics, 1940 awarded the Franklin Prize, 1954 honoured with highest civilian award the Bharat Ratna, and awarded Lenin Peace Prize in 1957. India celebrates National Science Day on 28 February of every year to commemorate the discovery of the Raman effect .

Raman's Spectroscopy: Raman discovered that when a light beam travels through a medium, it is deflected by the molecules in the medium. a small part of the light beam after the deflection, had a different wave length and colour from the

phenomenon. This initiated the study of Raman Spectroscopy.

Advantages of Raman Effect: Raman clearly explained how light travels through a medium and a light beam are deflected by the molecules in the medium. The experiment was named after him as Raman Effect which led to the discovery of Raman Spectroscopy, a field of study that has a lot of practical applications like handheld scanners and in the pharmaceutical industry.

Summary:

Raman was born on November 7th 1888 at Tiruchirapalli in Tamil nadu. His father was a Physics teacher in a college. He was a brilliant student right from the start. Science had already made an impression on him and he began to write research papers for Science Journals. When he was only 19, he becomes a member of the Indian Association for Cultivation of Science. Meanwhile, respecting his parents' wishes, he took up an administrative job in Science, however, did not flag. He used to spend his hours after office in the lab of the Association working throughout the night.

He was mainly interested in acoustics, the science of sound. He studied how stringed instruments like the violin and the sitar could produce harmonious music. He was elected to the Rama Society of London in 1924 and the British Government made him a Knight of the British Empire in 1929. It was a high honor for any great scientist.

C.V. Raman was the first Indian scholar who studied worthy in India and received the Noble prize. He was the first Asian and the first non-White to win such a great award in science. He passed away in 1970, on November 21. But his memories are with us. February 28, the day on which he discovered the "Raman Effect", is celebrated as Natural science day to commemorate his remarkable achievement in science.

For five years he had been doing research in optics, the science of height. No, sophisticated equipment was available in his Laboratory, but Raman was confident that he could find, the answer with some modification in his equipment. On March 16, 1928, Raman announced his discovery of 'new radiation', (describing the behavior of a beam of light passing through a liquid chemical) to an assembly of scientists at Bangalore. The world hailed the discovery as the "Raman Effect".

For Scientific research in this country, it was red letter day this discovery caught the attention of the world.

Question and Answers:

1: Why was Raman awarded the Nobel Prize?

A: Chandrasekhar Venkat Raman was a born physics enthusiast. His inquisitive nature was ever alive. He was always curious to know more and more. And he was very clear in his propositions and explanations. He was forever ready to instigate, interrogate, investigate and propagate. Even as a busy administrative officer, he always found time, patience and, more importantly, interest to conduct original scientific research at the Indian Association for the cultivation of sciences. With such inherent scientific temper, Sir C.V. Raman watched the sea and its blue color as he was voyaging to London in 1921. Sir C.V. Raman was not convinced by the earlier explanation that the blue color was the reflection of sky. Sir C.V. Raman speculated that it could be because of the scattering of sunlight by water molecules. And his consequent experiments proved this speculation. And the inevitable happened. And C.V. Raman's earlier bold declaration became true. He won the Nobel Prize for physics for his original discovery – molecular scattering of light – in 1930!

2: According to Raman, why is the sea blue in color?

A: C.V. Raman was ever keen to learn. Questioning was his strength. Research was his weapon. And discovery was his passion. And the reward was the Nobel Prize. C.V. Raman participated in the Universities' Congress in London in 1921. As he was travelling by the sea, he was impressed by the 'blue' color of the sea. Many people noticed this blue color earlier. They all thought it was the reflection of sky. But C.V. Raman was, somehow, not impressed with this belief. He guessed that sunlight is being scattered by the water molecules. He conducted experiments in this direction. He proved beyond doubt that water molecules indeed scatter light. So, the white sunlight, when scattered by the water molecules gives the sea its blue color. This discovery, known as the Raman Effect, fetched for him the Nobel Prize in 1930!

Answer Key

UNIT 1 THE RAMAN EFFECT

Post-reading

Choose the sentence that best summarizes the main idea in each paragraph of the text.

A. 1 B. 1 C. 1 D. 2 E. 1

Answer these questions.

Raman was awarded the Nobel Prize for his work on the scattering of light by liquids.

According to Raman, the blue colour of the sea was due to the scattering of sunlight by the water molecules. He verified this by using a polarised Nicol prism on a sample of sea water to show that light was scattered by the water molecules. He called this phenomenon, molecular diffraction.

Task 1

Form opposites of the words given below by adding prefixes. An example has been done for you.

qualify – disqualify
possible – impossible
climax – anticlimax
confirmed – unconfirmed

Task 2

Form adjectives by adding appropriate suffixes to the words listed below. An example has been done for you.

create – creative
beauty – beautiful
excite – exciting
pain – painful/painless

Task 3

Complete the sentences using the most appropriate forms of words given in the box.

- The techno giant was penalized heavily for using customers' personal information without authorization.
- The motto for the new PM should be minimum government but maximum governance.
- The ruling party is facing a strong anti-incumbency wave in the upcoming assembly polls.
- A possibility of extraterrestrial life has always attracted people's attention.

Task 4

Change the grammatical category of the words in Column A, using an appropriate suffix from the box below.

2. movable 3. crystallise 4. magnetic 5. nationalism 6. delivery
7. advertisement 8. spacious 9. frighten 10. assessment

Task 5

Add suitable affixes to form what is indicated within brackets. One has been done for you.

2. un- + palatable = unpalatable 3. suffocate + -ion = suffocation
4. attract + -ive = attractive 5. additional + -ly = additionally
6. activate + -ion = activation 7. capable + -ity = capability
8. il- + logical = illogical 9. torrent + -ial = torrential
10. corrode + -ive = corrosive

Task 6

Underline the indefinite articles in these sentences.

- Ahan Parekh was interested in renewable energy; he completed an internship with a company dealing in solar energy last year.
- A great deal of time and effort has been devoted to finding a cure for cancer.
- The nucleus of an atom holds a positive charge and has a specific number of protons and neutrons.

Task 7

Underline the definite articles in these sentences.

- Farmers used the constellations in the night sky for predicting the seasons.
- The man who invented the USB technology didn't make any money out of it.
- The primary advantage of Li-Fi technology is that it allows for faster transmission of data as compared to the existing Wi-Fi technology.
- The Netherlands is a beautiful country.
- The integrated circuits used in computers were replaced by microprocessors in the 1970s.
- The only way to account for the variations in the readings was to repeat the procedure a number of times.

Task 8

Fill in the blanks using the correct articles where required. You may use a/an/the or X (for 'none').

This instance was one of the first UFO sightings reported by X pilots anywhere in the world. Whilst flying from one city to another, in the USA, two pilots encountered a large, cigar-shaped craft, flying close to them, barely missing them at times. At one point, the object appeared to stop abruptly before vanishing into thin air. The pilots concurred that it was a long, thin craft, with two rows of tiny windows that emitted a bluish-green glow. It was moving really fast and leaving behind it a trail of orange exhaust.

Several witnesses at an American airbase claimed to have seen an identical object half an hour before what the pilots experienced. Officials from the US government were able to rule out the possibility of it being a military or commercial flight as there were no such flights scheduled at that time.

After a prolonged investigation, government officials wrote off the sightings as an illusion caused by X temperature changes. They later changed their minds and claimed that it was a meteor. However, experts later decided that, as the description of the object does not at all fit that of a meteor, this sighting will be classified as 'an unexplained phenomenon'.

Task 9

Correct the errors in the use of articles in this paragraph.

In the year 2005, Arvind Thiagarajan was a 25-year-old inventor with a couple of patents to his credit. By 2011, he managed to file for about 40 patents. When President Abdul Kalam presented him with the Junior Scientist Award in 2001, he inspired Arvind to invent and, more importantly, also patent his inventions. His most interesting invention is HDFonoDoc, the first device in the world which can analyse and document heart murmurs in real time. It was a replacement for the mechanical and digital stethoscopes used by doctors worldwide.

Task 10

Some sentences below have errors in the use of articles. Identify the error and rewrite the sentences. If there is no error, retain the sentence as it is.

- The Himalayas are a sensitive eco zone. (No error)
- A union minister visited our college last year for the anniversary function. (No error)
- Practice makes a person perfect.
- The peacock is considered our national bird.

- One of the most prominent rivers of India is the Ganga. (No error)
- B. Tech is the most sought-after degree in many parts of India.
- Gold is a good investment option since the interest rates are going down.
- The Olympian was awarded an honorary doctoral degree last year.
- All except the Sharmas were invited to the engagement ceremony. (No error)
- Every year many Indian students go abroad for higher studies.

Task 11

Read this paragraph and underline the prepositions.
to, of, in (repeated across sentences)

Task 12

Fill in the blanks using the correct prepositions.

1. on, in 2. in, to 3. by 4. by 5. in

Task 13

Fill in the blanks using the correct prepositions.

1. to, for 2. by, with 3. in, for 4. through 5. in, by

Task 14

Some sentences below have errors related to use of prepositions. Identify the error and rewrite the sentences.

- The politician divided his property among his three daughters.
- My brother has a two-wheeler besides two small cars. (No error)
- The address on the envelope was wrong and therefore it was sent back.
- When we reached the hotel, the entire staff of the hotel was waiting with flowers at the reception.
- During our trip to Shimla, the train went through a tunnel.
- You can consult a doctor for tips to sleep in hot and humid weather.
- My teacher was angry with me because I was very late for his class.
- It is really hard to laugh at Rakshit's jokes; they are really bad!
- Reshma's parents trusted in her and she never failed them.
- These days one needs to manage stress at work and yoga is a popular method. (No error)

Task 15

Separate the following into two groups, phrases and clauses.

- Mesmerizing quotes on life from social media – phrase
- The students are shouting – clause
- Life-threatening diseases – phrase
- Gold price has hit all-time high – clause
- An all-time favourite song – phrase
- Well-designed but badly executed welfare programme – phrase
- I wonder why – clause

Task 16

Classify the following sentences into simple (S), compound (CP) and complex (CX).

- I called up my brother and discussed our travel plans. CP
- The teacher read out the names of winners of the cultural competition on stage.
S
- The star player did not disappoint his fans as he scored two goals in yesterday's match. CX
- Orcas, which are also known as 'killer whales', are extremely intelligent animals. CX
- Many tourists are feared trapped in the deadly mudslide near the famous pilgrimage place. S
- The train was cancelled because of technical issues. CX
- Though I didn't believe in ghosts, the extraordinary events in our house made me approach the well-known paranormal investigators. CX
- The title of my next book is 'I am not what I am'. S

Task 17

Fill the blanks using suitable forms of the words given in brackets.

1. would have been 2. write 3. read 4. will be 5. were

Task 18

Spot the errors in these sentences and correct them.

- If it is sunny, the guests will want some lemonade.
- If I had more money, I would buy a house.
- If you slept on time, you would be able to wake up early.
- If I am stuck in traffic, I will let you know.
- If my brother moves to Singapore, I will visit him there.
- If they want to, they can host the event.

Task 19

Insert commas at the correct places in these sentences.

- The recipe required flour, sugar, eggs and cream.
- Once the storm had subsided, the people returned home from the makeshift shelters.
- We intended to visit Coorg as well, however, we couldn't for lack of time.
- Sanghavi, an avid social media user, decided to spread awareness about the air pollution in her city.
- I cannot afford a house in Bandra, so I am moving to Malad.

Task 20

Insert apostrophes at the correct places in these sentences.

- Raja Ravi Varma's paintings have become a part of the Indian imagination of the epics.
- My friend's flat is located in one of the most expensive localities in the city.
- The senior surgeon's opinion was to go ahead with the surgery.
- Who's taken the library books that were on my table?
- The children's section is located on the right-hand side of this bookstore.

Task 21

Insert colons at the correct places in these sentences.

- You have only one lifeline: use it while you can.
- On your Facebook profile, you can do the following: upload a profile photo, indicate your likes and interests, create albums of your favourite moments and include a cover photo.
- I can understand one thing from Satwik's tweets: he is travelling all over the world.
- The scientist said: 'We need to increase our focus on research to encourage the spirit of innovation among the youth.'
- Make a note of the items you need to carry to the camp: a torch, sleeping bag and safety kit.

Task 22

Check if the semicolon has been used properly in these sentences and correct it where required.

- I'm allergic to cottage cheese-based curries; milk-based products do not agree with me. (No error)
- Kerala is a lovely place; it has beautiful beaches and lovely weather.
- The social media usage fell sharply in the hostel last week; many students were preparing for exams.
- In the meeting today we have: Mr. Sachit Bhagat, CEO, MediaTech; Mr Piyush Gorakh, Director, Soltex Marketing; Ms Pratima Shah, Chairperson, Women Entrepreneur's Association of Hyderabad and Mr Satish Sehgal, Assistant Manager, Latitude Software Solutions.
- The librarian placed an order for books, journals, magazines and newspapers.

Task 23

Tick the correct uses of hyphen, en dash and em dash.

- We are expecting around 1000 - 2000 people for the wedding.
- You may think this solution will work—it won't.
- This is a one-way street.
- Conan Doyle was a famous nineteenth—century novelist.
- India—China relations have seen many ups and downs over the years.

Task 24

This paragraph has 10 errors related to vocabulary, grammar and punctuation. Identify the mistakes and rewrite the paragraph.

March 20 is celebrated as the World Sparrow Day since 2010. The aim is to generate awareness about sparrows, which were once very common in our surroundings but are now rare. Till a few years back, sparrows could be seen nesting in almost every backyard and public places such as bus and railway stations. The sparrows lived in large colonies and survived on food grains and tiny worms, and had a close relation with human beings. Now it's hard to believe that this tiny, humble sparrow is in danger of disappearing completely/entirely. What is causing distress to the humble sparrow? Experts note that the changing human landscape is the main culprit. Modification in house designs in both rural and urban areas, rise of skyscrapers, mobile towers and increased pollution have made it difficult for sparrows to survive.

Task 25

- Delete redundant portions and make these sentences as brief as possible. An example has been done for you.
- The government says that petroleum prices cannot be reduced because the prices are high in the global market.
- The player was thinking of deciding on his retirement.
- We will meet tomorrow at 11 am in the Conference room for just 10 minutes.
- The project leader shall ensure dedication from all the team members and timely completion of the project.

Task 26

Identify the topic sentence in the following paragraphs.

An enormous amount of research on how people respond to extreme events has been done by an American university. After studying scores of disasters such as floods, earthquakes and tornadoes over several decades, one of the most notable findings has been that people rarely lose control. During earthquakes, when the ground shakes, dwellings crumble, fires rage, and people are crushed, they do not run screaming through the streets in a wild attempt to escape the horror, even though they undoubtedly feel horrified. Earthquakes and tornadoes wreak havoc on entire communities. Yet people do not usually turn against their neighbors or suddenly forget personal ties and moral commitments. Instead the more consistently observed pattern is that people bind together in the aftermath of disasters – working together to restore their physical environment and their culture to their former shape.

An extremely significant factor in climate change awareness is social justice. It has been observed that those who are the most vulnerable to climate changes, those who are already suffering from the impacts of climate change, are the people and communities who contributed least to the problem. When governments and policy makers consider global reductions in emissions it is essential for them to ask exactly which countries are being asked to reduce emissions and by how much. They must be fair and bring in policies that require those countries with excessive emissions to reduce them significantly, but allow countries with very low emissions to increase them, up to the point where all countries have the same per capita emissions.

Task 27

Edit the following paragraph to achieve better cohesion and coherence.

Railways, in collaboration with Doodle, has set up free wifi at railway stations. You can connect to RailFi by following some simple steps. When you reach a railway station, make sure your phone or computer's wifi is on. Scan for available networks. You must be able to see 'RailFi'. Connect to it. Activation portal opens in your default browser and asks for your mobile number. Enter it and request for 'OTP' (One Time Password). Enter the OTP you have received. You will get a message that you are successfully connected.

Task 28

Here is a sequence of events leading up to India becoming a Republic. Write a narrative paragraph based on these points. Remember to use suitable sequencing words.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well.)

Initially, when India became independent on 15 August 1947, it did not have a constitution of its own. Hence, on 28 August 1947, a drafting committee was appointed to draft a permanent constitution for the country with Dr B R Ambedkar as the head. Subsequently, on 4 November 1947, the drafting committee submitted its report. On 24 January 1950, following discussions and revisions, the report was signed by the Constituent Assembly. Two days later, the constitution came into effect. India is now a truly sovereign country with a constitution of its own.

Task 29

Historical records show that the Titanic had the best wireless signalling system of the times. However, when the disaster struck, help could not reach the Titanic on time. Use these notes to write a paragraph on why the radio signalling system might have failed.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well.)

The Titanic had the most powerful radio signalling system designed by the inventor of the radio, Marconi, and managed by The Wireless and Telegraph Company owned by him. All messages were sent wirelessly via Morse Code and could be accessed by anybody on that particular frequency. However, one reason why it failed was that the operators on the Titanic were busy handling the communication of high-profile

passengers on board and hence, did not receive the warnings about the icebergs. Another reason was that many ships received the distress call from the Titanic, but the messages were transmitted and re-transmitted, leading to confusion.



YOUR PATH TO SUCCESS

UNIT- II

ANCIENT ARCHITECTURE IN INDIA

Explanation:

One of the most enduring achievements of Indian civilization is undoubtedly its architecture. **The Mauryan architecture:** The Mauryan architecture was influenced by the Persian and the Greek architecture. The Stupas of Sanchi and Sarnath are symbols of achievement of Mauryan architecture. The Sanchi Stupa depicted the Jataka stories. The beautiful sculptures were skillfully and aesthetically sculpted by the artisans. The lion capital of the Sarnath pillar is accepted as the emblem of the Indian Republic.

Asoka's reign (268-232 BC): It showed significant advancement in the field of architecture. Many monolithic stone pillars were erected on which teachings of 'Dhamma' were inscribed. The pillars are unique and remarkable for its animal figures. Gandhara art was developed during this period which was a blend of Greek and Indian art. Mathura school and Amaravathi School were famous for its indigenous art and architecture. Under the influence of Kushana's a large number of life like statues of Buddha and Bodhisattvas were built similar to that of Greek Gods.

The Satavahanas: The Satavahanas of the Andhra region developed Amaravati School. A great Stupa was built at Amaravati whose walls were adorned with bas-relief, carved medallion and decorative panels Nagarjuna konda is another example for Buddhist architecture.

Cave Architecture (2 BC- 10 AD):

Famous among the thousand caves that have been excavated were the Ajanta and Ellora caves of Maharashtra and the Udayagiri caves of Odisha. These caves have Buddhist Mandapas and pillared temples of Hindu Gods.

Rock-Cut Temples:

The earliest rock-cut temples were built in western Deccan which was hewn out of huge rocks. The Kailash temple at Ellora built by the Rashtrakutas, the Ratha temples of Mahabalipuram built by the Pallavas and the Karle caves are the examples of Rock-cut temples. The stability and permanence of rocks was the reason behind the artisans choosing to build temples.

Free-standing Temples:

In southern India the Pallavas, Cholas, Pandians, Hoysalas and the rulers of Vijayanagara kingdom were great builders of temples. Chola's developed a typical style of temple architecture of South India called the Dravida style, with Vimana or

Shikara, High walls and the gateway topped by a Gopura. In northern and Eastern India magnificent temples were constructed as well, which is referred to as Nagara style. Free standing Hindu temples marked the beginning of the Gupta period. The temples at Deogarh and at Bhitargaon are the examples of Gupta period. The Sun temple in Konark, Odisha, Khajuraho in Madhya Pradesh, Mount Abu in Rajasthan, the Somnath in Gujarat, the Kashi Viswanath temple in Varanasi are some of the important temples which bear testimony to Indian Architecture.

Summary:

Indian architecture's important phase began with the Mauryan period. Megasthenes, the Greek ambassador of Seleucus Nicator who visited the Mauryan court, described Chandragupta Maurya's palace as an excellent architectural achievement. Significant advancements in the field of architecture were during Ashoka's reign (c.268- 232 BC). Mauryan art and architecture imbibed the influence of the Persians and the Greeks. During Ashoka's reign, many monolithic stone pillars were erected, on which teachings of 'Dhamma' were inscribed. The lion capital of the Sarnath Pillar has been accepted as the emblem of the Indian Republic. Each pillar weighs about 50 tonnes and is about 50 feet high. The stupas of Sanchi and Sarnath are symbols of the achievement of Mauryan architecture. The gateway of Sanchi Stupa with the beautiful sculptures depicting scenes from the Jataka stories. Jataka stories bear testimony to the skill and aesthetic sense of the artisans. The blending of Greek and Indian art subsequently led to the development of Gandhara art. A large number of statues of the Buddha were built by the artisans of Mathura and Amaravati schools, especially after the first century AD, under the influence of the Kushanas. Rich ornaments costumes and drapery were used to impart physical beauty. The sculptures were in stone, terracotta, cement-like material and clay. Mathura school were made of spotted red stone, had a distinct spiritual look about them and here along with the Buddha we also find sculptures of Jaina deities. The Amaravati School developed under the patronage of the Satavahanas of the Andhra region. A great stupa was built at Amaravati in the Lower Godavari region. Nagarjunakonda is another place that is famous for its Buddhist architecture. The Gupta period marks the beginning of the construction of free-standing Hindu temples. The Ajanta and Ellora Caves of Maharashtra and the Udayagiri Caves of Odisha hold Buddhist viharas, chaityas as well as mandapas and pillared-temples of Hindu gods and goddesses. Temples hewn out of huge rocks are rock-cut temples; they were built in the western Deccan in the early years of the Christian era. The chaitya at the Karle Caves, the Kailash temple at Ellora built by the Rashtrakutas and the ratha temples of Mahabalipuram built by the Pallavas are examples of rock-cut temples. The Pallavas built temples like Kailasanathar temple and the Vaikunta Perumal temples at Kanchipuram. The Cholas built many temples like Brihadeshwara temple at Tanjavur. The Cholas developed a typical style of temple

architecture of South India called the Dravida style, complete with vimana or shikhara, high walls and the gateway topped by a gopuram. Odisha has some of the most beautiful temples such as the Lingaraja Temple built by Somavamsi kings, with addition by the Ganga rulers, the Mukteshvara Temple in Bhubaneswar and the Jagannath Temple in Puri. The Sun Temple in Konark was built in the thirteenth century by the Eastern Ganga ruler Narasimhadev I. The temple is dedicated to Surya (the Sun God) and has been designed as a twelve-wheeled chariot. Mount Abu in Rajasthan is known for the Dilwara temples dedicated to Jain tirthankaras. These were built in pure white marble and adorned with exquisite sculptures.

Question and Answers:

1: 'The lion capital of the Sarnath Pillar' – what does 'capital' mean here?

A: 'Capital' here means the decorated top part of a pillar. 'Capital' in other contexts means

- a) the administrative centre (a city) of a state/country etc.
- b) investment to start some business,
- c) important, main.....

2: What is a 'stupa'?

A: A stupa is a dome like structure. Stupas picture scenes from Jataka tales.

3: What is a Jataka story?

A: A Jataka story is a folk tale about the previous births of Gautama Buddha.

4: How did the Gandhara style emerge?

A: Gandhara style emerged from the blending of Greek and Indian art forms.

5: What are the characteristics of the Gandhara style?

A: Gandhara style life-like statues of the Buddha and Bodhisattvas looked like Greek gods. They used ornaments, costumes and drapery to make them look beautiful. They used stones terracotta, cement like material to make statues.

6: Name two other indigenous styles of architecture?

A: Mathura school and Amaravathi School are two native styles of architecture.

7: Name some places known for their cave architecture?

A: Ajanta, Ellora, and Udaygiri are some places famous for cave architecture.

8: What are rock-cut temples? Name some famous rock-cut temples.

A: Temples cut from huge rocks are called rock-cut temples. The Kailash temple at Ellora and the Rath temple of Mahabalipuram are some examples of well known rock-cut temples.

9: Name some of the major dynasty of South India.

A: The Pallavas, Cholas, Pandyan, Hoysalas and Vijayanagar kings are some dynasties of South India.

10: What are the differences between the Dravida style and Nagara style?

A: Dravida style mainly consists of 'Vimana' or 'Shikhara', high walls and the gate way topped by a 'gopuram'. Nagara styles, on the other hand, have the 'Shikhara' in the form of a spiral roof, the 'garbagriha' (sanctum) and the 'mandapa' (pillared-hall).

Answer Key

UNIT 2 ANCIENT ARCHITECTURE IN INDIA

Post-reading

Choose the correct answer.

III b. II c. both I and II d. I e. IV

Complete the table by mentioning the architectural contributions of the various dynasties. Two have been done for you.

Dynasties	Architectural contributions
Satavahanas	A great stupa at Amaravati in the Lower Godavari region
Guptas	Free-standing Hindu temples at Deogarh (Jhansi district) and Bhitargaon (Kanpur district)
Rashtrakutas	The Kailash temple at Ellora
Pallavas	The ratha temples of Mahabalipuram
Cholas	The Brihadeshwara temple at Thanjavur; developed a Dravidian style
Eastern Ganga	The Sun Temple in Konark
Chandelas	The temple complex at Khajuraho in the Bundelkhand region of Madhya Pradesh
Solankis	The Dilwara temples dedicated to Jain tirthankaras

Using your own knowledge of Indian history, discuss why temples were the most important architectural achievements of various dynasties that ruled India.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well.)

Temples were the most significant architectural achievements of rulers in different parts of ancient India. The possible reasons for this are many. Religion and religious rituals were a very important part of people's lives. Every occasion had a religious ritual attached to it that probably necessitated a visit to a temple. However, it was not just the commoners who offered prayers in temples for social occasions. The kings who built the temples themselves offered prayers before and after wars. It was an age of expansion of empires and wars were frequent. Therefore, temples were a necessity for rulers who sought divine blessings before a war. Temples were also centres of learning and cultural activities such as the practice of art, dance and music. Indian classical dance forms such as Bharatnatyam and Odissi have originated from temple dances. Lastly, temples functioned as royal treasuries in times of crises. Rulers, under threat are known to have hidden parts of their wealth in temples in the belief that attackers would not desecrate and plunder holy places.

Task 1

Fill in the blanks with the suitable synonyms from the second column in the table above.

near b. strong c. careful d. secretive e. tight

Task 2

Identify the synonyms of the words in bold.

1. b 2. a

none of the options is an exact synonym; 'agreed' is the closest option

a 5. d

Task 3

Fill in the blanks with antonyms of words in brackets.

1. natural 2. identical 3. reject 4. definite 5. connect

Task 4

Fill the blanks with the correct pronouns.

1. his or her 2. their 3. they 4. his 5. he

Task 5

Spot and correct the errors in these sentences.

- The movie was a good watch, though at times the scenes were a bit dragging.
- Coal is so cheap that trying to generate electricity without it would be economic suicide, especially for developing countries.
- A dragonfly keeps itself airborne by creating whirlwinds and vortices in the air.

Answer these questions.

The tenses of the verbs were incorrect in each instance.

I corrected them by noting whether the subjects of the sentences were in singular or plural. The tenses of the verbs had to be changed accordingly.

Task 6

Correct the errors related to subject–verb agreement in these sentences.

- Emergencies are by their nature unexpected events and require a prompt and proper response. If you follow the advice and guidance given in this book you will undoubtedly be able to give early and effective help when needed.
- Lungs do not have any muscles, so they cannot move air on their own. Instead, muscles in the chest make the lungs expand, or blow up like a balloon as air is sucked in.
- Certain days of the week and selected times of a day are better than others for holding meetings.
- People have been on the move since before historical records began, whether fleeing from their enemies or looking for new land to settle in. In fact, there are numerous historical pieces of evidence that show this.
- That bouquet of roses was probably the most meaningful gift that Della received on such an important day in her life. It was her birthday and she knew very well that Jim would not be able to buy an expensive gift.

Task 7

Correct the errors in these sentences.

- Neither the project manager nor his assistant is attending the meeting.
- Logistics is not my area of expertise.
- These pliers are not strong enough for the job.
- Our team is going to work overtime to meet the deadline.
- The committee has decided to pass the budget proposal in this session.
- They do not know the reason for the postponement of the event.
- Printers and scanners need regular maintenance for trouble-free service.
- The Seven Habits of Highly Effective People has been written by Stephen

- Covey.
- Each of the employees has been rewarded for contributing to the growth of the business.
- The Conjuring 2 was one of the scariest films to be released this year.

Task 8

Read the following title and subtitle of a passage and predict the content.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well.)

The title indicates that the passage will be an academic report or a research paper on the subject of social media addiction, with reference to Facebook.

Task 9

Read this passage and attempt the questions that follow.

Choose the best alternative/s.

1. b
2. c
3. b

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well.)

Apart from Twitter, Buck could have also used Facebook or WhatsApp to spread the message about his arrest. Social media is much more dynamic than traditional media and gets word across multiple platforms very fast. Social media is also a largely democratic space where posts are not censored by regulatory bodies, or do not have vested interests. Traditional media, on the other hand, has to be much more cautious with the content that it publishes or broadcasts and often has to be careful as to not hurt popular sentiments. On the flip side, traditional media is much more accountable than social media where people can post pretty much anything without proper verification of information.

Task 10

Circle the facts and underline the opinions in the following extract.

We live in an age where we cannot simply wish away the presence of social media. We are surrounded by these media-sites all the time. In the beginning, it all sounded very exciting, until a large number of people got hooked on and things started getting out of hand. (Opinion) For instance, in a recent study sponsored by a major media house, it was found that 13-year-olds check their social media feeds about 100 times a day, around 90 per cent of teens have used social media and 75 per cent of them have profiles on social networking sites. More than 50 per cent of them reported experiencing anxiety while using social media. (Fact)

Task 11

Tick the points that you would include in the letter.

a, c, e, f, h, i, j

Task 12

Here is a letter based on the situation in Task 11. Read the letter carefully, identify and label its parts. Choose from the options in the box.

sender's address

b. date c. receiver's address d. opening salutation e. subject line f. signing off

Answer these questions.

Yes, the subject line clearly and concisely specifies the applicant's purpose in writing the letter.

The receiver can contact the sender at the address that the letter has mentioned in the letter.

Task 13

Write letters of enquiry for these situations

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well.)

1.

Satish Gupta M 161/11
Sharda Nagar Hyderabad – 500049
1 September 2016

Mr S Z H Iyengar Branch Manager
The Bharat Insurance Company Shyam Nagar
Hyderabad – 50004

Dear Sir,

Sub: Request for brochure with details of insurance policies

I am a 31-year-old businessman. I wish to take an insurance policy in order to avail tax benefits. I would like to know about the insurance policies that your company

provides. My yearly turnover is Rs. 1,50,00,000. Could you please send me a brochure with the details of the various schemes available?

Regards,

Yours faithfully
Satish Gupta

2.

Sheena Mehta J 19/B
Badshah Nagar Lucknow –226044

20 March 2016

Mr Y S Zutshi
M/S Good Books Enterprises

Indira Nagar Lucknow–226049

Dear Sir,

Sub: Enquiry for the availability of books

I am a student of Class X in Good Shepherd Academy, Lucknow. I want to purchase the complete set of books for Class X prescribed by my school. I have attached a copy of the list of prescribed books with this letter.

Could you please check and let me know, as soon as possible, if the books are available with you? The new session at my school begins from 6 April 2016.

Please also let me know the mode of payment that would be the most convenient for you.

Yours faithfully

Ravi Chaturvedi

3.

Ravi Chaturvedi N1/6
Anand Vihar
New Delhi – 11009

21 July 2016

Dr Samapti Sehgal
Chairperson
Airports Authority of India Vasant Kunj
New Delhi – 110037
Dear Ma'am,

Sub: Permission for a field visit to the aircraft maintenance facility at an airport
I am a student of Aeronautical Engineering studying at IIT, Delhi. I am in my second year and as a part of the requirement of the courses that we have in this semester, it is mandatory for us to visit the aircraft maintenance facility at an airport.
We are a batch of 60 students. Kindly grant us the permission to visit the aircraft maintenance facility at any airport in or around Delhi.

Regards,

Yours faithfully

Ravi Chaturvedi

Task 14

Gautam had seen the following advertisement at his workplace regarding a new sporting facility for the employees. Underline the important points in the advertisement.

Having corporate connections with more than 40 business houses, Wizsports is proud to offer the employees of D & B Innovations the following facilities in the sports centre:

- A fully equipped gym with qualified instructors
- A hygienic swimming pool for both the beginners and the trained
- Full-sized tennis and shuttle courts
- An indoor basketball court
- A restaurant offering diet-friendly cuisine from our experienced chefs

So, wear your sporting shoes and come down to the sports centre. As an employee of D & B Innovations, you will be eligible for a 10% discount on the annual membership fee. Get in touch with Mr Aarav Gupta, our customer service representative, on 9440088665.

Gautam visited the sports centre and took up a membership. After a couple of weeks, he realised that he was not satisfied with the facilities and the quality of service. Here is the letter of complaint that he wrote to the management on this matter. Read the letter and discuss the following questions with your friends.

This is a formal letter. It is written in a precise and concise manner. The salutation, subject and closing is that of a formal letter. The letter carries a subject line which sums up its purpose. It carries a suitably-worded opening sentence and avoids the use of contracted forms.

The first paragraph is a general statement regarding the poor quality of services provided at Wizsports centre.

The second paragraph carries the specific details of the problems and the third paragraph carries further details.

The last paragraph, which is a request for action, is a significant part of a complaint letter. This is imperative in a letter of complaint and should always be included. The tone of the letter is firm yet polite.

Task 15

Danish had purchased some sports equipment for his college from Bharath Sports Pvt. Ltd., Patna. However, he faced some problems with the delivery. These are the notes he made regarding this. Using the notes and the format of the complaint letter given in Task 13, write a letter of complaint.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well.)

Danish Ashraf
17/B, Baruna Patna 803201
Bihar
16 May 2016
Shyam Ojha
Managing Director
Bharat Sports Pvt Ltd
Begumpur, Patna
800009 Bihar

Dear Sir,

Sub: Complaint regarding the delivery of sports equipment.

This letter is to inform you about the improper delivery of sports equipment from Bharat Sports Pvt. Ltd., Patna.

On 20 April 2016, I had placed an order for 15 badminton racquets, 20 cricket kits and 50 roller skates. However, only 10 shuttle racquets, 25 cricket kits and 100 roller skates were delivered. Moreover, the company had promised the delivery on 30 April, but delivered the items on 15 May, a date much later than the promised date. The promised discount of 10 percent was also not provided. Further, the packaging was open and some of the cricket kits had been tampered with.

I request you to kindly look into the matter and resolve these issues as soon as possible. I look forward to hearing from you on this.

Yours sincerely,

Danish Ashraf

Task 16

Write letters of complaint on these situations for further practice.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well.)

Sara Ahmed 165/4
Rana Pratap Marg Lucknow – 226001
Uttar Pradesh

4 February 2016

Sushil Arora
Circulation Manager Sports Outlook Hazratganj
Lucknow – 226001
Uttar Pradesh

Dear Sir,

Sub: Complaint regarding non-delivery of magazine

This letter is to inform you about the non-delivery of the magazine issues of Sports Outlook.

A month back, I had subscribed to the fortnightly magazine Sports Outlook and sent a demand draft of Rs.2000 towards an annual subscription. However, I have not received even a single issue of the magazine as yet.

I request you to kindly look into the matter and resolve the issue as soon as possible. I look forward to hearing from you on this.

Yours sincerely,

Sara Ahmed

Task 17

Write letters of requisition based on the following situations.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well.)

Rupal Kohli
Sunrise Apartments 156, Gandhi Road
Bhubaneswar – 536142 Odisha

12 August 2016

The Dean of Academics
Lalit Professional University
Bhubaneswar – 536003
Odisha

Dear Sir,

Sub: Request for permission to use the Computer Lab after hours

I am an MCA student of first year at Lalit Professional University. I am currently working on my end-of-term project for which I require the use of the university computer lab from 22–30 August, between 7 and 9 PM.

I was unwell and hospitalised last month due to which I have not been able to complete the project on time. I have received an extension from Professor S Gupta. Could I request you to grant me permission to use the lab after hours, on the above mentioned dates? This will enable me to meet my new project submission deadline.

I look forward to receiving permission from you and thank you in anticipation.

Regards,

Yours faithfully,

Rupal Kohli



your roots to success

Task 18

Based on the models discussed in this unit, create a résumé and cover letter for this job advertisement.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well.)

COVER LETTER

Hari Roy
17/8, Arya Nagar Lucknow – 226005
Uttar Pradesh
23 July 2016

The Manager
Human Resources Department
Softech

Dear Sir/Ma'am,

Sub: Applying for the post of Software Engineer with reference to the advertisement in Hindustan News, dated 20 July 2016.

This is in response to the advertisement for the post of Software Engineer. After carefully reviewing the requirements of the job, I feel that I am suitable for this job. I hold a B.Tech degree in Computer Science from IIT Kanpur and have an experience of 2 years with a reputed IT organisation. I have worked on several projects including coding, testing, reviewing, planning and design. I have experience in application development and product engineering services.

I feel that I can make a difference as I can add professionalism and accuracy to the current team. With extensive experience of working on Java, Oracle, Sybase, C++, Linux and Unix, I feel I can handle varied projects. Besides, I can multi-task and complete projects on time with minimal supervision.

If you find my profile suitable, I would be interested in taking this opportunity to meet you to learn more about your company, the requirements of the position and whether my qualifications would be suitable for your purpose.

I am grateful to you for your time and consideration. I look forward to hearing from you soon.

Yours faithfully,
Hari Roy
Enclosure: Résumé

Hari Roy
17/8 Arya Nagar, Lucknow
hari.roy@gmail.com

Academic qualifications:				
Degree/certificate	Institute	Board/University	Year	Percentage/GP A
B Tech (Computer Science)	Indian Institute of Technology, Kanpur	--	2013	78%
12th Std	St Sebastian School, Lucknow	ICSE	2009	95.6%
10th Std	St Sebastian School, Lucknow	ICSE	2007	92%

Training/projects undertaken:		
Name of the institute/organisation	Project details	Duration
Tata Consultancy Services	Database Management System The project involved coding, testing, reviewing, planning and design. I also helped in application development and product engineering services.	June 2012–November 2014

Computer proficiency:

Java, Oracle, Sybase, C++, Linux and Unix

Achievements:

Meritorious position in the Computer Olympiad in Class 12 Participated in and organised inter-collegiate debates

Personal details:

Date of birth: 27 January 1992

Gender: Male

Languages known: English, Hindi, Bengali

Complete the table by mentioning the architectural contributions of the various dynasties. Two have been done for you.

Dynasties	Architectural contributions
Satavahanas	A great stupa at Amaravati in the Lower Godavari region
Guptas	Free-standing Hindu temples at Deogarh (Jhansi district) and Bhitargaon (Kanpur district)
Rashtrakutas	The Kailash temple at Ellora
Pallavas	The ratha temples of Mahabalipuram
Cholas	The Brihadeshwara temple at Thanjavur; developed a Dravidian style
Eastern Ganga	The Sun Temple in Konark
Chandelas	The temple complex at Khajuraho in the Bundelkhand region of Madhya Pradesh
Solankis	The Dilwara temples dedicated to Jain tirthankaras

NIRCM

YOUR DREAMS TO SUCCESS

UNIT- III

BLUE JEANS

Explanation:

Introduction: The name comes from serge de Nimes, a city in Southern France. Originally it was made from wool and cotton. Only later it was made solely from cotton. Levi Strauss, an enterprising immigrant recognized a need for strong work pants for the mining worker of California. He first designed and marketed 'Levis' in 1850. A tailor named Jacob Davis invented riveted pants to hold the mining tools. Subsequently Davis granted Strauss to use his rivet idea which was patented in 1873.

Raw Materials: True blue jeans are made of 100 percent cotton; the most common dye used being synthetic indigo. Other features include the zipper, the buttons, the rivets and the label.

Manufacturing Denim Cloth: This is done in three stages

- **Preparing the cotton yarn:** The ginned cotton (picked from fields and processed) is inspected before carding. In this process the cotton is put through machines that contain brushes (cards) with bent wire teeth. These cards clean, disentangle, straighten and gather the cotton fibres, which are now called slivers. Other machines join, pull and twist these slivers which make the threads stronger. Next they are put on spinning machines for further twisting and stretching the fibres to form yarn.
- **Dyeing the yarn:** Denim is usually dyed with chemically synthesized indigo before weaving. Ball warps (large balls of yarn) are dipped in the indigo mixture several times and is then slashed (starched). This makes the threads stronger and stiffer. Now the yarn threads are ready to be woven.
- **Weaving the yarn:** The yarn is woven on large mechanical looms. The blue dyed (long and vertical) threads are combined with white (short and horizontal) threads. In this weaving the blue colour dominates. At this point the denim is ready for finishing. The cloth is brushed to remove lint and pre-shrunk after three washings.

Making blue jeans: The patterns from the design are cut with high-speed cutting machines from the denim. The denim is ready to be sewn at this point. It is done in assembly-line fashion with human operated sewing machines. Different workers are assigned specific functions from attaching the pockets, securing the belt loop, stitching the buttons and zipper to hemming. Finally the maker's label is sewn.

Pre-washing & Stone-washing: Some jeans are pre-washed and some are stone-

washed to change the appearance or texture of the finished jeans. Pre-washing involves washing the jeans in industrial detergent to soften the denim. Stone-washing involves washing the jeans but pumice is added to the load resulting in a faded appearance. Small stones produce an even abrasion, while large stones produce a more uneven appearance. Blue jeans are inspected after the completion for correction. They are sent back for re-sewing. There it is re-inspected and passed.

Summary:

'Blue jeans' as we see them have a long and strange history. Denim cloth has an unusual history. The name comes from Serge de Nimes, a city in southern France. Denim cloth is originally made from wool. But by 1700's, it was made from wool and cotton.

Blue jeans, in the form that we know them today, did not come about until the middle of the nineteenth century. Levis Strauss, an enterprising immigrant who happened to have a few bolts of blue denim cloth on hand, recognized a need for strong work pants in the mining communities of California. He first designed and marketed 'Levis' in 1850.

Jeans underwent many changes both in use and forms in the long history. First, the strong fabric was used as sail for boats. Noticing the rugged quality, miners started using the cloth for their pants. The stitching patterns, rivets, buttons, zippers, etc. altered as time passed and now jeans assumed a form that is the symbol of fashion. The raw material cotton passes through various stages before it takes the form of jeans. The stages are:

- Preparing the cotton yarn.
- Dyeing the yarn.
- Weaving the yarn.
- Designing patterns.
- Cutting the cloth.
- Stitching and checking quality.

Each stage involves tools, skills, strategies, and plans. True blue jeans are made out of 100% cotton, including the threads used for stitching them. The most common dye used is synthetic indigo. Finally the ready-to-wear blue jeans greet prospective buyers at retail outlets.

Question and Answers:

1: What were the steps denim went through before being used as pants?

A: Denim was first used only to make sails. Later it was used to make pants for miners. Finally it is now used to make blue jeans.

2: List out the evolution of blue jeans discussed in paragraphs 2 and 3.

A: Levi Strauss first used blue denim to stitch pants for miners. That was in 1850. Later, rivets were added to jeans by a tailor, Jacob Devis. Later zipper joined jeans in the place of buttons. Rivets changed their place on the jeans.

3: What are the steps in manufacturing the Denim fabric?

A: Manufacturing denim cloth involves three stages. In the first stage, ginned cotton is made into cotton yarn. Secondly, the yarn is dyed in synthetic indigo several times. Finally, the yarn is woven into denim fabric.

4: What is carding?

A: Carding is a process. Cotton is put through machines that have brushes with bent wire teeth. These brushes clean, disentangle, straighten and gather together the cotton fibers. The brushes are called cards. Hence the process is called as carding. Carded fibers are called slivers.

5: Denim is dyed (before being woven/After being woven).

A: Before being woven.

6: How is denim dyed?

A: Cotton yarn is made into large balls. They are called ball warps. They are dipped in indigo mixture several times.

7: What is slashing? Why is it done?

A: Dyed yarn is coated with one of the many kinds of starchy substances. This process is called slashing. Slashing makes the threads stronger and stiffer.

8: The yarn is woven on (mechanized looms/ hand looms)?

A: Mechanized looms.

9: What is sanforising? Why is it done?

A: Woven denim cloth is preshrunk (washed to allow contracting). This process of shrinking before stitching is called sanforising. Sanforising ensures that stitched jeans don't shrink beyond tolerable levels.

10: How is sewing done?

A: First, desired design is selected. Patterns from the design are cut from heavy paper. Pieces of denim are cut with high speed cutting machines. Then, the pieces are stitched in an assembly line fashion. After that, buttons, rivets and zippers are fixed.

11: What is the difference between prewashing and stone washing?

A: Prewashing involves washing in industrial detergents for a short time. This is to soften the denim. But stone washing involves adding pumice (a kind of stone) to the load. This is done to give the faded shade to the jeans.

Answer key

UNIT 3 BLUE JEANS

Post-reading

Choose the correct answer.

ii b. iv c. ii d. iii

Here are the different stages in manufacturing jeans. Arrange them in the right sequence.

c, e, j, h, g, i, b, d, a, f

Task 1

Here is a list of words starting with the prefix 'bio-', which means 'life'. Find out what these words mean. Use these words in sentences of your own.

- biochemistry – a branch of science that studies the chemistry of living things
- biography – the life story of a person written by someone else
- biodegradable – being able to decay naturally without causing harm to the environment
- biotechnology – using biological processes and organisms for industrial, medicinal and other such purposes
- biohazardous – a biological agent such as a pathogen or a chemical that may harm human beings, animals and the environment
- bioinformatics – the science of collecting and processing complex biological data such as human genetic codes using computer technology

Task 2

Here is a list of words ending with the suffix '-phobia'. Find out what these words mean. Use these words in sentences of your own.

- hydrophobia – fear of water
- claustrophobia – fear of closed spaces
- agoraphobia – fear of going outside and staying in public spaces
- xenophobia – fear of foreigners and their culture
- photophobia – fear of light
- acrophobia – fear of heights

Task 3

Complete these sentences choosing from the list of words and phrases above.

- Copernicus proposed that it was the earth that went around the sun and not vice versa as the people had thought so far.
- In a quid pro quo arrangement, in exchange for a donation, the politician may support a law that favours the gun manufacturing company.
- The President has accused the national media of pursuing a vendetta against him.
- The restaurant has a lavish buffet with authentic Indian dishes. If you do not like it, you can go for an equally exciting a la carte menu of exquisite continental dishes.
- The teacher made an inappropriate racial remark in the class. The students walked out en masse in protest. Later the teacher apologised.
- The fast food giant committed a serious faux pas when it refused to serve food to a man clad in shirt and lungi.
- We all use emojis efficiently on mobile phones, but do you know how to get them on computers?
- The actor is known for his impromptu lines in between the rehearsed dialogues and his fans love him.
- We bought a marble replica of Taj Mahal as a souvenir during our trip to Agra.
- Many people died in the tsunami on the shores of the Indian Ocean in 2004.

Task 4

Rewrite these sentences placing the modifiers in the right place.

- The student's new books were bought online.
- I slowly ate the lunch that the office boy had bought.
- The student's torn book was lying on the desk.
- Simran just wanted to say 'hi' to the actor.
- He tried to make nearly all of his teachers happy.
- The children went to a museum yesterday.

Task 5

Explain the differences in meaning among sentences within each set.

- I always focus on dedication to work. – qualifies 'what I do'
- I focus always on dedication to work. – qualifies 'what I focus on'
- I focus on dedication to work always. – qualifies 'dedication to work'
- Fortunately, Dev has worked on similar projects in the past. – qualifies the entire sentence
- Dev has fortunately worked on similar projects in the past. – qualifies 'worked'
- Dev has worked on similar projects fortunately in the past. – qualifies 'in the

- past'
- Only John can write a novel like this. – qualifies 'John'
 - John can only write a novel like this. – qualifies 'write'
 - John can write only a novel like this. – qualifies 'a novel like this'

Task 6

Identify whether the underlined verbs are in the present, the past or the future.

1. Present 2. Past 3. Future 4. Past 5. Present

Task 7

Identify the tense forms of the underlined verbs in these sentences.

1. Present perfect 2. Present perfect continuous 3. Present continuous
4. Present perfect 5. Simple present

Task 8

Fill in the blanks using the correct present tense form of the verbs given in brackets.

1. drives 2. have read 3. are attending 4. has been studying 5. has submitted

Task 9

Identify the tense of the underlined verbs.

1. Simple Past 2. Past Perfect 3. Past Perfect 4. Past Continuous 5. Past Perfect Continuous

Task 10

Fill in the blanks using verbs in the correct tense.

1. bought 2. learnt/learned/will learn/will be learning 3. lived
4. had started 5. had been taking

Task 11

Identify the tense of the underlined verbs in these sentences.

1. Simple Future 2. Future Perfect 3. Future Continuous
4. Future Continuous 5. Future Perfect Continuous

Task 12

Fill in the blanks in these sentences using the given verbs in the correct tense.

will get

will be writing

will have been studying

will give

will have finished

Task 13

Identify the errors in tenses in these sentences and correct them.

Last year, the football team had performed very poorly.

It appears that he is not satisfied with my response.

Time and tide wait for no man.

They were looking for a new direction when the merger of the companies took place. /

They are looking for a new direction when the merger of the companies takes place.

The university declared the result by the time the students completed their internship.

By this time next year, you will be completing your graduation.

He regretted his decision for the last two years.

The technician was testing the gadget when there was a short circuit.

Every Christmas Ryan goes home and spends time with his family.

The diagram below depicts what happens/happened when the profit margins drop drastically within a year.

Task 14

Skim the following prospectus of a B-school quickly and answer the questions that follow.

Both (Teaching section does not use pronoun 'you' to refer to students directly)

a. Yes b. Yes c. Yes

Industry visits and tie-ups with top companies

Yes

True

False

Yes

Yes

No

True

Task 15

Now, scan the passage above carefully and find words that match these definitions.

a. plot b. pieces c. ordeal d. infer e. vivid
f. evolved g. strategy h. pugilist

Answer these questions.

Boxing and wrestling were popular in ancient India, though they were not general hobbies of respectable men but the preserve of professional pugilists, who performed for the amusement of the audience.

The bullfight was seen as an ordeal to test the manhood of young men, as girls who watched the performance would choose their husbands from amongst the successful competitors.

True

Polo, hockey, boxing, wrestling, archery and chess are some of the sports that have survived the test of time and are still enjoyed in India today.

Task 16

Define the following terms. You may refer to a dictionary for help.

Eco-friendly office – an office which has adopted eco-friendly practices such as solar energy, reduced paper usage, no plastic etc.

Disability friendly college – a college that has facilities such as ramps, lifts, special washroom facilities et cetera for people with disabilities to help them move around independently

Social media – an online platform where people share views, photographs and make friends and interact with them

SUV – a type of light motor vehicle similar to a car but built for a high performance in rugged terrains

Bar code – an electronic identification system – consisting of vertical bars of varying width, which can be scanned by a laser – for goods

Task 17

Describe any one of the following objects.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well)

5. Description of mobile phone

I have a Lenovo Vibe P1 mobile phone. The dimensions of this are 71.8 mm × 141 mm × 9.5 mm. It has a 16 GB RAM, a quad core processor, an LED touchscreen, 1280 × 720 resolution and HD recording. The primary camera is of 8 megapixels and the secondary camera is of 5 megapixels. It has Bluetooth support and can be connected to a Wi-Fi network.

There are many advantages of buying this device. This device has a huge battery of 5000 mAh which does not require frequent charging. The power saver button also helps when the battery is low; a charge of 15% provides a standby of around 7 hours. The device restricts data usage through background app management. The memory is extendable up to 120 GB. Besides, one gets 1.3 GB RAM at the first boot up. Also, lightweight back cover and a screen guard come free of cost with the device. This saves about Rs 500. The device also has gravitation, light and proximity sensors.

The disadvantages of this device are that it is a little heavy, has a non-removable battery, and does not have a Gorilla glass. It is also difficult to place a micro SIM card in it. Besides, the device has an average-quality camera, a single speaker, and takes around three hours to get charged once it runs out of power. However, in this price range, this mobile phone is the best choice as there is no need to carry power banks in order to keep the phone charged and valuable data can be saved through various advanced features.

Task 18

Read the description of the structure seen in the image. Mark which of the aspects is described in each line.

This is the Lingaraja Temple of Bhubaneswar. It is made of sandstone (the material). The tallest spire is in the shape of an elongated dome (shape and features). The structure next to this dome is pyramid shaped and has horizontal layers of sandstone (shape and features). Sturdy pillars support the triangular, temple-like roof of this structure (shape and features). The outer walls of these structures are covered in sculptures of animals and humans (details of the outer walls).

Task 19

In pairs, think of other details that you can add to the description by just looking at the image from the previous task.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well)

This architectural structure is horizontally-long with multiple adjoining towers. There are two towers in the front and two turrets adjacent to the gate. The front part of the building has bastions at the top. It also comprises four dome-shaped structures. The building has a big courtyard as well.

Task 20

Look at the image carefully. Describe this structure in about five lines.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well)

This is the Jama Masjid of Delhi. It is made of red sandstone and white marble. There are two tall minarets on either side of the main building. In the centre is the arched gateway. There is an open courtyard in front of the gateway. The main dome of the mosque is partially visible behind the arch of the gateway. On either side of the large central dome, two smaller domes are seen.

Task 21

Choose one of the following and write a descriptive paragraph in about 250-300 words.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well)

5. The place I want to visit at least once in my lifetime.

I want to visit Iceland at least once in my lifetime. Iceland is a small island country in the Atlantic ocean. Though it is midway between Europe and North America, it is politically a part of Europe. In fact, it is Europe's second largest island, after Great Britain. My interest in Iceland lies in its volcanoes. The country has several active volcanoes. In fact, it was created as a result of volcanic activity. As a result, Iceland has many geysers. The interior of the Icelandic island consists of cold deserts. They are uninhabitable highlands that are a combination of sand, mountains and lava.

To me, the other attraction in Iceland is the Northern Lights. Of course, this is visible from many arctic countries such as Norway, Sweden and Finland. But in my opinion,

it adds to the tourism value of Iceland. In winters when it is very dark, the sky is lit up by these multicoloured dancing lights that are a spectacle to behold.

With a host of natural wonders like geysers, glaciers, basalt stacks and of course the northern lights, Iceland has seen a tourism boom in recent years. I want to visit this quaint country and experience a natural landscape that is unique to its geographical and geological location. The view that Iceland offers would not be available in any other part of the world.

Task 22

Choose any one of the following and write a description in about 300 words.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well)

3. The incident which made me change my views about a teacher.

People wear masks and very often we know the mask and not the real person behind it. However, once in a while an incident occurs that gives us a glimpse of the real person and it completely changes our views about him/her.

I had a similar experience with the Dean of Academics in my college. Dr B R Yadav was known to be a strict disciplinarian by everyone. He did not tolerate missed classes, rude behaviour or poor grades. Our professors took full advantage of his image and routinely packed us off to his office to explain ourselves when we missed our classes. That was the experience we dreaded most throughout the three years of college.

I saw him only once after I had left college. My suitcase had just been stolen in a long distance bus journey – a suitcase in which I was carrying all my educational certificates while going for a job interview. When I reached my destination, I braced myself for some harsh words and called Dr Yadav fully expecting a telling off for being careless. Instead, I found that he was the most considerate person I'd ever known. His kind words and offer of support to get a new copy of my certificates, made me see him as a person who was genuinely concerned for his students. Unfortunately, he had to wear a mask to run the college well and most students went through college without ever getting an opportunity of knowing the well-wisher behind the mask. A chance incident, unfortunate though it was, changed my views about Dr Yadav.

Task 23

Choose one of the following and write a paragraph in about 300 words.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well)

3. Components of a desktop computer

A desktop computer has many components. Some of them are essential, without which the computer cannot run. Some of them are optional – they are only needed if we want the computer to perform some extra functions. Let us begin with the essential parts of a computer.

A desktop computer has four essential parts – the Central Processing Unit or the CPU, the monitor, the keyboard and the mouse. The CPU is the brain of the computer. It is where the data is stored in hard drives. It is also where the processor which helps run the computer is located. The monitor is a display device. It converts inputs from the CPU into a visual form that we can see and understand. The keyboard is an input device. It helps us to type information. Using the keyboard we can give various commands to the computer and have it perform various operations. These may range from running a complex software to writing an essay. The mouse is a pointing device. We use it to click and select options displayed on the monitor.

The optional parts of a desktop computer are usually determined by users' choices and preferences. For example, if we want to listen to music on the computer we can add a set of speakers to it. If we wish to take VOIP calls, we might need a headset with a microphone. A UPS is recommended if one lives in a place that experiences frequent power cuts. In this way a desktop computer with four basic parts can be customised to do much more depending on the users' needs and choices.

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UNIT- IV

KING LEAR

Explanation:

The play opens with the Earl of Kent and Earl of Gloucester talking about King Lear's plans for 'the division of the kingdom'. Kent meets Gloucester's illegitimate son Edmund and learns he is a year younger than Edgar, Gloucester's 'son by order of law'. The King and all his court arrive and King Lear announces his plan to 'shake all cares and business from our state, / Conferring them on younger years' and calls on his three daughters to express their love for him before he rewards them with a share of his kingdom. His two older daughters, Goneril and Regan, offer poetic speeches but his youngest and favourite daughter Cordelia refuses, declaring 'I love your majesty / According to my bond, no more nor less'. Lear is angry and disowns Cordelia, giving her share of the kingdom to her sisters' husbands to divide between them. Kent, out of loyalty to both Lear and Cordelia, speaks up to tell Lear he is wrong, but Lear does not listen and banishes Kent from the kingdom.

The King of France and the Duke of Burgundy, rivals to marry Cordelia, are brought in and Lear tells them that she is 'new adopted to our hate / covered with our curse and strangered with our oath'. Hearing what has happened, Burgundy is no longer interested in marrying her but France declares 'Thy dowerless daughter, King, thrown to my chance, / Is queen of us, of ours, and our fair France.' After Lear and his court have left, Cordelia says goodbye to her sisters and leaves for France. Left alone, Goneril and Regan discuss their father's 'poor judgement' and 'unconstant starts'.

Edmund speaks to the audience about his 'bastardy', asking 'Wherefore should I / Stand in the plague of custom'. He resents the fact that he is treated differently to his brother and declares 'Legitimate Edgar, I must have your land'. He has forged a letter from Edgar that he hopes will make his 'invention thrive'. Gloucester arrives and believes that Edmund is trying to hide the letter from him. Gloucester insists on reading the letter and finds a plot suggesting that Edmund work with Edgar to get rid of their father and share his wealth. Edmund tells his father 'It is his hand, my lord, but I hope his heart is not in the contents.' This helps to convince Gloucester that Edgar is plotting against him and that 'These late eclipses in the sun and moon portend no good to us'. When Gloucester has gone, Edmund makes fun of his father's superstition, telling the audience 'we make guilty of our disasters the sun, the moon, and the stars, as if we were villains by necessity.'

Edgar then arrives and Edmund tells him that their father is very angry with him. Edgar believes 'Some villain hath done me wrong'. When he is gone, Edmund turns once more to the audience to laugh at his 'credulous father, and a brother noble, / Whose nature is so far from doing harms / That he suspects none'.

King Lear, his hundred knights and their squires are all staying with Goneril. She complains to her servant Oswald about her father and his 'riotous' companions, saying 'By day and night he wrongs me'. She tells Oswald to 'Put on what weary negligence

you please' when called on to serve Lear and says her sister is also not prepared to tolerate them.

The Earl of Kent tells the audience that he has disguised himself in order to return and serve King Lear. He introduces himself to Lear as 'A very honest-hearted fellow.' Lear is impressed and tells him 'Follow me, thou shalt serve me: if I like thee no worse after dinner.' When Oswald does not behave as Lear expects him to, Kent helps Lear to punish Oswald and Lear thanks him. Lear's Fool then arrives and offers Kent his coxcomb 'for taking one's part that's out of favour'. Through his word play and songs, the Fool suggests that Lear has been a fool to give his kingdom away, saying 'thou hast pared thy wit o'both sides and left nothing i'th'middle.'

Goneril enters and complains to Lear about his 'all licensed fool' and his 'insolent retinue' who do 'hourly carp and quarrel, breaking forth / In rank and not-to-be endured riots.' She asks him 'a little to disquantify your train'. He grows angry and curses her, saying 'Into her womb convey sterility', and hopes that if she does have a child it teaches her 'How sharper than a serpent's tooth it is / To have a thankless child.' He sets off to stay with Regan, believing she will be 'kind and comfortable'. When Lear has gone, Goneril calls Oswald and sends him with a letter to Regan.

Lear sends his new servant, the disguised Kent, on ahead to take letters to Regan and let her know he is coming to stay. Kent promises 'I will not sleep, my lord, till I have delivered your letter.' Lear is left with his Fool who tells him that a snail has a shell 'to put's head in, not to give it away to his daughters and leave his horns without a case.' Lear confesses 'I did her wrong' and worries that he may be going 'mad'.

Edmund learns from a servant that Regan and Cornwall are on their way to Gloucester's house and that there are rumours of 'likely wars toward 'twixt the dukes of Cornwall and Albany.' Edmund hopes Cornwall's arrival will help his plans. He calls for his brother Edgar who has been in hiding and advises him to 'fly this place'. He sees their father Gloucester approaching and tells Edgar 'pardon me / In cunning I must draw my sword upon you'. As Edgar runs off, Edmund gives himself a wound to make his story about Edgar's treachery more convincing. He then tells his father that Edgar tried to 'Persuade me to the murder of your lordship'. Gloucester is convinced that Edgar is a 'murderous caitiff'.

Regan and her husband arrive and sympathise with Gloucester over Edgar's betrayal. Cornwall tells Edmund 'For you, Edmund, / Whose virtue and obedience doth this instant / So much commend itself, you shall be ours'. Regan tells Gloucester they are visiting him for 'needful counsel' on dealing with the news received from her father and her sister.

Oswald has arrived at Gloucester's house and meets Kent, still disguised as 'Caius'. Oswald does not recognise him as a follower of Lear and the two men argue. Kent hurls insults and draws his sword against Oswald for bringing 'letters against the king' and taking 'vanity the puppet's part against the royalty of her father'.

Regan, Cornwall, Gloucester and Edmund arrive and stop the fight but Kent refuses to back down saying 'anger hath a privilege'. Cornwall calls for the stocks to punish Kent who appeals to Regan saying 'Why, madam, if I were your father's dog / You should not use me so'. Gloucester speaks up that 'The king his master needs must take it ill' but Regan and Cornwall are unconcerned. Left alone, Kent shows the audience a letter he has received from Cordelia 'Who hath most fortunately been informed / Of my obscured course'.

Edgar tells the audience that he plans to disguise himself as a 'Bedlam beggar' called 'Poor Tom' and run away.

Lear then arrives and wakes up Kent who is still sleeping in the stocks. Lear is shocked at Kent's treatment, complaining 'tis worse than murder / To do upon respect such violent outrage'. He is further outraged when Gloucester tells him that Regan and Cornwall will not see him. They finally appear and Lear complains to Regan that Goneril 'hath tied / Sharp-toothed unkindness, like a vulture, here'. Regan tells her father to return to Goneril and 'Say you have wronged her'. When Goneril herself arrives, Regan takes her hand and together they tell Lear they will look after him in their homes, but not his knights. Goneril asks 'What need you five-and-twenty, ten, or five, / To follow in a house where twice so many / Have a command to tend you?' Lear calls his daughters 'unnatural hags' and walks away from the castle as a storm is brewing

Summary:

Lear, the aging king of Britain, decides to step down from the throne and divide his kingdom evenly among his three daughters. First, however, he puts his daughters through a test, asking each to tell him how much she loves him. Goneril and Regan, Lear's older daughters, give their father flattering answers. But Cordelia, Lear's youngest and favorite daughter, remains silent, saying that she has no words to describe how much she loves her father. Lear flies into a rage and disowns Cordelia. The king of France, who has courted Cordelia, says that he still wants to marry her even without her land, and she accompanies him to France without her father's blessing. Lear quickly learns that he made a bad decision. Goneril and Regan swiftly begin to undermine the little authority that Lear still holds. Unable to believe that his beloved daughters are betraying him, Lear slowly goes insane. He flees his daughters' houses to wander on a heath during a great thunderstorm, accompanied by his Fool and by Kent, a loyal nobleman in disguise. Meanwhile, an elderly nobleman named Gloucester also experiences family problems. His illegitimate son, Edmund, tricks him into believing that his legitimate son, Edgar, is trying to kill him. Fleeing the manhunt that his father has set for him, Edgar disguises himself as a crazy beggar and calls himself "Poor Tom." Like Lear, he heads out onto the heath.

When the loyal Gloucester realizes that Lear's daughters have turned against their father, he decides to help Lear in spite of the danger. Regan and her husband, Cornwall, discover him helping Lear, accuse him of treason, blind him, and turn him out to wander the countryside. He ends up being led by his disguised son, Edgar, toward the city of Dover, where Lear has also been brought.

In Dover, a French army lands as part of an invasion led by Cordelia in an effort to save her father. Edmund apparently becomes romantically entangled with both Regan and Goneril, whose husband, Albany, is increasingly sympathetic to Lear's cause. Goneril and Edmund conspire to kill Albany.

The despairing Gloucester tries to commit suicide, but Edgar saves him by pulling the strange trick of leading him off an imaginary cliff. Meanwhile, the English troops reach Dover, and the English, led by Edmund, defeat the Cordelia-led French. Lear and Cordelia are captured. In the climactic scene, Edgar duels with and kills Edmund; we learn of the death of Gloucester; Goneril poisons Regan out of jealousy over Edmund and then kills herself when her treachery is revealed to Albany; Edmund's betrayal of Cordelia leads to her needless execution in prison; and Lear finally dies out of grief at Cordelia's passing. Albany, Edgar, and the elderly Kent are left to take care of the country under a cloud of sorrow and regret.

Question and Answers

1. What did Lear decide to do?
He decided to give the country to his three daughters.
2. Why does Lear ask how much his daughters love him?
In order to decide how to share the country between them.
3. What will happen when he gives them the country?
His daughters will rule instead of him. He will stay with each daughter in turn for a week.
4. What did he do in order to decide?
He asked them to say how much they loved him
5. What did Goneril say in reply to his question?
She said that she loved him as much as life, and more than anything else.
6. How did Lear react toward her answer?
He was pleased and gave her one third of the land.
7. What did Regan say in response? / How much did Regan say she loves her father?
She said that she loved her father more than Goneril
8. How did Lear feel? What did he give Regan and her husband?
He was very pleased and gave her another third of land.
9. What was Lear sure Cordelia would say?
He was sure she would say that she loved him more than her sisters.
10. Why didn't Cordelia say that she loves him more?
Because she didn't want to compete with her sisters in boasting about her love for her father.
11. What did Cordelia say about her love to her father?
She said that she loved him as much as a daughter should love her father.
12. Why is Kent violently angry at Oswald, Goneril's steward?

Kent is angry because Oswald comes with letters against the King and, pretends he has never seen Kent.

13. Does Oswald pretend that Kent is a total stranger to him? What proves him wrong?

Oswald pretends he has never met Kent, but later he tells Cornwall the entire story.

14. Why is Kent placed in the stocks?

Kent is placed in the stocks because Cornwall takes Oswald's side against Kent's in the quarrel.

15. What does Regan think would be worse than putting her father's servant in the stocks?

Regan feels it would be worse to have her sister's steward abused than to have her father's courier put in the stocks.

16. What is Cornwall's response to Kent's statement that he serves the King?

Cornwall remains stoic about putting the King's servant in the stocks.

17. How does Gloucester feel about Kent being placed in the stocks?

Gloucester feels the King will "take it ill" when he sees him in this condition.

ANSWER KEY

UNIT 4 KING LEAR

Task 1

Sort these words in the table into acronyms and abbreviations and write their full forms.

	Abbreviation/ acronym	Full forms
RAM	acronym	Random Access Memory
Mr	abbreviation	Mister
LASER	acronym	Light Amplification by Stimulated Emission of Radiation
St	abbreviation	Saint

	Abbreviation/ acronym	Full forms
Dec	abbreviation	December
BBC	acronym	British Broadcasting Corporation
cent	abbreviation	Century

Task 2

Find out what these abbreviations/acronyms stand for.

DNA	Deoxyribo Nucleic Acid	LAN	Local Area Network
SONAR	Sound Navigation and Ranging	FYI	for your information
Sci-fi	Science Fiction	approx	approximately
EU	European Union	LPG	Liquefied Petroleum Gas
sitcom	situation comedy	laser	light amplification by stimulated emission of radiation
scuba	self-contained underwater breathing apparatus	e.g.	exempli gratia (for example)
NASA	National Aeronautics and Space Administration	GIF	Graphics Interchange Format
DNA	Deoxyribo Nucleic Acid	cont	continued
i.e.	id est (that is)	RSVP	Repondez S'il Vous Plait (reply if you please)
TNT	Trinitrotoluene	VAT	Value Added Tax

Task 3

Identify and delete the redundant words/phrases from these sentences.

In earlier days, there was a consensus that the Earth was flat.

The result of the rainwater harvesting initiatives was that the level of ground water improved dramatically.

Imports during the financial year 2017-18 reduced considerably.

It is better that the assessments are postponed.

Edmund Halley the astronomer, compiled a chart on trade winds and monsoons in 1686.

This phone is a better choice because it has a RAM of 4 GB.

Task 4

Rewrite these sentences avoiding the clichés used.

During the monsoon, the road behind my house should be avoided since it tends to get waterlogged.

Ravi, who is always ahead of time, submitted his assignment much before the deadline.

Malpractice during the examinations will not be tolerated.

The movie was an exciting thriller.

Regular exercise and proper diet ensure that one remains healthy.

Task 5

Read the passage and complete the table.

Type	Media	Pros	Cons
Magazines	print	serve consumers by interest and trade longer shelf life as compared to newspapers	do not serve a small area glossy magazines are expensive circulation in a small market may not be cost-effective
Radio	sound	a great way to reach the target audience	difficult to remember what is heard the regular repetition of message leads to a significant increase in the cost
Television	audio-visual	extensive reach demonstration of ideas through sound, sight, movement and colour can demonstrate how a product or service works	TV advertisements are generally expensive
Hoarding and transit posters	print	can be put up on buses, taxis and bicycles messages on large billboards can get across with a lot of impact	contain limited information advertising can be very expensive for prime locations and supersized billboards
Direct mail, catalogues and leaflets	print/electronic	more personal cost-effective if sent directly to an email database	mailing list needs to be more precise for a better reach
Online	electronic	cost-effective way to attract customers reach a global audience at a low cost	cannot be used to reach customers who do not have access to the Internet

Task 6

Here are a few statements. Think of three reasons for each of these statements. Discuss in pairs to see if your reasons match. One has been done for you.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well.)

The higher production costs for a visual medium like television and expensive commercial slots make television a costlier way of advertising, as compared with radio which uses only sound; television ensures a better reach as people watch television more often than they listen to radio; an advertisement on television is easier to remember as compared to a jingle on radio.

Newspapers have a short shelf life and, hence, the advertisements need to be printed on a regular basis in order to attract customers; newspaper advertisements are less attractive; people read news online increasingly and do not subscribe to newspapers.

Wrong estimation of the target audience may lead to improper circulation; direct mail involves logistical difficulties and expenses; people often do not read unimportant mail.

Online advertising ensures better circulation as more and more people have started using the Internet; it is cost-effective; it is attractive in terms of more dynamism in design and interaction.

Task 7

Read the following passage and answer the questions that follow.

1. a. seeking evidence b. examining all sides of an issue
2. a. looking at theb. considering thec. examining evidence from all
issue problem sides
3. a. Correct b. Incorrect c. Correct
d. Incorrect
4. b. to see if something is
suitable
5. a. imagined

Task 8

Write essays on the following topics in about 350-400 words each.

(This is an open-ended question. Possible responses are provided here. There could be alternative responses as well.)

It is 9 PM and Gautam is trudging back home from work. He has a feeling of exhaustion and fatigue. As he steps off the bus, he wonders why he feels like this while returning home every evening. He believes he is overworked. Despite this, his manager pulls him up every week for not having completed his tasks or for not having

completed them well. Is Gautam incompetent? He believes he is not. What then is the reason for this fatigue when half of the items on his to-do list are incomplete?

The reason is time spent on social media. Gautam and many more young professionals like him spend a lot of time at work hooked on to apps like Facebook, LinkedIn and Whatsapp. The addictive nature of the social media platforms makes one oblivious to the amount of time that one is spending on the platform. As a result, either the workday extends to accommodate the unfinished tasks or bright minds turn into careless and sloppy professionals. Social media platforms are the biggest reason for loss of productivity at work and are therefore considered time wasters by both employers and experts. Unofficial reports indicate that the productivity loss at the workplace due to social media alone is as high as 13%!

The indirect effect of social media is on the health of its users. Sleeplessness and anxiety triggered by social media usage lowers employee productivity as professionals come to work having had 4-5 hours of sleep every night. It affects the concentration of students and reduces their attention span. In extreme cases, people's visions are also affected.

One might argue that a lot of work can be completed via social media. For example, it gives a ready customer base to small businesses. A lot of buying and selling can happen through social media platforms. Social media can also be used as a learning tool or as mode of networking. However, the benefits are little and dependent on the motivation of the user. In comparison, the 13% loss of productivity is significant and companies are left clueless about how to manage the menace.

The concept of artificial intelligence is the new buzzword in the world of technology. New experiments are being conducted by universities and corporates alike and a whole body of research is being created every week on this concept. While there is a lot of talk about how machines with artificial intelligence or AI are going to make our lives easier, there is also a whole lot of speculation about the ill effects that it is going to have on human society.

Machines using Artificial Intelligence can become a threat to human society. I agree with this statement and here are some reasons as to why I agree with it.

Firstly, there is the threat of huge job cuts. Scientists and industry pundits predict that people will not be required to do rote jobs any longer because robots will be able to do them just as well, if not better. The percentage of people losing their livelihoods to robots could be as high as 40% by the year 2030! Robots will be able to drive cars, generate bills at supermarkets, interpret financial data and work in assembly lines in factories. Where does all this leave the human species?

There is another and bigger threat posed by the use of AI. Just like all scientific and technological inventions, machines with AI are also liable to be misused by people with a criminal bent of mind. In a world that is becoming more and more reliant on online conveniences, digital security systems being exposed to newer AI threats can cause havoc. Harassment, blackmail, theft, conspiracy theories can all be fed by the abuse of AI.

Lastly, it is necessary to point out that human society is at an existential risk from artificial intelligence. This is a hypothesis that states that someday AI will achieve supremacy over human beings and cause a global catastrophe. Human society will become dependent on AI for its survival just like endangered species of plants and animals are currently dependent on humans for their survival.

These reasons are valid and point to a less than happy future for the human race that can be brought about by the 'intelligence' of machines without a conscience.

Task 10

Attempt a précis of the following passage.

(This is an open-ended question. A possible response is provided here. There could be alternative responses as well.)

Bad habits are behaviours that we internalise and carry on with. We should erase these habits to improve the quality of our lives.

Firstly, we must learn to admit our mistakes, even though they might affect our self-esteem.

Secondly, we should stop entertaining negative thoughts about ourselves lest we internalise them and become vulnerable to disorders like depression or anxiety. We must find some positive thoughts to replace negative thoughts.

Thirdly, we should try to maintain a good posture. A good posture lifts our mood and makes us confident. We must always keep our spine straight, look up and focus.

Fourthly, we must avoid multitasking in activities which require our complete attention. In such cases, one or both the activities is adversely affected. To overcome this, we must practice mindfulness.

Lastly, we should stop jumping to conclusions about other people, especially when they are rude to us. We must consider possible alternative explanations. Sometimes the reason for their anger is not related to us at all.

UNIT- V

HOW A CHINESE BILLIONAIRE BUILT HER FORTUNE

Explanation:

Zhou Qunfei was born in a tiny village in China. She was the youngest of the three children in her family. She lost her mother when she was five. Her father was a skilled craftsman as he lost his eye-sight and a finger in an industrial accident. She helped her family raise pigs and ducks for their livelihood. She is remarkable for her neatness of appearance, her round, owl-like glasses and her cherubic face.

How to become a billionaire?

Despite being a brilliant student, Qunfei dropped out of school at the age of 16. She landed a job that required her to work from 8am to 12pm, polishing glass. The whole hours spent were very long, and monotonous and she fed up with working hours. After three months, she firmly decided to quit the job but her boss got impressed with the letter and promoted her too.

Most at Home

In the factory, glass is cut, ground down to size, bored and polished to give each plate a transparent finish. Then the plates are strengthened in a potassium ion bath, painted and cured. Finally, they are cleaned and coated with anti-smudge and anti-reflection films. Zhou is obsessive about the standards maintained in her factory. From her office, door leads to an apartment. She uses this apartment to rest, so that she can have access to the factory floor day and night.

Zhou Qunfei, the world's richest self-made woman was the founder of Lens Technology and attributes herself success to perseverance. She counts a \$27 million estate in Hong Kong among her acquisitions. But she is at most at home on the floor of her factory.

Lens Technology

When Zhou Qunfei had saved enough money, she took the help of her relatives and set up a workshop for making watch lenses. Much of what she knew about making lenses was self- taught. She began to work out different ways of improving the quality of the lenses. She began to acquire a reputation for making the finest watch lens available in the market.

Today, there are several competitors in this area, but Lens Technology still remains a tier- one player. Ms. Zhou is very hands-on with her job. She still tours the factory floor and sits down at the machines to work them herself. This is her way of finding any faults in the process or equipment that are in use.

Advent of Mobile Phones

The advent of mobile phone made her a billionaire. In 2003, she received a call from the mobile giant Motorola. They wanted her to make screens for mobile phones. Until then mobile screens were made of plastic. But glass would be more resistant to scratches and provide sharper images for texts and multimedia. Zhou got on board and created the screens for Motorola.

Soon, HTC, Nokia and Samsung placed orders with her. Then, in 2007, Apple entered the market with the iPhone, which is a keyboard-enabled glass touch screen. Within five years, she set up manufacturing plants in three cities.

Conclusion

In spite of all the success she has achieved, Zhou is relatively less-known, even in her own country. She rarely grants any interviews or makes public appearances. Her employees know her to be fastidious and observant of the smallest details. She remembers where she comes from and does not take her present position for granted. She recalls that in her village most girls did not have the option of going to middle school. Zhou chose to work and run a business. And it is a choice she never regrets.

Summary:

Ms Zhou Qunfei, the World's richest self-made woman, was born as the youngest of three children in a tiny village in China. Her mother died when she was just five. Her father, a skilled craftsman, lost his eyesight and a finger in an industrial accident. That made young Qunfei help the family earn their livelihood. She stopped her education at 16 and joined a job that required her to work from 8am to 12 midnight, polishing glass. Unable to bear the stress and boredom, she resigned the job in just three months. Impressed by her good qualities, her employer promoted her. Later, she established her own workshop that supplied lenses to watch companies. She made her name as the quality lenses supplier. The advent of the mobile phone changed her fortune. Beginning with Motorola's, mobile giants like Nokia, Samsung and Apple placed orders with Zhou's Lens Technology for glass screens. Billions poured in. She invested more and more in expanding facilities, improving technologies and recruiting skilled manpower. She ran after quality never after name. Though she built up a huge empire, she feels at home on her factory floor running machines.

QUESTIONS AND ANSWERS

1. Who is the world's richest self-made woman? What is the name of the company she started?

Ms Zhou Qunfei is the world's richest self-made woman. Born in a tiny village of china as the youngest of three children, she started a company named "Lens Technology".

2. Where is the 'most at home'? What does it mean to be 'most at home'?
Zhou Qunfei is most at home on her floor of her factory, dipping her hand in a tray of water, to see if it is of the right temperature. 'Most at home' means 'feel very happy' or 'at ease'.

3. Where was she born? What was her childhood like?
Zhou Qunfei was born in a small village as youngest of three children. Her childhood was not that happy. Her mother died when she was just five. Her father lost his eye sight and a finger in an industrial accident. So, she had to work even as a child.

4. What does lens technology produce? Who are its biggest customers?
'LENS TECHNOLOGY' produces lenses for watches and glass screens for mobile phones. Motorola, HTC, Nokia, Samsung and apple are its biggest customers.

5. Why do you think Motorola approached lens technology and not any other lens maker?
Motorola approached 'lens technology' as the company has a reputation for making quality glass. Motorola also thought that glass screens for mobiles would be much better than plastic screens. Hence Motorola approached lens technology for glass mobile screens of good quality.

6. What are the processes that glass is put through in the factory?
In the factory, glass is first cut, and then it is ground down to size, later it is bored and polished. After that the plates are strengthened in a potassium ion bath, and then painted and cured. Finally, they are clean and coated with anti smudge and anti-reflection films.

7. What are the factors that help make Ms Zhou successful?
Zhou's hard work. Obsession with quality, charm and humility help her become successful.

ANSWER KEY

UNIT 5

HOW A CHINESE BILLIONAIRE BUILT HER
FORTUNE

Post-reading

Arrange the sentences in the order in which they appear in the passage.

e - b - f - c - g - d - a

Circle the qualities that Zhou Qunfei is seen to possess. Then find the lines in the passage that support it.

Hard-working: 'She landed a job that required her to work from 8 am to 12 pm, polishing glass.'

Demanding: 'Ms Zhou is very hands-on with her job. She still tours the factory floor and sits down at the machines to work them herself. This is her way of finding any faults in the process or equipment that are in use. She expects the same amount of dedication from her employees as well. Her employees know her to be fastidious and observant of the smallest details. She notices a manager slouching at a meeting and asks him to sit straight.'

Obsessive: 'Zhou is obsessive about the standards maintained in her factory. From her office, a door leads to an apartment. She uses this apartment to rest, so that she can have access to the factory floor day and night.'

Task 1

Fill in the blanks using suitable terms from the box.

- | | | | | |
|--------------|-------------|-------------|-----------------|---------------|
| 1. GDP | 2. catalyst | 3. phishing | 4. attachments | 5. ultrasonic |
| 6. quarterly | 7. mergers | 8. buoyancy | 9. line manager | 10. spam |

Task 2

Match these terms with their meanings.

- | | | | |
|-----|-----|-----|-----|
| 1-d | 2-h | 3-g | 4-b |
| 5-a | 6-e | 7-c | 8-f |

Task 3

Identify the errors in the use of articles and prepositions in these sentences and correct them. If there is no error write 'No error'.

The media was caught spreading lies about the country's top leader.

The board agreed with the CEO's opinion on expanding the market. (No error)

The students are worried about the classes, because the textbooks are not yet available in the market.

Freedom of speech is one of the fundamental rights guaranteed by our constitution. (No error)

The school insists on our wearing a uniform all six days of the week.

The candidate's answer sheets were re-evaluated and she became the topper.

A unique feature of our country is unity in diversity. (No error)
The cricketer was found guilty of tampering with the ball.
The farmers are protesting against the thermal power plant.
The actor apologised for his recent insensitive comments on social media.
Honesty is the best policy.
At the peak of his career, Dev resigned from his job and went back to his village.
The instructor told us to refer to our notes while doing assignments.
One needs to have an MBBS from a recognised university to become a doctor.
My mother is yet to recover from viral fever even after two weeks.
The Dravidian languages/Dravidian languages are spoken mainly in the southern states of India.
Manoj has sent an invitation for his wedding.
Every student must carry the identity card always.

The doctor informed the patient's relatives about the course of treatment.

France is a European country.

Task 4

Identify the errors in tenses in these sentences and correct them.

When I was walking in the park, I heard a loud noise.
Before I joined a US company, I had completed an internship at HYF Ltd.
Joseph is a lecturer in an engineering college.
Yesterday the students were talking loudly in the class while the teacher had dozed off.
I sing songs during parties for a livelihood.
MNTE has been constructing this bridge since 2008 and it's not complete still.
By the same time next year my sister will have been married.
When the teacher reminded me about the time, I had already completed the exam.
I like this new office cabin design.
During the next year, we will be building our new house.
Rita always hated night shifts but she had no other options.
The earth takes almost 24 hours for a single rotation on its own axis.
I have been waiting for the bus for the last two hours and I am really worried about getting home.
After relocating to Kolkata from Hyderabad, my uncle is still adjusting to the new city.
We went to market and bought fruits and vegetables.

Task 5

Identify the errors in subject–verb and noun–pronoun agreement in these sentences and correct them.

Some of the shoes in this shop are on discount. ('some of the shoes' is plural)

The committee decided to review its expenditure for the current financial year before placing a request for additional funds. ('committee' is singular)

If anybody is not satisfied with the quality of the product, he/she/they* can ask for a refund of his/her/their money. ('anybody' is a singular pronoun)

*Note: 'They' is preferable as it is gender neutral.

On seeing the old lady in the bus, one of the girls gave up her seat. ('one of the girls' is the subject and is singular)

The list of the books required for the library is on my table. ('list' is singular)

Our college team is headed for the state-level match after a brilliant performance in the district level knockout games. ('team' is singular)

The staff was requested to attend the meeting. ('staff' is singular)

Fifty percent of the stock was gutted in the fire. ('stock' is singular)

Either Mr Reddy or Mr Rao is going to be appointed chairperson of the committee. (The subject indicates only one of the men will be appointed. Therefore, it is singular)

Marks & Spencers is a major British multinational retailer headquartered in London. ('Marks & Spencers' is a brand name and so is singular)

Task 6

Rewrite these sentences after placing the modifiers in the right place.

The patient with a severe headache was referred to a doctor.

They served food wrapped in aluminum foil to the children.

He drives the taxi for nearly eight hours every day.

My sister has one child only.

Unfortunately, I can take only three students to the conference.

The tall soldier with the beard led the parade.

I bought a used car with a damaged windscreen from an online site.

Sam asked me over the phone to go for a ride with him.

The results will be known only after all the votes have been counted.

The pedestrian walking on the footpath was hit by a car.

Task 7

Identify and eliminate the clichés and redundancies in these sentences. Rewrite the sentences in the space given.

We decided to combine our resources to tackle the problem.

I was certain that this was the correct route to the library.

I couldn't hear the instructions clearly. Could you repeat them please?

The conference organisers replied to my mail saying that they would be able to fund my trip.

First, I'd like to draw your attention to the first item on the agenda.

Ultimately, it is the budget which will decide whether we would add additional systems to our existing facility.

I don't think it would be advisable to take the short cut to Golconda Fort.

This story has been fabricated by the media.

The agenda of the meeting should be circulated to all team members.

The lawyer suggested that we add a clause to the agreement.

Task 8

Read this passage and answer the questions that follow.

The Google Self-driving Car project involves the development of technology to run driverless electric cars.

Google Chauffeur is a software that helps run the driverless car.

Google Chauffeur is fitted with sensors that can 'see' everything around the car. It can also make a search about aspects of driving. It captures minute details. This is why Sebastian Thurn describes it as a 'perfect driving mechanism'.

Examples of human factors involved in driving include maintaining one's lane, holding the right body position and anticipating traffic.

prototype

Task 9

Read this passage and answer the questions that follow.

The Greek word 'klon' means to create new plants from buds and twigs of existing plants.

J B S Haldane is credited with the use of the word 'clone' in the sense of creating duplicates of human beings. He is a geneticist and science writer as well.

The title of the speech given by Haldane in 1963 is 'Biological Possibilities for the Human Species of the Next Ten Thousand Years'.

Today, cloning is widely used for selective assisted breeding of animals.

clone

Task 10

Read this passage and tick the correct option to answer the questions that follow.

1. b 2. a 3. a 4. b 5. b

Task 11

Read this passage and answer the questions that follow.

At the time of the Great Depression, people were going through a lot of suffering because of the recession. They needed to feed their imagination with heroes who would see them through the troubled times. Newspaper comic strips of superheroes provided just that.

The two scientific and technological breakthroughs of the twentieth century mentioned in the passage are Albert Einstein's theories on the nature of the universe and pioneering activities of airmen and women.

Meanings:

utopian – a perfect world

pseudoscientific – falsely scientific

The superheroes mentioned here are Superman and Spiderman.

Stories about the pseudoscientific backgrounds of the superheroes made them more realistic to their audience.

Task 12

These extracts are from a report on Bt Brinjal. Decide which section of the report each extract has been taken from.

Introduction

Methods

Introduction

Acknowledgements

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Conclusion

Task 13

Read and decide if these sentences are suitable or unsuitable, based on their construction, for inclusion in a report. Give reasons for your choice. One has been done for you.

- no, uses informal language (contractions)
- yes, uses formal language
- yes, explains acronyms
- no, does not explain acronyms
- no, uses direct speech
- yes, uses indirect speech
- yes, is crisp and precise
- no, is convoluted, uses redundancies