

General instructions:

- i) 15 minute prior reading time allotted for question paper reading.
- ii) The question paper contains THREE sections – Reading, Grammar and Writing and Literature.
- iii) Attempt questions based on specific instructions for each part.

SECTION – A (Reading Skills)

(20Marks)

1. Read the passage given below.

1. Nature is our mother, our first teacher. The greatest lesson that she teaches us is to maintain an equilibrium in life. We learn to maintain composure through our joys, sorrows and fears. In fact, there are a thousand lessons that nature can teach us, provided we look for them.

2. With time, a sapling grows into a full-grown tree; something so tiny and delicate develops into a strong tree capable of supporting others. No matter how tall it grows, how much it may flourish, or how many animals and birds it may support, its roots are firmly buried from where it once rose. That's a lesson - to keep ourselves grounded, respect and embrace our roots, and give something back to those humble beginnings that nurtured us into who we are.

3. Then there is the message of peaceful coexistence. 'I am because we are.' Nature provides every creature a chance to exist. However, the existence of one creature or being depends on the existence of the other. The tiger eats the antelope; without the antelope, the tiger wouldn't survive. Likewise, without tigers, the overabundance of antelopes would cause them to starve to death.

4. I wonder if you have noticed that when birds or squirrels see a predator, they give out an alarm call to their fellow creatures, of the lurking danger. They put themselves in danger to save the lives of others. Many animals, like the salmon, usually die after they spawn, but this doesn't stop them. One life extinguished for the betterment of others is a small price to pay.

5. The snow melts in the warmth of spring to give birth to fresh green leaves. In autumn these leaves age into shades of gold only to be buried in the cold grave of winter. Change is inevitable; the sooner we embrace this, the better it is for us. We must also understand that even in pain there is growth. If you cut a hole in the tree, it will grow around it. No matter what may come in its way, a river will continue to flow. Similarly, no matter what grief may break your heart, nature teaches us that life goes on.

6. Keep in mind life isn't about making lists and trying to be one step ahead of others. Life is to live. Take a break-stop being a workaholic, and smell the roses, do whatever makes you feel happy and most of all spend some time with nature to pick up invaluable lessons.

Based on your understanding of the passage, answer the questions by choosing the correct option. (10x1=10)

- i) According to the author, what, from the following, is the greatest lesson being taught by nature?
 - a) balanced in our emotions.
 - b) partial to joys in life.
 - c) afraid of unhappiness
 - d) indifferent to fears.
- ii) Select the option that suitably completes the dialogue with reference to paragraph Jai: I've done well for myself in this school. I'm the best they have. I can get admission anywhere. This is my moment!
Sid: Congratulations! Just remember, we should
 - a) become strong despite our weakness.
 - b) be kind and supportive towards everyone.
 - c) respect the origins from where we have grown.
 - d) nurture ourselves well from the beginning.
- iii) Choose the option that best conveys the message in - 'I am because we are.'
 - a) Tigers are dependent on antelope
 - b) Antelope are dependent on tigers
 - c) Humans are dependent on animals
 - d) Everyone is dependent on each other
- iv) What qualities do the birds and squirrels display when they warn others of possible danger? Choose one option from the following:
 - a) Observation skills and alertness.
 - b) Tendency to get easily frightened.
 - c) Selfless assistance to help others.
 - d) Determination to protect themselves.
- v) Select the option that can suitably replace lurking (paragraph IV).
 - a) The policeman pulled up the person who was wandering aimlessly through the city.
 - b) The thief knew that remaining hidden was the best strategy to avoid being caught.
 - c) The policeman was caught on camera while pouncing with force, to grab the fleeing culprit.
 - d) The thief was walking boldly into the house thinking it was devoid of residents.
- vi) A Portmanteau words like smog (smoke + fog), is a blend of words in which parts of multiple words are combined into a new word. From the options given below, select a Portmanteau word that appears in the para VI.
 - a) coexistence
 - b) workaholic
 - c) full-grown
 - d) flourish
- vii) Select the qualities from paragraph III, that the author wants us to imbibe. Being-
 - 1) acceptive
 - 2) passionate
 - 3) emotional
 - 4) resilient
 - 5) perceptive
 - a) (2), (4) and (5)
 - b) (1), (3) and (4)
 - c) (1), (4) and (5)
 - d) (3), (4) and (5)

- viii) Which of the following is shown by the changing of seasons?
 a) The beauty of nature. b) Nature's creativity. c) All seasons are equal. d) Nothing lasts forever.
- ix) What does the writer advise, in paragraph VI?
 a) Indulging in competition with others. b) Making priority lists.
 c) Taking life seriously. d) Having free time for ourselves.
- x) Choose the option that lists the quote best expressing the central idea of the passage.
 a) Nature: She pardons no mistakes. Her yea is yea, and her nay, nay. -Ralph Waldo Emerson
 b) Look deep into nature, and then you will understand everything better. - A. Einstein
 c) Nature never deceives us; it is we who deceive ourselves. -Jean Jacques Rousseau
 d) All the ugliness of the world can best be forgotten in the beauty of nature! -Mehmet Murat

2. Read the passage given below.

1. Many of us believe that "small" means "insignificant". We believe that small actions and choices do not have much impact on our lives. We think that it is only the big things, the big actions and the big decisions that really count. But when you look at the lives of all great people, you will see that they built their character through small decisions, small choices and small actions that they performed every day. They transformed their lives through a step-by-step or day-by-day approach. They nurtured and nourished their good habits and chipped away at their bad habits, one step at a time. It was their small day-to-day decisions that added up to make tremendous difference in the long run. Indeed, in matters of personal growth and character building, there is no such thing as an overnight success.

2. Growth always occurs through a sequential series of stages. There is an organic process to growth. When we look at children growing up, we can see this process at work: the child first learns to crawl, then to stand and walk, and finally to run. The same is true in the natural world. The soil must first be tilled, and then the seed must be sowed. Next, it must be nurtured with enough water and sunlight, and only then will it grow, in to trees laden with ripe fruits.

3. Gandhi understood this organic process and used this universal law of nature to his benefit. Gandhi grew in small ways, in his day-to-day affairs. He did not wake up one day and find himself to be the "Mahatma". In fact, there was nothing much in his early life that showed signs of greatness. But from his midtwenties onwards, he deliberately and consistently attempted to change himself, reform himself and grow in some small way every day. Day by day, hour by hour, he risked failure, experimented and learnt from mistakes. In small and large situations alike, he took up rather than avoid responsibility.

4. People have always marvelled at the effortless way in which Gandhi could accomplish the most difficult tasks. He displayed great deal of self-mastery and discipline that was amazing. These things did not come easily to him. Years of practice and disciplined training went into making his successes possible. Very few saw his struggles, fears, doubts and anxieties, or his inner efforts to overcome them. They saw the victory, but not the struggle.

5. This is a common factor in the lives of all great people: they exercised their freedoms and choices in small ways that made great impact on their lives and their environment. Each of their small decisions and actions, added up to have a profound impact in the long run. By understanding this principle, we can move forward, with confidence, in the direction of our dreams. Often when our "ideal goal" looks too far from us, we become easily discouraged, disheartened and pessimistic. However, when we choose to grow in small ways, taking small steps one at a time, our achievement becomes easy.

Based on your understanding of the passage, answer the questions by choosing the correct option. (10x1=10)

- i) The main idea in the first paragraph is that
 a. Big things, big actions and big decisions make a person great
 b. Small actions and decisions are important in one's life
 c. Overnight success is possible for all of us
 d. Personal changes are not important
- ii) What does the writer mean by saying 'chipped away at their bad habits'?
 a. Steadily gave up bad habits b. Slowly produced bad habits\
 c. Gradually criticized bad habits d. Did not like bad habits
- iii) Which of the following statements is true in the context of the third paragraph?
 a. Gandhi became great overnight
 b. Gandhi showed signs of greatness in childhood itself
 c. Every day Gandhi made efforts to change himself in some small way
 d. Gandhi never made mistakes
- iv) What is done by great people to transform their lives?
 a. They approach life on a day-by-day basis b. They build character in small ways
 c. They believe in performing everyday d. they struggle a lot
- v. How can we grow in small ways?
 a. by getting disheartened b. by dreaming little
 c. by taking small steps one at a time d. by small practice

- vi. How did Gandhiji become 'Mahatma'?
 - a. by risking others life
 - b. by learning from great leaders
 - c. by taking up responsibilities
 - d. by the environment
- vii. How do small actions and choices impact our lives?
- viii. Describe organic process of growth through an example from the text.
- ix. What according to the author is the universal law of nature"?
- x. How did Gandhi accomplish the most difficult tasks effortlessly?

SECTION – B (Writing & Grammar)

(1x10=10)

3. Attempt any TEN of the following.
- i. Read the conversation between a mother and son. Complete the sentence by reporting the son's reply correctly.
- Rose: Did you see my new umbrella? Isn't it fine?
 Roy: Yes, it is! Did you buy it from the mall?
 Rose asked her son Roy if he had seen her new umbrella and she wanted to know whether it was a fine one. Roy agreed and asked his mother _____
- ii. Fill in the blank by choosing the correct option to complete the sentence:
- Prime Minister said single- use plastic _____grave threat to the environment.
- a. posed b. had posed c. posing d. poses
- iii. Select the correct option to fill in the blank for the given line, from Science Exhibition guidelines.
- It _____ensured that the exhibits are not crude and hazardous.
- a. could be b. should be c. may be d. might be
- iv. Select the option that identifies the error and supplies the correction for the following sentence.
- Spending time with your kids bring immediate as well as long term gain to the parents.
- | | | |
|--------|-------|------------|
| Option | Error | Correction |
| A | With | in |
| B | bring | brings |
| C | to | for |
- v. Complete the given sentence, by filling in the blank with the correct option.
- The police _____the matter.
- a) is investigating b) are investigating c) had investigating d) will investigated
- vi. Which option displays the correct change of the following to reported speech?
- Sunitha asked Venkat. "How much is the rent for your flat?"
- a. Sunitha asked Venkat how much was his rent for flat.
 b. Sunitha asked Venkat how much the rent for his flat was
 c. Sunita enquires from Venkat that how much rent he pays.
 d. Sunita told Venkat how much the rent for his flat was.
- vii. Select the correct option to fill in the blank for given sentence.
- The dog _____under the chair before the children arrived.
- a. has been hiding b. was hid c. have hid d. had hidden
- viii. Report the dialogue between Headmaster and Student, by completing the sentence.
- Student: Sir, I had to collect my transfer certificate.
 Headmaster: It is with the head clerk.
- The student told headmaster that he had to collect his transfer certificate. The headmaster said that _____
- a. it is with the head clerk b. it will be with the head clerk
 c. it was with the head clerk d. it is being with the head clerk
- ix. Select the option that identifies the error and supplies the correction for the following sentence.
- A teacher was teaching an important lesson on the class.
- | | | |
|--------|-------|-------------|
| Option | Error | Correction: |
| A | was | is |
| B | an | a |
| C | in | on |
- x. Fill in the blank by choosing the correct option, to complete the following question.
- Will you get _____orange in the market?
- a) any b) one c) some d) many
- xi. Choose the correct form of verb to fill the gap.
- At this time tomorrow we _____our project details to madam.
- a) are presenting b) shall be presenting c). have been presenting d) will have been presenting.
- xii. Fill in the blank space with correct option.
- I don't think there is _____hope that Sarla is going to pass this year.
- a) less b) few c) any d) some
- 4) 1. Attempt ANY ONE from A and B given below. (1x5=5)
- A. You are Nitish/Nikita, the Head Boy/Girl of Tagore Public School, Chennai. Write a letter to New Start Sports, Kalkaji, New Delhi asking them to send sports equipment for the games and sports department of your school.

B. The insanitary conditions in your colony are causing multiple diseases. Write a letter in 100-120 words to the Municipal Commissioner bringing the problem to his notice and request him to take urgent action in the matter. You are Thivyan / Divya of C 2/7, Ankur Enclave, New Delhi.

2. Attempt ANY ONE from A and B given below. (1x5=5)
- A. Anisha is to write an analytical paragraph on 'Smoking is a silent killer of life'. Using your own ideas and the outline given below, write this paragraph on her behalf in 100 - 120 words
- Smoking is actually a silent killer-nicotine is a poison - dangerous to various vital organs-smoking a cigarette shortens-causes a deadly disease-guide our smoking youth-ensure good health to all Indians
- OR
- B. Read the following excerpt from an article that appeared in the magazine section of a local daily:
- "Technology is addicting, and like any drug, it is especially effective on children. Be it cell phones, iPods, tables, computers, or a simple television set, technology hooks children."
- Write a paragraph to analyze the given argument.
- You could think about what alternative explanations might weaken the given conclusion and include rationale/evidence that would strengthen/counter the given argument

SECTION - C (LITERATURE)

5. Reference to the Context: (5)
1. Attempt ANY ONE of two extracts given.
- A. **OOP:** I haven't a clue I've been to seven galaxies, but I've never seen anything like this. Maybe they're hats. (He opens a book and puts it on his head.) Say, maybe this is a haberdashery!
- OMEGA:** (bowing low) Perhaps the Great and Mighty Think-Tank will give us the benefit of his thought on the matter.
- THINK-TANK :** Elementary, my dear Omega. Hold one of the items up so that I may view it closely. (Omega holds a book on the palm of her hand.) Yes, yes, I understand now. Since Earth creatures are always eating, the place in which you find yourselves is undoubtedly a crude refreshment stand
- OMEGA:** (to Iota and Oop) He says we're in a refreshment stand.
- OOP:** Well, the earthlings certainly have a strange diet.
- i. Why did Omega bow low before Think-Tank?
- a) as a mark of respect and recognition of supremacy
 - b) to flatter and appease the character
 - c) as a sign of submission and understanding of his strength
 - d) to curry favour and goodwill from the character
- ii. Choose the option that associates the person to a haberdashery
- a) Jagdeep is a primary school teacher who teaches English
 - b) Tanishq is a tailor who makes garments for men only
 - c) Falguni is a chemist who manufactures her own medicine
 - d) Asma is an engineer who works on designing space stations
- iii) Choose the option that explains what Think Tank meant by saying-Elementary, my dear Omega
- a) 'It's simple general knowledge, Omega.'
 - b) It's something that a primary school person won't understand, Omega.
 - c) 'It's quite obviously deducible, Omega
 - d) 'It's a little more than complicated, Omega.
- iv. The quality of being crude has been allotted to the refreshment stand because
- a) earthlings have bad eating habits according to Think-Tank
 - b) the temperature of the refreshment stand was too high
 - c) the refreshment stands are responsible for poor health of the Earthlings
 - d) it produces food that is unrefined and unprocessed in nature
- v. Inhabitants of Earth are earthlings and those from Mars are Martians, what are the inhabitants of Venus addressed as in most science-fiction stories?
- a Venusites b. Venatians c. Venings d. Venusians

OR

- B.He just felt a bit dizzy. Then he flapped his wings once and he soared upwards. "Ga, ga, ga, Ga, ga, ga, Gaw-col-ah," his mother swooped past him, her wings making a loud noise He answered her with another scream. Then his father flew over him screaming. He saw his two brothers and his sister flying around him curveting and banking and soaring and diving. Then he completely forgot that he had not always been able to fly, and commended himself to dive and soar and curve, shrieking shrilly.
- i. Pick the most appropriate reason why the young seagull felt dizzy
- a) he hadn't eaten anything for a day
 - b) he was dizzy with excitement.
 - c) he was weary of heights
 - d) he was flying for the first time.
- ii. How would you describe the screams of the gulls in the given extract?
- a) elation b) bewilderment c) shock d) protection

- iii. The line "he completely forgot that he had not always been able to fly" implies the
 - a) great confidence the young gull had in his skills
 - b) naturalness of the act of flying for the young gull.
 - c) satisfaction and joy of flying together as a family.
 - d) desire of the young gull to leave his fears behind.
- iv. The extract refers to the many movements of the young gull's brothers and sister Choose the option that correctly sequences these movements.
 - a) the young gull's brothers and sister flew by tilting their wings, rose high, made darting movements and plunged headfirst
 - b) the young gull's brothers and sister flew by plunging headfirst, making darting movements, titled their wings and rose high
 - c) the young gull's brothers and sister flew with darting movements, titled their wings, rose high and plunged headfirst
 - d) the young gull's brothers and sister flew by rising high, plunging head first, making darting movements and tilting their wings
- v. Which of the following mirrors the use of the literary device in 'shrieking shrilly'?
 - a) sparkling saga b) singing soft c) slippery sloppily d) sneeze silently

2. Attempt ANY ONE of two extracts given.

A) What is the boy now, who has lost his ball,
 What, what is he to do? I saw it go
 Merrily bouncing, down the street, and then
 Merrily over there it is in the water!

- i. The extract suggests that the poet is _____
 - a) an onlooker observing b) a parent recounting the incident
 - c) the boy talking about himself d) imagining the incident
- ii. The poet seems to have indicated the merry bouncing of the ball to
 - a) create a sense of rhythm in these lines
 - b) support the happiness of the experience of playing
 - c) contrast with the dejected feeling of the boy
 - d) indicate the cheerful mood of the boy
- iii. Choose the situation that corresponds to the emotion behind the exclamation mark in the poem.

Hey! Hey! That's no way to dispose off the garbage Have you no community sense? Please put it in the bin	I knew it!! knew he'll perform well in his auditions for Young Shef Now we prepare for the semi finals	I don't know where I've placed my ID card Let me check the bag once more Ah, finally I got it!	I've been trying to call mom for the past 20 minutes and can't get through I don't know howAgain!
1	2	3	4
a) option 1	b) option 2	c) option 3	d) option 4

- iv. The poem begins with a question. Based on your reading of the poem, the speaker.
 - a) wants the boy to answer the question b) expects the passers-by to respond
 - c) is looking for answers in a self-help book d) is thinking to himself
- v. Alliteration is a literary device that occurs with the same letter or sound at the beginning of adjacent or closely connected words.
Pick the option that showcases an example of alliteration from the extract.
 - a) what is the boy now b) who has lost his ball
 - c) I saw it go d) and then/ merrily over

OR

B. Ink trickled down to the bottom of the household,
 And little mouse Blink strategically mouseholed.
 But up jumped Custard, snorting like an engine,
 Clashed his tail like irons in a dungeon,
 With a clatter and a clank and a jangling squirm,
 He went at the pirate like a robin at a worm"

- i. Which option lists the quotes that support the ideas in the extract?
 - 1. fear makes strangers of people who would be friends
 - 2. if you're brave enough to start, you're strong enough to finish
 - 3. courage doesn't mean you don't get afraid. Courage means you don't let fear stop you
 - 4. you get in life what you have the courage to ask for
 - 5. fear has a large shadow, but he himself is strong
- a) 1 and 5 b) 2, 3 and 4 c) 2 and 3 d) 1,3 and 5

- ii. What is the poet's purpose of using the onomatopoeic words given in the extract?
- it is to emphasize on the might and boldness of Custard
 - it is to introduce the character Custard to the readers
 - it is to impress upon the readers that Custard was ready
 - it is to make Custard bold enough to face the situation
- iii. Pick an option that best fits the usage of the word 'trickled' as used in the extract.
- the water trickled down the tap and filled the trough
 - students trickled into the classroom as the teacher entered
 - tears trickled down her cheeks as she heard the sad news
 - his enthusiasm for the task slowly trickled away
- iv. Select the option that fits with the reaction of the characters in the context of the extract.
- | | | | |
|------------------------------|------------------------------|-----------------------|--------------------|
| Ink terrified | Blink: i) _____ | Pirate it : ii) _____ | Custard: undaunted |
| a) i) shocked ii) displeased | b) i) petrified ii) wondered | | |
| c) i) upset ii) dazed | d) i) petrified ii) shocked | | |
- v. 'He went at the pirate like a robin at a worm. Why has this comparison been used here?
- Just like the robin catches the worm,
- Custard attacked the pirate after careful observation
 - Custard attacked the pirate without delay
 - Custard attacked the pirate valorously
 - Custard attacked the pirate stealthily

6. A) Answer any FOUR of the following questions in 40-50 words: (3x4=12)
- Based on your reading, would you call the narrator a family man? Justify your stance (First Flight-The Black Aeroplane)
 - Comment on the teacher-student relationship shared between Anne and Mr Keesing.
 - Coorgis belong to a valorous and hospitable race. Comment on this statement with reference to the text.
 - Peculiar behaviours are a characteristic of Otters. Discuss with respect to "Mijbil the Otter"
 - Valli didn't like the way adults treated her during her bus journey. Describe how did she react

- B. Answer any TWO of the following questions in 40-50 words: (3x2=6)
- It's not easy to be mean to people who are very nice to you. Do you think that the young thief had to work on giving himself valid reasons to be able to commit the theft?
 - Scientists contribute to make the world a better place. Griffin is an antithesis to this statement. Justify
 - Mention two things you would have done, other than what M Loisel did, to help resolve the problem of the lost necklace

- C. Answer any ONE of the following questions in 100-120 words. (6x3=6)
- Do you think Chubukov is a good father? Justify your opinion based on your reading of the text:
 - Read the given quote by actor Jim Carry

I THINK EVERYBODY
SHOULD GET RICH AND
FAMOUS AND DO
EVERYTHING THEY EVER
DREAMED OF SO THEY
CAN SEE THAT IT'S NOT
THE ANSWER.

Can you relate this to the Buddha's life before and after he attained enlightenment?
Provide examples from the text to support your answer.

- D. Answer any ONE of the following questions in 100-120 words: (6x1=6)
- You've read the quote: 'A teacher affects eternity. He can never tell where his influence stops.'
In the context of this statement, comment on the role of Bholi's teacher in her life.
 - Albert Einstein said. "The important thing is to never stop questioning", Richard was a genius who proved this quote true. Justify.

General instructions:

- i) 15 minute prior reading time allotted for question paper reading.
- ii) The question paper contains THREE sections – Reading, Grammar and Writing and Literature.
- iii) Attempt questions based on specific instructions for each part.

SECTION – A (Reading Skills)

(20Marks)

1. Read the following passage carefully:

1. The novel corona virus has given rise to a global pandemic that has destabilized most institutional settings. A virus invisible to the naked eye has massively disrupted our lives, economies, healthcare and education systems worldwide.

2. Given the corona virus's current situation, some households have also had time to introspect on gender roles and stereotypes. For instance, women are expected to carry out household chores like cooking, cleaning, and looking after the family. With men sharing household chores responsibilities during the lockdown period.

3. This tough period also gave people some time to reflect on the importance of keeping themselves fit. Those who never exercised before, too developed some new habits of Yoga, Pranayam and exercises during the lockdown period. These new habits and people's increased focus on their health, wellness and immunity will surely change the way, we lead our lives even in future.

4. The nature too healed itself during the lockdown period. Restricted human movement led to better air quality, cleaner waterbodies and joyful wildlife movements. The human beings, we hope, reflected during this time, how some of their unconscious activities cause disruption in nature and worked out ways to adopt environmental-friendly options for their activities in future.

5. This situation also affected the education sector to a great extent. It has forced us to shift from offline to online mode of teaching-learning process. Technology-enabled teaching is definitely the future we are looking towards, but it is important to identify key challenges for students and teachers in the current scenario.

6. The current scenario has also affected our economies to the extent where in many businessmen had to bear heavy losses in their businesses. The governments and individuals need to take actions to mitigate risk and minimize transmission while maintaining social and economic activities. However, relaxed control measures, declining risk perception and the understandable desire to return to normalcy have led to reduced protective behaviour and more social and workplace interactions, often in confined, close-contact settings, where the virus spreads really fast.

7. It is our responsibility that we take all necessary precautions through mask-wearing, physical distancing, hand hygiene as part of daily life. It is highly important to make these new behaviour part of our everyday habits. Travelling to new places, casual café visits with a large bunch of friends, spending our weekends in shopping, window-shopping and casual strolls, large gatherings in birthday parties and other celebrations; will require some modifications and patience to fit into 'New Normal' keeping all the safety norms in mind.

8. We are sure that regular communication from authorities, improved understanding of individual responsibility and, subsequently, a greater willingness to adopt infection prevention practices can be a stepping stone to a 'new future'.

On the basis of your understanding of the passage, answer the following questions (1x10 =10)

- a) COVID – 19 has been called a pandemic as _____.
 - i) It has spread across the globe
 - ii) There is no Vaccination for it
 - iii) There is no preparedness for it
 - iv) It has disrupted the common life
- b) State whether the Following statement is TRUE or FALSE.
The lockdown period made people introspect on gender roles and stereotypes because People talked about gender stereotypes. ____
- c) People, who never exercised before, started exercising during the lockdown period because _____.
 - i) being at home, they had sufficient time at hand.
 - ii) **exercise was the only way to treat people infected with the novel corona virus.**
 - iii) people learnt new ways to exercise their body.
 - iv) people understood the importance of health and wellness in the face of the pandemic.
- d) During the lockdown period, the air and waterbodies were clean because _____.
 - i) **there was less human movement due to lockdown**
 - ii) the virus helped in cleaning the air and the water
 - iii) the government made extra efforts to clean the air and the water
 - iv) people got together to clean waterbodies.
- e) During the pandemic period the education in schools continued through _____.
 - i) offline mode of teaching
 - ii) **online mode of teaching**

iii) weekly classes.

iv) none of the above

f) Which of the following did NOT lead to reduced protective behaviours among people?

i) Relaxed control measures

ii) Declining risk perception

iii) Physical distancing

iv) Understandable desire to return to normalcy

g) Which of the following is OPPOSITE in meaning to the word 'mitigate' as used in the passage?

i) Lessen

ii) Reduce

iii) Aggravate

iv) Weaken

h) What does 'stepping stone' refer to _____

i) stones and pebbles lying on the road

ii) something used as a way to progress

iii) the destination of our journey

iv) blocks and problems in one's path.

i) State whether the following statement is TRUE or FALSE

During the pandemic there was a boom in the economy ____

j) Fill in the blank in the following sentence

_____ should be avoided as a protection shield for corona infection.

2. Read the following passage carefully:

HYDERABAD THE CITY OF NIZAMS

GOLCONDA FORT:

1) In the 16th century, when Golconda was the capital of Qutab Shahi Kingdom, it is believed that a shepherd boy came across an idol on the hill. It was then that the Kakatiya dynasty's ruler built the fort, which is 120 m high. After it was captured by Aurangzeb, the Mughal emperor, the fort fell into ruins.

2) The beautiful ruins of the fort have a story to tell. They make you wonder, how the fort may have looked in its days of glory and grandeur. The fort also hosts a sound and light show everyday and the history of this fort is narrated in such an interesting manner that even a child can understand and enjoy it.

3) The climb to the fort is a tedious one and unless you are physically fit, you should avoid the climb and relax in the gardens below. The view from the top is breathtaking and should suffice as a counter – incentive to laziness

CHARMINAR

1) The next place to visit is Charminar. The literal meaning of the monument is 'four minarates'. There is a mosque on the second floor. It is said that when the state was engulfed by severe plague, Sultan Muhammad Quli Qutab Shah, the fifth ruler of the Qutab Shahi dynasty, prayed to end the plague and promised to build a mosque in the very place where he was praying. Thus, Charminar came into being!

2) The walk from the bottom to the top of the monument is a little spooky, owing to the narrowness of the pathway and the steepness of the steps. Once you reach the top, after successfully negating the tiers of balconies, the view of the crowds bustling below will surely lift your spirits.

3) Make sure you visit the nearby Laad Bazaar, where there are rows of shops selling the famous Hyderabad glass bangles and lac bangles.

SALAR JUNG MUSEUM

1) The Salar Jung Museum is the third largest museum in the country and boasts of owning the biggest one-man collection of antiques in the world. A visit to the Salar Jung Museum is a must metalware, ivory carvings, Indian bronzes and carpets.

2) The main attraction is definitely the Musical Clock, made by Cook and Kelvy of England. Inside the clock is a timekeeper. Every hour, he comes out and beats a gong as many times as the time indicates. Another attraction at the museum is the Veiled Rebecca, an amazing sculpture made by the Italian sculptor, Giovanni Maria Benzoni.

On the basis of your understanding of the passage, answer the following questions (10x1=10)

a) Golconda was the capital of the Qutab Shahi Kingdom in the _____

i) 15th century

ii) 16th century

iii) 17th century

iv) 14th century

b) The main attraction in the Salar Jung Museum is _____

i) metalware

ii) collection of carpets

iii) musical clock

iv) ivory carvings

c) Write TRUE or FALSE:

Veiled Rebecca is kept in the Golconda fort. ____

d) Write TRUE or FALSE:

Laad Bazaar famous for its glass and Lac bangles is near Charminar. ____

e) _____ ruler decided to build a fort on the hill.

f) The Mughul ruler _____ attacked and captured the fort which led to its ruin.

g) "Four minarates" is the meaning of the word _____

h) Find the word from the passage which means the same as "the quality of being great" _____

i) Golconda fort also hosts a _____ show every day.

i) cultural

ii) light and sound

iii) dance

iv) singing

j) The literal meaning of charminar is _____

- i) Chaturbuj
- ii) four corners
- iii) four minarates
- iv) four pillars

SECTION – B (Grammar)

III. Attempt any ten of the following questions: (1x10 = 10)

- i) Fill in the blank by choosing the correct answer:
The first scientist to _____ President of India, Dr. Avul Pakir Jainulabdeen Abdul Kalam was born into a middle class family in Rameshwarm, Tamil Nadu.
i) a ii) the iii) an iv) their
- ii) Read the conversation between Doctor and the patient. Read the dialogue given below then complete the passage that follows
Doctor: You should take this medicine everyday
Patient: Should I take it before dinner or after dinner?
The doctor advised the patient that _____
- iii) Complete the given description by filling the blank with the correct option:
Libraries can be termed store _____ of knowledge.
i) houses ii) house iii) housing iv) hause
- iv) Fill in the blank by using correct form of the word in the bracket for the given portion of a letter.
Subject: “Misbehaviour of the auto rickshaw drivers in the city”
Dear sir,
I would like to _____ (draws) the attention of the authorities concerned towards the above mentioned problem through the columns of your esteemed newspaper.
- v) Select the option that identifies the error and supplies the correction for the following line from a news report.

Sachin Tendulkar is a best cricketer in India

Option	Error	Correction
1	a	the
2	in	of
3	is	are
4	better	best

- vi) Select the correct option for filling the blank in the given information
The pleasure _____ being outdoors is fundamental to human happiness
i) of ii) off iii) at iv) in
- vii) You can't go on your school tour without your parents _____
i) permission ii) mission iii) pledge iv) promise

- viii) Report the Dialogue:
Ritu : Hello! Reena, Do you know that the school trip to Mussoori has been cancelled?
Reena: No, I didn't know that why has the trip been cancelled?
Ritu met Reena and asked her _____

- ix) Identify the error in the given sentence and supply the correction:
The children or at a risk of osteoporosis at a younger age as they are not drinking enough milk.
- x) Fill in the blank by choosing the correct option, to complete the blank given by new information.
Biology students at a Swedish university refused to _____ insects on ethical grounds.
i) kill ii) kills iii) killing iv) killed

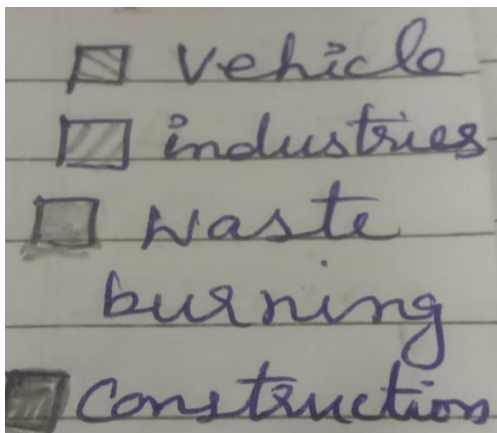
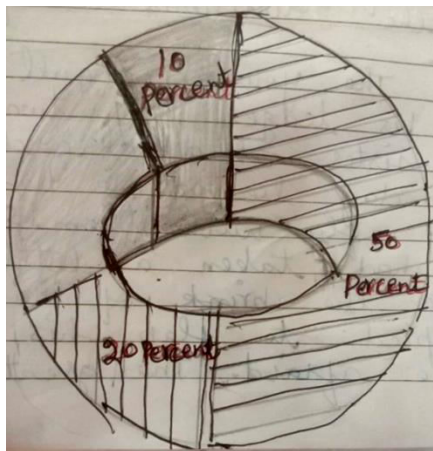
- xi) Complete the narration of the dialogue between Jain and Manna
Jain when is the fancy dress competition in your school?
Manna: It is after two weeks
Jain asked Manna when the fancy dress competition in her school was Manna replied that _____

- xii) Identify the given below are instructions to draw a circle.
A compass is take and a pencil is inserted in to the provided hole and tightened.

Error	Correction

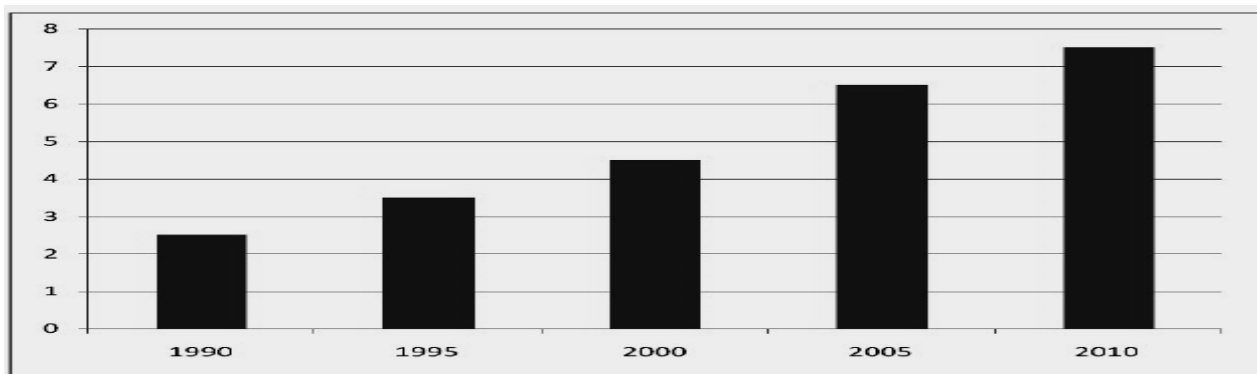
SECTION – B (Creative Writing Skills)

- IV) Attempt any ONE from A and B given below: (5)
- A. You are store–incharge in Charya Boys' Senior Secondary School, Kolkata. Write a letter to the Manager, Pioneer Traders & Co., Kolkata, placing an order of stationery articles for your school store. You are Naveen / Hasan.
(or)
- B) You are Anju / Arun, a student of class X and resident of 56 D, Ring Road, ITO, New Delhi, and wants to be a choreographer. Write a letter to the director, National Institute of Choreography, Noida, seeking information about their course, admission procedure, eligibility criteria, and other necessary details.
- V) Attempt any ONE from A and B given below: (5)
- A. The pie chart given here is showing the major causes of air pollution in metropolitan cities in India
Analysing the data carefully write an analytical paragraph in 100- 120 words.



(or)

B. The following data shows that death due to violence which has considerably increased during recent years. Using this data, write an analytical paragraph in 100 – 120 words focusing on how the educated youth can play a major role in establishing peace in the society.



SECTION – C (Literature)

V. Read the extracts given below and attempt any ONE of TWO extracts given: (5)

A. The young seagull was alone on his ledge. His two brothers and his sister had already flown away the day before. He had been afraid to fly with them. Somehow when he had taken a little run forward to the brink of the ledge and attempted to flap his wings he became afraid. The great expanse of sea stretched down beneath, and it was such a long way down — miles down. He felt certain that his wings would never support him, so he bent his head and ran away back to the little hole under the ledge where he slept at night.

- Why was the young seagull afraid?
 - He was afraid of flying
 - He was waiting for somebody to accompany
 - He was afraid of eating food
 - He had no experience
- What did the young seagull feel about his wings?
 - He felt that his wings would not support him
 - He felt that he had no wings
 - He felt that he had only one wing
 - All of the above
- State whether the following statement is TRUE or FALSE.
The seagull ran away back to the little hole. _____
- Pick out the word from the stanza which means 'a narrow flat piece of rock that sticks out from a cliff'.
- Give an antonym of the word "attempt".

(or)

B. LOMOV

Hear me out, I implore you! The peasants of your father's grandfather, as I have already had the honour of explaining to you, used to bake bricks for my aunt's grandmother. Now my aunt's grandmother, wishing to make them a present

NATLAYA:

I can't make head or tail of all this about aunts and grandfathers and grandmothers. The meadows are ours, that's all

LOMOV: Mine

NATALYA: Ours! You can go on providing it for two days on end you. can go and put on fifteen dress jackets, but I tell you they; re ours, ours, ours!! . I don't want to give anything of mine so there!

- Natalya and Lomov were
 - talking to each other
 - abusing each other
 - arguing with each other
 - in love with each other.
- What did Lomov forget in the midst of the argument?
 - Marriage proposal for Natalya
 - ownership documents of oxen Meadows
 - His dog
 - None of the above

- c) State whether the following statements are true or False.
- Chubukov's grandfathers peasants used to bake bricks for Lomov's aunt's grandmother --
 - Oxen Meadows was the reason for argument between Chubukov, Natalya and Lomov. ---
- d) Find the exact word from the extract which means to beg someone desperately to do something ____
- e) The word "proposal" has several meanings. Can you guess what sort of proposal the play is about?
- A suggestion, plan, or scheme for doing something
 - An offer for a possible plan or action
 - The act of asking someone's hand in marriage
 - None of the above

VI. Read the extracts given below and attempt the question that follow: (Attempt Any One) (5)

A) An ultimate shaking grief fixes the boy As he stands rigid, trembling, staring down. All his young days in to the harbour where His ball went I would not intrude on him, A dime, another ball, is worthless. Now, he senses first responsibility In a word of possession..

- a) The boy is in grief because his ball has been _____
- destroyed by the pet
 - taken forcibly
 - lost
 - given to the other boy
- b) The ball in the poem symbolizes _____
- a sense of adventure
 - innocence of the young boy
 - an ability to bounce back
 - an extended family
- c) State whether the following statement is TRUE or FALSE.
- The poet does not offer the new ball to the child because he wants to teach him the value of responsibility.
- d) The name of the poet is _____
- Robert Keith
 - John Berryman
 - Robert Frost
 - William Wordsworth
- e) Find the word from the stanza which means the same as "insignificant".

(or)

B. Did you finish your home work, Amanda?

Did you tidy your room, Amanda

I thought I told you to clean your

Shoes, Amanda.

- a) What is first priority of the poet for Amanda?
- Unclean the room
 - polish the shoes
 - finish the home work
 - bite the nails
- b) The poet thought that she had advised her _____
- to clean, her shoes
 - to finish the work
 - to learn the lesson
 - to Swim like mermaid
- c) Give a synonym of "Tidy" from the stanza _____
- d) Fill in the blank in the following sentence:
- _____ is making all the remarks at Amanda.
- e) On hearing the above lines Amanda is _____
- happy
 - sad
 - confused
 - excited

VII. Answer in 40 – 50 words of any four out of the five questions give: (4x3=12)

- What did Lencho compare to new coins? Why?
- What are the elders in Goa nostalgic about?
- How did the crow change the mood of the poet?
- Whose dog in the play "The proposal" turns out to be superior?
- What happened, when Griffin did not wake up in time?

VIII. Answer in 40 -50 words of any two out of the three questions given: (2x3=6)

- Did the young lady expect Horace to be caught after the theft?
- What happened at the ball? Was Matilda's dream fulfilled?
- How did Hari Singh know that Anil had forgiven him?

IX) Attempt the following questions in 100 – 120 words: (6)

- a) Why did Kisa Gautami meet the Buddha? How did the Buddha change her life?
- (or)
- b) "Appearances are deceptive" Cite examples from the poem, "How to tell Wild Animals", to corroborate this statement.

X. Answer the following question in 100 – 120 words:

- a) "Love and sympathy can transform a thief" How is it true in case of Hari Singh? Comment.
- (or)
- b) Contentment in one's life is very important to lead a peaceful life. We should be happy with what we have and should not crave for what we don't have. Matilda suffered in her life because she was not contented in her life. What do you learn from her mistake in life?

General instructions:

- i) 15 minute prior reading time allotted for question paper reading.
- ii) The question paper contains THREE sections – Reading, Grammar and Writing and Literature.
- iii) Attempt questions based on specific instructions for each part.

SECTION – A (Reading Skills)

(20Marks)

I. Read the passage given below.

1. In most societies that have any glimmering of civilization, a person accused of wrong doing is given at least a nominal chance of proving his innocence. The Romans had a highly sophisticated / comprehensive system of courts and the members of their legal profession were well educated but the Saxons who followed them to rule Britain used rougher methods.
2. From about the sixth century A.D. to the eleventh the majority of the trials were in the form of cruel physical torture (carrying a piece of red hot iron, stepping barefoot and blindfold across a floor covered with red hot coals or sometimes by a gentler method of oath – swearing.
3. The accused was ordered to bring to the Saxons authorities, a police officer or a priest could be persuaded to swear on oath or still a number of persons who would say that the accused was of good character and thus innocent. The number of persons who swore depended on the crime. A noble/a landlord or a priest counted for up to half a dozen ordinary peasants. As almost everyone lived in small villages, where almost everyone knew everyone else and very few would risk telling a lie on oath (the people were mostly religious), the truth was generally told, if the accused could not produce enough oath helpers, he was found guilty and punished.
4. In the eleventh century the Normans introduced trial by battle in certain cases. The accused and the accuser fought with special weapons until one was dead or surrendered. It was believed that God would know the guilty and give the innocent the power to win. The whole idea became ridiculous when both the parties were allowed to hire champions who would fight on their behalf. It seemed likely whoever could pay the more for a stronger professional fighter stood a good chance of winning and judged innocent. This may sound unfair to us but there is a parallel with a wealthy person today who can hire a costly and brilliant barrister to defend him.
5. In the early middle ages when England was a land of small villages remote from each other, crime tended to be basic and direct; beating up, theft, sex and murder being the main offences. But as towns and manufacturing and commerce grew, the possibilities for cheating and fraud soared. The whole organization of society become more complex and opened the door to a world of more sophisticated wickedness. With no regular police force, spies and informers were offered rewards when they brought in criminals.

On the basis of the understanding of the passage, answer the questions that follow:

(10x1=10)

1. England (or Britain) turn by turn came under the rule of:

(A) Saxons; Romans; Normans	(B) Normans; Saxons; Romans
(C) Romans; Saxons; Normans	(D) Normans; Romans; Saxons
2. The article describes:

(A) The development of the system of justice in England	(B) civilized societies and justice.
(C) Justice v/s Civilisation	(D) Rule of Justice in England
3. Study the following statements:

(a) Romans were proud of their judicial system	
(b) There is not much difference between the Normal and modern system of justice	
(A) (a) is right and (b) is wrong	(B) (b) is right and (a) is wrong
(C) Both (a) and (b) are right	(D) Both (a) and (b) are wrong
4. Match the following:

(a) Romans	-	(i) A priest to swear for the accused
(b) Saxons	-	(ii) Highly paid lawyers can win a case
(c) Modern	-	(iii) Educated judge and lawyers
(d) Normans	-	(iv) the winner in a battle declared innocent
(A) (a) (iv); (b) (ii); (c) (i); (d) (iii)		(B) (a) (iii); (b) (i); (c) (ii); (d) (iv)
(C) (a) (i); (b) (iii); (c) (iv); (d) (ii)		(D) (a) (ii); (b) (i); (c) (iii); (d) (iv)
5. Study the following statements:

(a) In a trial by battle, money played a main role.	(b) God helped the innocent win the battle.
(A) (a) is right and (b) is wrong	
(B) (b) is right and (a) is wrong	
(C) Both (a) and (b) are right and (a) was the conclusion.	
(D) Both (a) and (b) are right and (a) was not the conclusion.	
6. For seven hundred years from the sixth century trial was mostly rough . (True / False)

7. Study the following statements:
- (a) Earlier England comprised small villages each with a small population.
 - (b) Crimes like cheating and fraud were rate.
- (A) (a) is an assertion and (b) is the response
 - (B) (b) is an assertion and (a) is the response
 - (C) Both (a) and (b) are unrelated assertions
 - (D) Both (a) and (b) are responses to some other assertions
8. 'any glimmering of civilisation' 'Glimmering' in the above expression has been used as a metaphor. Glimmering stands for _____
- (A) A slight suggestion
 - (B) a great hope
 - (C) some fear
 - (D) a little confidence
9. The rich have always enjoyed an advantage in the judicial system because _____
10. The word which means the same as "a vidation or breach of a law in para 5 is _____

II. Read the passage given below: (10)

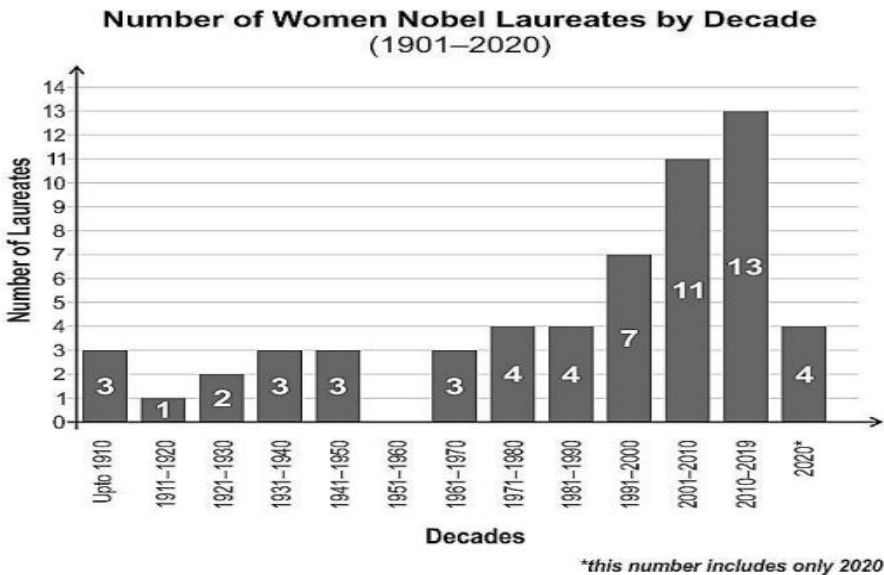
I. The Nobel Prize is an international award administered by the Nobel Foundation and is based on the fortune of Alfred Nobel, a Swedish inventor and entrepreneur. The Nobel prize is awarded for the best contribution in the fields of Physics, Chemistry, Medicine, Literature and to the person who has contributed by and large to bring Peace on Earth. In 1968, Sweden’s central bank established the Sveriges Riksbank Prize in Economic Sciences in memory of Alfred Nobel.

II. A look into the history of the recipients of the award reveals that only 57 women have received the award compared to 873 male recipients. There are various historical reasons for why this is the case, but the trend appears to be improving.

III. Goran Hansson, the permanent secretary of the Royal Swedish Academy of Sciences said , " While more women are being recognised now compared with previous decades, only about 10% of the professors in natural sciences in western Europe or North America are women, and even lower if you go to east Asia." All over the world, the number of men working in STEM fields is much higher than the number of women.

IV. Hansson emphasised that they have made sure to identify the problem and also learn about subconscious bias in the prize-awarding committees and academies. "We’ve had lectures by sociologists, we’ve had group discussions, we have put quite a lot of effort into it," he said.

V. “In the end, we will give the prize to those who are found the most worthy, those who have made the most important contributions," he added.



On the basis of the understanding of the passage, answer the questions that follow: (10x1=10)

- i) According to the passage, the gender disparity among Nobel Prize recipients is due to _____ factors.
- A. historical
 - B. economical
 - C. sociological
 - D. psychological
- ii) What efforts are being made by the Royal Swedish Academy of Sciences to address the low representation of female scientists?
- i. The Academy is consciously awarding female scientists from the 2000s.
 - ii. The Academy is inviting sociologists to lecture about the gender gap.
 - iii. The Academy is hosting group discussions to boost the intelligence of female scientists.
- A. only (i)
 - B. only (ii)
 - C. (i) and (iii)
 - D. (ii) and (iii)
- iii) According to the passage, Goran Hansson says that there are _____.
- A. more female scientists in East Asia than in Europe
 - B. fewer male scientists than female scientists in Europe
 - C. fewer male scientists being considered for recognition now
 - D. more female scientists being recognised for their work now
- iv) Which of these can be inferred from the graph showing the number of women Nobel laureates by

- decade?
- No woman received the Nobel prize before the year 1910.
 - More women have received the Nobel prize since 1971 than men.
 - At least one woman received the Nobel prize every year since 1901.
 - Since 1961, women Nobel laureates have been increasing steadily every decade.
- v) According to Goran Hansson, the Royal Swedish Academy of Sciences _____.
- researches the cause of gender discrepancy in Nobel prize nominations
 - nominates fewer men for prestigious awards like the Nobel prize
 - awards the Nobel prize to the most famous contributors
 - selects individuals who are not prejudiced in any way
- vi) Select the sentence that CORRECTLY uses the phrase 'by and large' as used in paragraph I.
- Paula prepared a by and large cake for dinner.
 - We bought by and large clothes for the campaign.
 - Most of the lions by and large eat deer when hungry.
 - She was so excited that she screamed by and large on the road.
- vii) The Nobel Prize is an international award because it recognises the achievements made _____.
- in all subjects
 - by all genders
 - in all countries
 - by all institutions
- viii) Identify the opinion from these statements about the information shared in the passage.
- The Nobel prizes have been awarded to more men than women.
 - Alfred Nobel's wealth is used to award the Nobel prizes to the winners.
 - The Nobel prize was awarded for the best contribution in only four fields initially.
 - Women in general are more inclined to working on world peace than on other subjects.
- ix) Find the word from the passage which means (para – 1)
- inventor
 - entrepreneur
 - fortune
 - contributed
- x) State whether the following statement is True / False
- The Nobel Prize is awarded for the best contribution in the field of chemistry only.

SECTION – B (Grammar)

(10x1=10)

Attempt any ten of the following questions:

- i) Fill in the blank by choosing the incorrect option to complete an online update.
- The votes _____ in the multipurpose Hall
- are counting
 - are being counted
 - is counted
 - count
- ii) Read the conversation between shyam and sheela . complete the sentence by reporting sheela's replay correctly.
- Shyam: Can you wait for me?
- Sheela : No, I must go now
- Shyam asked sheela if she could , could wait for him sheela replied in negative and said that _____
- iii) Select the option to fill in the blank
- The good is that _____ volunteers dropped out this month than the last two.
- fewer
 - less
 - few
 - a little
- iv) Select the option that identifies the error and supplies the correction for the following line.
- Have you ever learnt from a mistake you have made? Many shouldn't admit doing so.
- | Option | error | correction |
|--------|-----------|------------|
| a) | learnt | learn |
| b) | shouldn't | wouldn't |
| c) | made | make |
| d) | many | more |
- v) Complete the given narrative, by filling in the blank with the correct optin.
- 40% of the country _____ support the new law
- doesnot
 - donot
 - should not
 - could not
- vi) Fill in the blank by using the correct form of the word in the bracket, for the given portion of the letter
- Subject: Ban on poly bags
- Dear Sir
- Through the columns of your newspaper, I wish to share my views on poly bags which are largely used there days. I totally agree with the views, _____ published in the article "Ban on poly bags"
- vii) Report the dialogue between Rajeev and his Dad by completing the sentence.
- Rajeev : Dad, will you gift me a laptop?
- Dad: Not now, wait till your class 12 board results.
- Rajeev asked his dad if he would gift him a laptop. Negating Dad asked Rajeev _____
- viii) Identify the error in the given sentence and supply the correction
- Changes in technology has led to the generation gap in their modern world
- Use the given format for your response
- | Error | correction |
|-------|------------|
| _____ | _____ |
- ix) Shiva shares, some information with John Report John's question.
- Did you enjoy the movie?
- x) Fill in the blank by choosing the correct option:
- We are living in a world _____ every girl wants to be a diva and every boy descres to be a dude
- that
 - where
 - what
 - whose
- xi) Select the correct option to complete the narration of the dialogue.

Ganesh: Doctor my wife is unwell. May I know what will be the total expenses on her treatment?

Doctor: Well, You will have to pay only 6 lakhs for her treatment.

Ganesh told Doctor that his wife was unwell and asked if he might know what would be the total expenses on her treatment. The doctor replied that _____ for her treatment.

- a) he would have to pay only 6 lakhs
- b) She would have to pay only 6 Lakhs
- c) They will have to pay only 6 lakhs
- d) he will have to pay only 6 lakhs

xii) Identify the error and supply the correction

It was a great match with a nail – biting finish and all the spectators present their thoroughly enjoyed watching it

Use the given format for your response

Error	correction
_____	_____

SECTION – C (Writing skills)

(10marks)

IV) Attempt any one from A and B given below:

(5)

A) The condition of the public park in your locality is miserable. Write a letter to the Editor of a Local Newspaper with the help of the points given below in 120-150 words. You are Ranjit / Reshma.

- Poorly managed parks
- Heaps of garbage everywhere
- Boundary-wall broken
- Very dirty animals resting there

(or)

B) John had employed the services of Decent Packers, 142, Ramanujam Street, Chennai to pack and transport household goods and a car to Borivali, Mumbai. He is dissatisfied with the services and decides to lodge a complaint with the manager of the company. Write a letter in 100-120 words as John voicing his displeasure.

V) Attempt any one from A and B given below:

(5)

A. Write an analytical paragraph on whether internet is useful or not based on cues given below:

- Internet widely used
- Interconnection
- Easy and quick
- Made our life easier
- Various uses
- E – commerce – online shopping
- no access in a few places

(or)

B. Read the following excerpt from an online post of a website.

Taking part in sports is important for children as it reduces stress and enhances their mood. Sports builds healthy bones and muscles, increases fitness, improves sleep, helps them socialize. It also improves their cooperation skills, boosts self-confidence, and lowers the risk of getting obese

Write a passage in 100 – 120 words to analyse the given argument

You could think about what alternative explanation might weaken the given conclusion and include rationale / evidence that would strengthen / counter the given argument.

SECTION – C (Literature)

(40m)

1. Answer any one of the two extracts given:

(5)

CHUBUKOV : What's that? What did you say?

NATALYA : Papa, send the mowers out to the Meadows at once!

CHUBUKOV : What did you say, sir?

NATALYA : Oxen Meadows are ours, and I shan't give them up, shan't give them up, shan't give them up!

LOMOV : We'll see! I'll have the matter taken to court, and then I'll show you!

CHUBUKOV : To court? You can take it to court and all that? I know you; You're just on the look – out for a chance to go to court and all that. You pettifogger! All your people were like that! All of them!

LOMOV : Never mind about my people! The Lomovs have all been honourable people and not one has ever been tried for embezzlement, like your grandfather!

i) What was the tone Chubukov spoke in when he said 'what that? What did you say'?

- 1) Questioning 2) joking 3) confused 4) surprised 5) playful

Choose the correct option:

- a) 1, 2, 4 b) 2, 3, 4 c) 1, 3, 4 d) 2, 5

ii) Select the most appropriate option (1) and (2)

1) Shan't give them up

2) Then I'll show you

a) 1 is true and 2 is false

b) 2 is the opposite of 1

General Instructions:

- (i) Section A has 20 Questions of 1 mark each.
- (ii) Section B has 5 Questions of 2 marks each.
- (iii) Section C has 6 Questions of 3 marks each.
- (iv) Section D has 4 Questions of 5 marks each.
- (v) Section E has 3 case-based Questions of 4 marks each.
- (vi) Section E has 3 case based integrated units of assessment (04 marks each) with sub – parts of the values of 1, 1 and 2 marks each respectively.
- (vii) All questions are compulsory. However, an internal choice in 2 questions of 5 marks, 2 questions of 3 marks and 2 questions of 2 marks has been provided. An internal choice has been provided in the 2 marks questions of Section E
- (viii) Draw neat figures wherever required. Take $\pi = \frac{22}{7}$ wherever required if not stated.

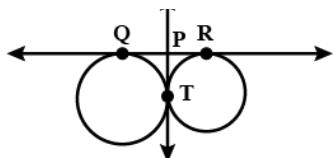
SECTION – A Multiple Choice Questions - (1 mark each)

1. If α and β are the zeroes of polynomial $p(x) = px^2 - 2x + 3p$ and $\alpha + \beta = \alpha\beta$ then the value of p is
 (a) $-\frac{2}{3}$ (b) $\frac{2}{3}$ (c) $-\frac{1}{3}$ (d) $\frac{1}{3}$
2. The pair of equations $x + 2y = 8$ and $2x + 4y - 16 = 0$ is
 (a) consistent (b) consistent and dependent (c) inconsistent (d) none of these
3. For any natural number n , $6^n - 5^n$ will always end with
 (a) 1 (b) 2 (c) 3 (d) 4
4. If $x - 4 = \frac{12}{x}$, $x \neq 0$ then the value of x is
 (a) 4, 3 (b) -4, 3 (c) 6, -2 (d) -6, 2
5. If the *HCF* and *LCM* of two numbers are respectively $(n - 1)$ and $(n^2 - 1)(n^2 - 4)$ then the product of the two numbers will be
 (a) $(n^2 - 1)(n^2 - 4)$ (b) $(n^2 - 1)(n^2 - 4)(n^2 + 1)$
 (c) $(n + 1)(n^2 - 4)(n - 1)^2$ (d) $(n - 1)(n^2 + 4)(n + 1)^2$
6. The perpendicular bisector of the line segment joining the points $A(2, 3)$ and $B(5, 6)$ cuts the y axis at
 (a) $(8, 0)$ (b) $(0, 8)$ (c) $(0, -8)$ (d) $(-8, 0)$
7. If $\sec^2 \theta (1 + \sin \theta)(1 - \sin \theta) = k$, find k
 (a) $\frac{-1}{2}$ (b) $\frac{1}{2}$ (c) -1 (d) 1
8. $\triangle ABC$ is such that $AB = 3\text{ cm}$, $BC = 2\text{ cm}$ and $CA = 2.5\text{ cm}$. If $\triangle ABC \sim \triangle DEF$ and $EF = 4\text{ cm}$ then perimeter of $\triangle DEF$ is
 (a) 7.5 cm (b) 15 cm (c) 22.5 cm (d) 30 cm
9. Find the area of a quadrant of a circle whose circumference is 22 cm.
 (a) $\frac{61}{8}\text{ cm}^2$ (b) $\frac{69}{8}\text{ cm}^2$ (c) $\frac{71}{8}\text{ cm}^2$ (d) $\frac{77}{8}\text{ cm}^2$
10. Given that $\sin \theta = \frac{a}{b}$ then $\cos \theta$ is equal to
 (a) $\frac{b}{\sqrt{b^2 - a^2}}$ (b) $\frac{b}{a}$ (c) $\frac{\sqrt{b^2 - a^2}}{b}$ (d) $\frac{a}{\sqrt{b^2 - a^2}}$
11. In $\triangle ABC$ and $\triangle DEF$, $\angle B = \angle E$, $\angle F = \angle C$ and $AB = 3DE$. Then, the two triangles are
 (a) congruent but not similar (b) similar but not congruent
 (c) neither congruent nor similar (d) congruent as well as similar
12. PQ and PR are two tangents from an external point P to a circle with centre O . If $\angle POR = 55^\circ$ then $\angle QPR$ is
 (a) 35° (b) 55° (c) 70° (d) 80°
13. A number is chosen at random from the numbers $-6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6$. The probability that square of this number is less than or equal to 1 is
 (a) $\frac{9}{13}$ (b) $\frac{3}{13}$ (c) $\frac{8}{13}$ (d) $\frac{7}{13}$
14. In a circle with centre O and radius 6 cm, AB is a chord of length 6 cm. Then area of sector AOB is
 (a) $10\pi\text{ cm}^2$ (b) $6\pi\text{ cm}^2$ (c) $8\pi\text{ cm}^2$ (d) $5\pi\text{ cm}^2$
15. If $\cos \theta = \frac{1}{2}$, then the value of $\frac{2 \sec \theta}{1 + \tan^2 \theta}$ is
 (a) $\frac{1}{2}$ (b) $-\frac{1}{2}$ (c) 1 (d) -1
16. The volume of the largest right circular cone that can be cut out from a cube of edge 7 cm is
 (a) 89.83 cm^3 (b) 98.83 cm^3 (c) 79.83 cm^3 (d) 97.83 cm^3

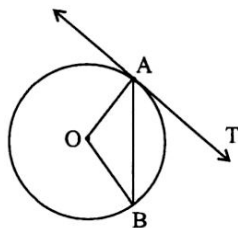
17. If the mode of a data is 45, mean is 27 then the median is
 (a) 30 (b) 27 (c) 46 (d) 33
18. If the mean of the frequency distribution is 7.5 and $\sum f_i x_i = 120 + 3k$, $\sum f_i = 30$ then k is equal to
 (a) 30 (b) 35 (c) 40 (d) 45
19. Assertion (A) : If the coordinates of the midpoints of the sides AB and AC of $\triangle ABC$ are $D(3, 5)$ and $E(-3, -3)$ respectively then $BC = 20$ units.
 Reason (R) : The line joining the midpoints of two sides of a triangle is parallel to the third side and is equal to half the length of it.
- (a) Both assertion and reason are correct and reason is the correct explanation for the assertion.
 (b) Both assertion and reason are correct and reason is not the correct explanation for the assertion.
 (c) Assertion is correct but reason false.
 (d) Assertion is false but reason is correct.
20. Assertion (A) : \sqrt{x} is an irrational number, where x is a prime number.
 Reason (R) : Square root of any prime number is an irrational number.
- (a) Both assertion and reason are correct and reason is the correct explanation for the assertion.
 (b) Both assertion and reason are correct and reason is not the correct explanation for the assertion.
 (c) Assertion is correct but reason is false.
 (d) Assertion is false but reason is correct.

SECTION – B (5 questions of 2 mark each)

21. In the figure below, QR is a common tangent to the given circles, touching externally at the point T . The tangent at T meet QR at P . If $PT = 3.8$ cm, find the length of QR .



22. In figure below, O is the centre of the circle, AB is a chord and AT is the tangent at A . If $\angle AOB = 100^\circ$, then calculate $\angle BAT$.

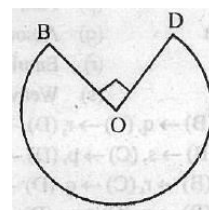


23. Find the value of a so that the point $(3, a)$ lies on the line represented by $2x - 3y = 5$.

24. Evaluate $\tan^2 45^\circ \sec^2 60^\circ + \operatorname{cosec}^2 45^\circ \tan 60^\circ$
 (or)

If $\sec \theta + \tan \theta = x$, then find the value of $\sec \theta$ in terms of x .

25. In the given figure (on the right), the shape of a table top in a restaurant is that of a sector of a circle with centre O and $\angle BOD = 90^\circ$. If $OB = OD = 60$ cm, find the perimeter of the table top. (Use $\pi = 3.14$)
 (or)

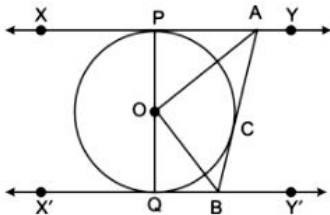


In a circle of radius 10.5 cm, the minor arc is one fifth of the major arc. Find the area of the sector corresponding to the major arc

SECTION – C (6 questions of 3 marks each)

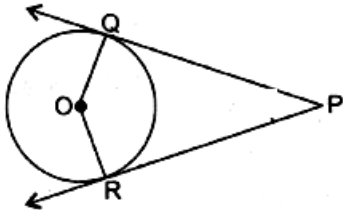
26. Prove that $7\sqrt{2} - 3$ is an irrational number.
27. From a pack of 52 playing cards jacks, queens, kings and aces of red colour are removed. Find the probability that the card drawn is
 (i) a black queen (ii) a red card (iii) a face card
28. For what values of a and b does the following pair of linear equations have an infinite number of solutions?
 $2x + 3y = 7$ and $a(x + y) - b(x - y) = 3a + b - 2$
 (or)
 If $217x + 131y = 913$, $131x + 217y = 827$, then find the value of x and y
29. If $x = r \sin A \cos B$, $y = r \sin A \sin B$ and $z = r \cos A$, Show that $x^2 + y^2 + z^2 = r^2$.
30. If α and β are the zeroes of the quadratic polynomial $p(x) = 2x^2 - 4x + 5$, then find the value of $\frac{1}{\alpha^2} + \frac{1}{\beta^2}$

31. In figure XY and $X'Y'$ are two parallel tangents to a circle with centre O and another tangent AB with point of contact C intersecting XY at A and $X'Y'$ at B , what is the measure of $\angle AOB$?



(or)

If from an external point P of a circle with centre O two tangents PQ and PR are drawn such that $\angle QPR = 120^\circ$. Prove that $2PQ = PO$



SECTION – D (4 questions of 5 marks each)

32. $ABCD$ is a trapezium with $AB \parallel DC$. E and F are points on non-parallel sides AD and BC respectively such that EF is parallel to AB . Show that $\frac{AE}{ED} = \frac{BF}{FC}$
33. A man drives his car on a highway where the speed limit is 60 km/hr . He has to cover a distance of 240 km at a uniform speed on this road. If he increases his speed by 20 km/hr , he can reach his destination one hour earlier. What is his original speed at which he travels?
34. A building is in the form of a right circular cylinder surmounted by a hemispherical dome. The base diameter of the dome is equal to $\frac{2}{3}$ of the total height of the building. Find the height of the building if it contains $67\frac{1}{21}\text{ m}^3$ of air.

(or)

Due to sudden floods, some welfare association jointly requested the government to get 100 tents fixed immediately and offered to contribute 50% of the cost. If the lower part of each tent is in the form of a cylinder of diameter 4.2 m and height 4 m with the conical upper part of same diameter but of height 2.8 m and the canvas to be used costs $\text{Rs. } 100\text{ per m}^2$ find the amount the associations will have to pay.

35. If the median of the following data is 14.4, find x and y . Given, the total frequency is 20.

CI	0-6	6-12	12-18	18-24	24-30
Frequency	4	x	5	y	1

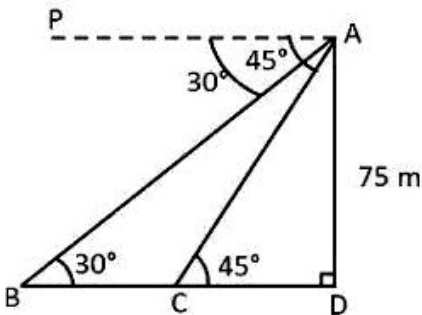
(or)

The following distribution gives the state – wise teacher – student ratio in higher secondary schools of India. Find the mode and mean of this data. Compare and interpret the two measures.

Number of students per teacher	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55
Number of States/UT	3	8	9	10	3	0	0	2

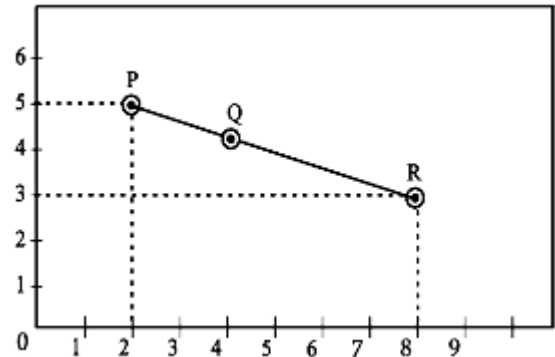
SECTION – E (3 questions of 4 marks each)

36. A light house is a tower with a bright light at the top and serves as a navigational aid and also warns ships of dangerous areas. In the given figure, a man on top of a 75 m high light house is observing two ships approaching towards its base. Observe the figure carefully and answer the following questions.
- Is $\angle PAB = \angle DBA$? Give reason.
 - Find the distance of ship B from the foot of the light house.
 - What is the distance between the two ships?
- (or)



What would have been the distance between the two ships if the ships were on either side of the light house?

37. A group of class X students goes to picnic during vacation. There were three different slides and three friends Kevin, Ria and Tania are sliding in the three slides. The position of the three friends shown by P, Q, R in three different slides are given below.



- (a) Find the distance PQ .
 - (b) Find the midpoint of PR .
 - (c) Find the coordinates of the point on X axis which is equidistant from P and Q .
- (or)

Find the coordinates of the point B which divides the line segment PR internally in the ratio 2: 1

38. Aditya is celebrating his birthday. He invited his friends. He bought a packet of toffees which contains 1230 toffees. He arranged the candies such that in the first row there are 3 candies, in the second there are 5 candies, in the third there are 7 and so on.



- (a) Find the difference in number of candies placed in the 9th row and 4th row.
 - (b) If Aditya decided to make 15 rows, then how many total candies will be placed by him in the same arrangement.
 - (c) Find the total number of rows of candies.
- (or)
- How many candies are there in the last row?

General Instructions:

- All Questions must be attempted, however there are internal choices for 2 marks, 3 marks and 5 marks questions.
- Section A has 20 Questions of 1 mark each.
- Section B has 5 Questions of 2 marks each.
- Section C has 6 Questions of 3 marks each.
- Section D has 4 Questions of 5 marks each.
- Section E has 3 case-based Questions of 4 marks each.
- Do all the working neatly in the working column.
- Any rough work elsewhere should be canceled.
- Give proper labeled diagrams wherever necessary.

SECTION – A Multiple Choice Questions - (1 mark each)

- The pair of equations $x + 2y = 8$ and $2x + 4y - 16 = 0$ is
 (a) consistent (b) consistent and dependent (c) inconsistent (d) none of these
- If the *HCF* and *LCM* of two numbers are respectively $(n - 1)$ and $(n^2 - 1)(n^2 - 4)$ then the product of the two numbers will be
 (a) $(n^2 - 1)(n^2 - 4)$ (b) $(n^2 - 1)(n^2 - 4)(n^2 + 1)$
 (c) $(n + 1)(n^2 - 4)(n - 1)^2$ (d) $(n - 1)(n^2 + 4)(n + 1)^2$
- If $x - 4 = \frac{12}{x} = x \neq 0$ then the value of x is
 (a) 4, 3 (b) -4, 3 (c) 6, -2 (d) -6, 2
- For any natural number n , $6^n - 5^n$ will always end with
 (a) 1 (b) 2 (c) 3 (d) 4
- If α and β are the zeroes of polynomial $p(x) = px^2 - 2x + 3p$ and $\alpha + \beta = \alpha\beta$ then the value of p is
 (a) $-\frac{2}{3}$ (b) $\frac{2}{3}$ (c) $-\frac{1}{3}$ (d) $\frac{1}{3}$
- In $\triangle ABC$ and $\triangle DEF$, $\angle B = \angle E$, $\angle F = \angle C$ and $AB = 3DE$. Then, the two triangles are
 (a) congruent but not similar (b) similar but not congruent
 (c) neither congruent nor similar (d) congruent as well as similar
- Given that $\sin \theta = \frac{a}{b}$, then $\cos \theta$ is equal to
 (a) $\frac{b}{\sqrt{b^2 - a^2}}$ (b) $\frac{b}{a}$ (c) $\frac{\sqrt{b^2 - a^2}}{b}$ (d) $\frac{a}{\sqrt{b^2 - a^2}}$
- The perpendicular bisector of the line segment joining the points $A(2, 3)$ and $B(5, 6)$ cuts the y -axis at
 (a) $(8, 0)$ (b) $(0, 8)$ (c) $(0, -8)$ (d) $(-8, 0)$
- If $\sec^2 \theta (1 + \sin \theta)(1 - \sin \theta) = k$, find k
 (a) $-\frac{1}{2}$ (b) $\frac{1}{2}$ (c) -1 (d) 1
- $\triangle ABC$ is such that $AB = 3cm$, $BC = 2cm$ and $CA = 2.5cm$. If $\triangle ABC \sim \triangle DEF$ and $EF = 4cm$ then perimeter of $\triangle DEF$ is
 (a) 7.5 cm (b) 15 cm (c) 22.5 cm (d) 30 cm
- PQ and PR are two tangents from an external point P to a circle with centre O . If $\angle POR = 55^\circ$, then $\angle QPR$ is
 (a) 35° (b) 55° (c) 70° (d) 80°
- In a circle with centre O and radius 6 cm, AB is a chord of length 6 cm. Then area of sector AOB is
 (a) $10\pi cm^2$ (b) $6\pi cm^2$ (c) $8\pi cm^2$ (d) $5\pi cm^2$
- Find the area of a quadrant of a circle whose circumference is 22 cm.
 (a) $\frac{61}{8} cm^2$ (b) $\frac{69}{8} cm^2$ (c) $\frac{71}{8} cm^2$ (d) $\frac{77}{8} cm^2$
- The volume of the largest right circular cone that can be cut out from a cube of edge 7 cm is
 (a) $89.83 cm^3$ (b) $98.83 cm^3$ (c) $79.83 cm^3$ (d) $97.83 cm^3$
- A number is chosen at random from the numbers $-6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6$. The probability that square of this number is less than or equal to 1 is
 (a) $\frac{9}{13}$ (b) $\frac{3}{13}$ (c) $\frac{8}{13}$ (d) $\frac{7}{13}$
- If the mean of the frequency distribution is 7.5 and $\sum f_i x_i = 120 + 3k$, $\sum f_i = 30$ then k is equal to
 (a) 30 (b) 35 (c) 40 (d) 45
- If the mode of a data is 45, mean is 27 then the median is
 (a) 30 (b) 27 (c) 46 (d) 33

18. If $\cos \theta = \frac{1}{2}$, then the value of $\frac{2 \sec \theta}{1 + \tan^2 \theta}$ is

- (a) $\frac{1}{2}$ (b) $-\frac{1}{2}$ (c) 1 (d) -1

19. Assertion : \sqrt{x} is an irrational number, where x is a prime number.

Reason : Square root of any prime number is an irrational number.

- (a) Both assertion and reason are correct and reason is the correct explanation for the assertion.
 (b) Both assertion and reason are correct and reason is not the correct explanation for the assertion.
 (c) Assertion is correct but reason is false.
 (d) Assertion is false but reason is correct.

20. Assertion : If the coordinates of the midpoints of the sides of the sides AB and AC of ΔABC are $D(3, 5)$ and $E(-3, -3)$ respectively then $BC = 20$ units.

Reason : The line joining the midpoints of two sides of a triangle is parallel to the third side and is equal to half the length of it.

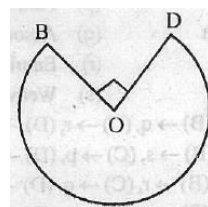
- (a) Both assertion and reason are correct and reason is the correct explanation for the assertion.
 (b) Both assertion and reason are correct and reason is not the correct explanation for the assertion.
 (c) Assertion is correct but reason is false.
 (d) Assertion is false but reason is correct.

SECTION – B Very Short Answer Questions - (2 marks each)

21. In the given figure on the right, the shape of a table top in a restaurant is that of a sector of a circle with centre O and $\angle BOD = 90^\circ$. If $OB = OD = 60$ cm, find the perimeter of the table top. (Use $\pi = 3.14$)

(or)

In a circle of radius 10.5 cm, the minor arc is one fifth of the major arc. Find the area of the sector corresponding to the major arc

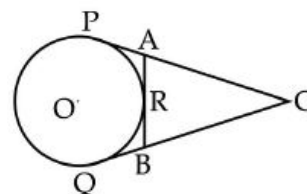


22. Evaluate $\tan^2 45^\circ \sec^2 60^\circ + \operatorname{cosec}^2 45^\circ \tan 60^\circ$

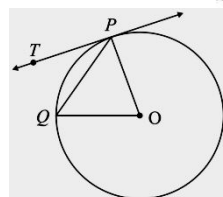
(or)

If $\sec \theta + \tan \theta = x$, then find the value of $\sec \theta$ in terms of x .

23. CP and CQ are tangents to a circle with centre O . ARB is another tangent touching the circle at R . If $CP = 11$ cm and $BC = 7$ cm, then find the length of BR .



24. O is the centre of the circle, PQ is a chord and PT is the tangent at P . If $\angle POQ = 70^\circ$, then calculate $\angle TPQ$.

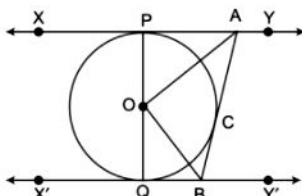


25. Find the value of a so that the point $(3, a)$ lies on the line represented by $2x - 3y = 5$

SECTION – C Short Answer Questions - (3 marks each)

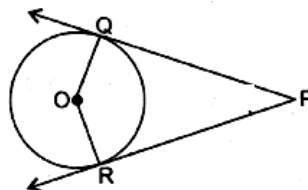
26. Prove that $2\sqrt{5} - 3$ is an irrational number

27. In figure XY and $X'Y'$ are two parallel tangents to a circle with centre O and another tangent AB with point of contact C intersecting XY at A and $X'Y'$ at B , what is the measure of $\angle AOB$?



(or)

If from an external point P of a circle with centre O two tangents PQ and PR are drawn such that $\angle QPR = 120^\circ$. Prove that $2PQ = PO$



28. For what values of a and b does the following pair of linear equations have an infinite number of solutions?

$$2x + 3y = 7 \text{ and } a(x + y) - b(x - y) = 3a + b - 2$$

(or)

If $217x + 131y = 913$, $131x + 217y = 827$, then find the value of x and y

29. Prove that $\sqrt{\frac{1 + \sin A}{1 - \sin A}} = \sec A + \tan A$

30. From a pack of 52 playing cards jacks, queens, kings and aces of red colour are removed. Find the probability that the card drawn is

- (i) a black queen (ii) a red card (iii) a face card

31. If a and β are the zeroes of the quadratic polynomial $p(x) = 2x^2 - 4x + 5$, then find the value of $\frac{1}{\alpha^2} + \frac{1}{\beta^2}$

SECTION – D Long Answer Questions - (5 marks each)

32. A man drives his car on a highway where the speed limit is 60 km/hr . He has to cover a distance of 240 km at a uniform speed on this road. If he increases his speed by 20 km/hr , he can reach his destination one hour earlier. What is his original speed at which he travels?
33. $ABCD$ is a trapezium with $AB \parallel DC$. E and F are points on non-parallel sides AD and BC respectively such that EF is parallel to AB . Show that $\frac{AE}{ED} = \frac{BF}{FC}$
34. A building is in the form of a right circular cylinder surmounted by a hemispherical dome. The base diameter of the dome is equal to $\frac{2}{3}$ of the total height of the building. Find the height of the building if it contains $67\frac{1}{21}\text{ m}^3$ of air.

(or)

Due to sudden floods, some welfare association jointly requested the government to get 100 tents fixed immediately and offered to contribute 50% of the cost. If the lower part of each tent is in the form of a cylinder of diameter 4.2 m and height 4 m with the conical upper part of same diameter but of height 2.8 m and the canvas to be used costs $\text{Rs. } 100\text{ per m}^2$ find the amount the associations will have to pay.

35. If the median of the following data is 14.4, find x and y . Given, the total frequency is 20.

	0-6	6-12	12-18	18-24	24-30
Frequency	4	x	5	y	1

(or)

The following data gives the distribution of total monthly household expenditure of 200 families of a village. Find the modal and mean monthly expenditure. Also interpret the two measures..

Expenditure (in rupees)	1000-1500	1500-2000	2000-2500	2500-3000	3000-3500	3500-4000	4000-4500	4500-5000
Number of families	24	40	33	28	30	22	16	7

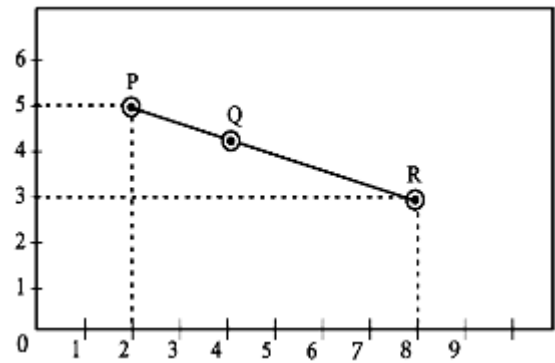
SECTION – E Case Based Questions - (4 marks each)

38. Aditya is celebrating his birthday. He invited his friends. He bought a packet of toffees which contains 1230 toffees. He arranged the candies such that in the first row there are 3 candies, in the second there are 5 candies, in the third there are 7 and so on.



- (a) Find the difference in number of candies placed in the 9th row and 4th row.
- (b) If Aditya decided to make 15 rows, then how many total candies will be placed by him in the same arrangement.
- (c) Find the total number of rows of candies.
- (or)
- How many candies are there in the last row?

37. A group of class X students goes to picnic during vacation. There were three different slides and three friends Kevin, Ria and Tania are sliding in the three slides. The position of the three friends shown by P, Q, R in three different slides are given below.



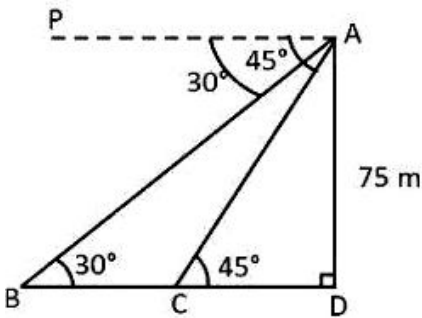
- (a) Find the distance PQ .
 - (b) Find the midpoint of PR .
 - (c) Find the coordinates of the point on X axis which is equidistant from P and Q .
- (or)

Find the coordinates of the point B which divides the line segment PR internally in the ratio $2:1$

38. A light house is a tower with a bright light at the top and serves as a

navigational aid and also warns ships of dangerous areas. In the given figure, a man on top of a 75m high light house is observing two ships approaching towards its base. Observe the figure carefully and answer the following questions.

- (a) Is $\angle PAB = \angle DBA$? Give reason.
 - (b) Find the distance of ship B from the foot of the light house.
 - (c) What is the distance between the two ships?
- (or)



What would have been the distance between the two ships if the ships were on either side of the light house?

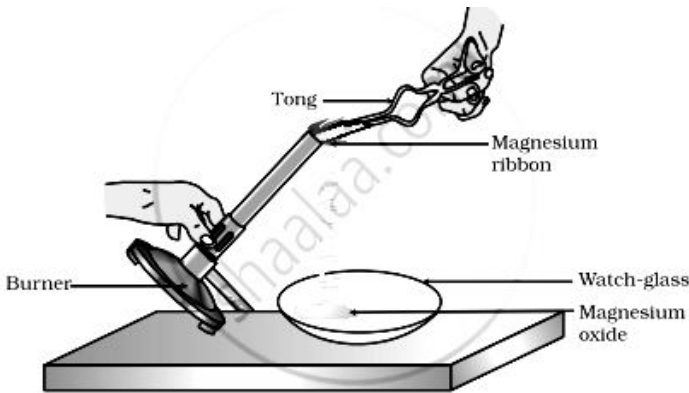
General Instructions:

- (i) This question paper consists of 39 questions in 5 sections.
- (ii) All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.
- (iii) Section A consists of 20 objective type questions carrying 1 mark each.
- (iv) Section B consists of 6 Very Short questions carrying 02 marks each. Answers to these questions should be in the range of 30 to 50 words.
- (v) Section C consists of 7 Short Answer type questions carrying 03 marks each. Answers to these questions should in the range of 50 to 80 words
- (vi) Section D consists of 3 Long Answer type questions carrying 05 marks each. Answers to these questions should be in the range of 80 to 120 words.
- (vii) Section E consists of 3 source-based/case-based units of assessment of 04 marks each with sub –parts.

SECTION – A

Select and write one most appropriate option out of the four options given for each of the questions 1 – 20

- Which gas is released when an acid reacts with a metal?
 (a) CO_2 (b) H_2 (c) SO_2 (d) NO_2
- $AB + CD \rightarrow AD + CB$, This is a reaction of -
 (a) Combination (b) Double displacement (c) Decomposition (d) Displacement
-



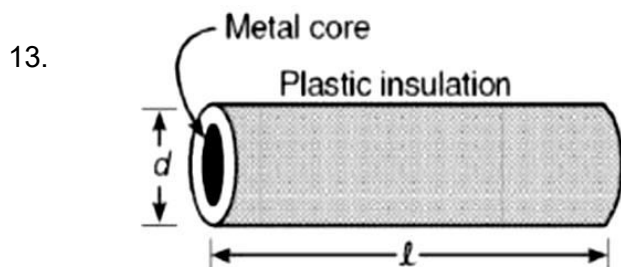
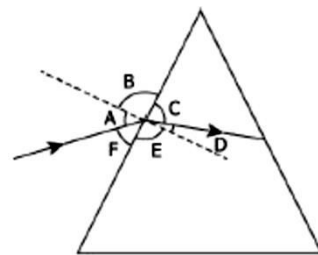
Which of the following is the correct observation of the reaction shown in the above set up?

- (a) Brown powder of Magnesium oxide is formed.
 - (b) Colorless gas which turns lime water milky is evolved.
 - (c) Magnesium ribbon burns with brilliant white light.
 - (d) Reddish brown gas with a smell of burning Sulphur has evolved.
- With the reference to four gases CO_2 , CO , CH_4 and O_2 which one of the options in the table is correct?

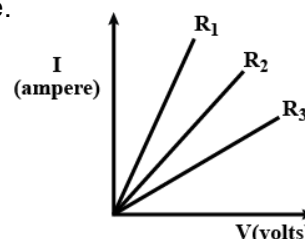
Option	Acidic oxide	Used in treatment of water	Product of respiration	Product of incomplete combustion
(a)	CO	Cl_2	O_2	CO
(b)	CO_2	Cl_2	CO_2	CO
(c)	CO_2	O_2	O_2	CO_2
(d)	CO	O_2	CO_2	CO_2

- Which of these metals requires electricity for extraction from its ore?
 (a) Zinc (b) Silver (c) Copper (d) Aluminium
- Phenolphthalein is-
 (a) Yellow in acidic and pink in basic medium. (b) Pink in acidic and colorless in basic medium.
 (c) Pink in acidic and yellow in basic medium. (d) Colorless in acidic and pink in basic medium.
- Name the pores in a leaf through which respiratory exchange of gases takes place.
 (a) Lenticels (b) Vacuoles (c) Xylem (d) Stomata
- The directional orientation of part of plant in response to light is termed as
 (a) Chemotropism (b) Phototropism (c) Geotropism (d) Hydrotropism
- The plants that have lost their capacity to produce seeds, reproduce by
 (a) Spore formation (b) Budding (c) Regeneration (d) Vegetative Propagation
- The process where characteristics are transmitted from parent to offspring's is called
 (a) Heredity (b) Variation (c) Evolution (d) None of these

11. Which region of the alimentary canal absorbs the digested food?
 (a) Stomach (b) Small intestine (c) Large intestine (d) Liver
12. A ray of light striking a glass prism is shown below. Choose the angle that represent angle of incidence and angle of refraction respectively
 (a) Angle B and E
 (b) Angle C and F
 (c) Angle D and F
 (d) Angle A and D



13. Plastic insulation surrounds a wire having diameter d and length l as shown above. A decrease in the resistance of the wire would be produced by an increase in the -----
 (a) length of the wire (b) area of cross section of the wire
 (c) temperature of the wire (d) None of the above
14. A student carries out an experiment and plots the V-I graph for the three samples of nichrome wire with resistances R_1 , R_2 and R_3 as shown in the figure. Which of the following is true.
 (a) $R_1 = R_2 = R_3$
 (b) $R_1 > R_2 > R_3$
 (c) $R_3 > R_2 > R_1$
 (d) $R_1 < R_3 < R_2$
15. The refractive index of water and dense flint glass are 1.33 and 1.65 respectively. If a ray of light travels from dense flint glass to water, it will bend -----
 (a) Towards normal (b) Away from normal
 (c) Through the normal (d) No bending
16. The strength of the magnetic field due to a straight conductor carrying current -----
 (a) Increases with the current flowing through it.
 (b) Decreases with the increase of thickness of the conductor.
 (c) Increases as we move away from it.
 (d) Does not change with the change of material of the conductor.



Q. no 17 to 20 are Assertion and Reason based questions. These consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- (a) Both A and R are true and R is the correct explanation of A
 (b) Both A and R are true and R is not the correct explanation of A
 (c) A is true but R is false
 (d) A is false but R is true
17. Assertion (A) : When calcium carbonate is heated, it decomposes to give calcium oxide and carbon dioxide.
 Reason (R) : The decomposition reaction takes place on application of heat, therefore it is an endothermic reaction.
18. Assertion (A) : In anaerobic respiration, one of the end product is alcohol.
 Reason (R) : There is an incomplete breakdown of glucose.
19. Assertion (A) : Variations are seen in offspring produced by sexual reproduction.
 Reason (R) : DNA molecule generated by replication is not exactly identical to original DNA.
20. Assertion (A) : In a series circuit, the current is constant throughout the electric circuit.
 Reason (R) : All electric devices need equal currents to operate properly.

SECTION – B

Q. no. 21 to 26 are very short answer questions.

21. A clear solution of slaked lime is made by dissolving Ca(OH)_2 in an excess of water. This solution is left exposed to air. The solution slowly goes milky as a faint white precipitate forms. Explain why a faint white precipitate forms, support your response with the help of a chemical equation.
 (or)

Keerti added dilute Hydrochloric acid to four metals and recorded her observations as shown in the table given below:

21.

Metal	Gas Evolved
	Yes
	Yes
	No
Z	Yes

Select the correct observation(s) and give chemical equation(s) of the reaction involved.

22. Write the function of the following in the human alimentary canal:

- (a) Saliva (b) HCl in stomach (c) Bile juice (d) Villi

23. (a) Define synapse.

(b) What happens at the synapse between two neurons?

24. What is food chain? Why is the flow of energy in an ecosystem unidirectional? Explain briefly.

25. An electric oven of $2KW$ power rating is operated in a domestic electric circuit ($220V$) that has a current rating $5A$. (i) What is the current drawn? (ii) What will happen to the fuse wire? Justify your answer.

26. What are the differences between aerobic and anaerobic respiration? Name some organisms that use anaerobic mode of respiration.

SECTION – C

Q.no. 27 to 33 are short answer questions.

27. Give any three methods to prevent rancidity.

28. (a) What are antacids? What is their role?

(b) What is olfactory indicators? Give one example

(c) What is POP chemically and write its name.

29. (a) The depletion of ozone layer is a cause of concern. Why?

(b) What destructive effect do chlorofluorocarbons bring about in the atmosphere?

(or)

(a) What is biological magnification?

(b) What are the problems caused by the non-biodegradable wastes that we generate?

30. (a) Define dispersion of white light.

(b) Explain with the help of a neat labeled ray diagram the combination of white light using two prisms.

31. A student uses a concave mirror for image formation when the object is placed at different positions. Find the image distance and magnification if the object is placed at a distance of 10 cm from the pole of a concave mirror of focal length 15 cm . Also draw the respective ray diagram.

32. (i) Three resistors of resistances 5Ω , 10Ω and 20Ω are connected in parallel in an electrical circuit.

What will be the equivalent resistance and total current if the potential difference is $20V$.

(ii) Also draw the respective circuit diagram.

(or)

(i) State Joules law of heating

(ii) An electric iron consumes energy at a rate of $800W$ when heating is at the maximum and $440W$ when the heating is at the minimum. The potential difference maintained is $220V$, Calculate the current in each case.

33. What do the following transport

- (a) Xylem (b) Phloem (c) Pulmonary vein (d) Vena cava
(e) Pulmonary artery (f) Aorta

SECTION – D

Q.no. 34 to 36 are Long answer questions.

34. Shristi heated Ethanol with a compound A in presence of a few drops of concentrated sulphuric acid and observed a sweet smelling compound B is formed. When B is treated with sodium hydroxide it gives back Ethanol and a compound C.

(a) Identify A and C

(b) Give one use each of compounds A and B.

(c) Write the chemical reactions involved and name the reactions.

(or)

(a) What is the role of concentrated Sulphuric acid when it is heated with Ethanol at $443K$. Give the reaction involved?

- (b) Reshu by mistake forgot to label the two test tubes containing Ethanol and Ethanoic acid. Suggest an experiment to identify the substances correctly? Illustrate the reactions with the help of chemical equations

35. (a) Name the part marked 'A' in the diagram.

(b) How does 'A' reaches part 'B',

(c) State the importance of 'C',

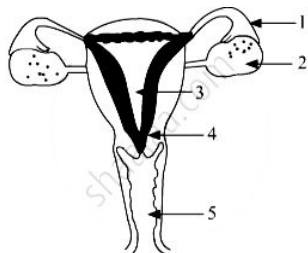
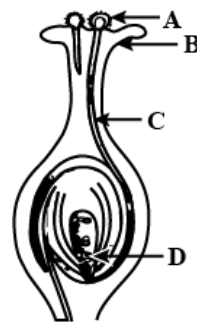
(d) What happens to the part marked 'D' after fertilisation is over,

(e) The part of the flower that forms a seed is

- (i) Ovule (ii) Carpel (iii) Ovary (iv) Stamen

(or)

(a) Identify the given diagram. Name the parts of 1 to 5,



(b) What are the various ways to avoid pregnancy? Elaborate any one method.

36. (a) Explain with the help of a neat diagram, how a magnetic field is produced on a current carrying conductor in the form of a circular coil or circular loop.

(b) Mark the direction of electric current and magnetic field in the above diagram

(c) State the rule related with this activity.

(or)

(a) Explain with the help of a neat diagram, how a force is exerted on a current carrying conductor placed in a permanent magnetic field.

(b) Mark the direction of electric current and magnetic field in the above diagram.

(c) State the rule related with this activity.

SECTION – E

Q.no. 37 to 39 are case based/data -based questions with 2 to 3 short sub-parts. Internal choice is provided in one of these sub-parts.

37. On the basis of reactivity of different metals with oxygen, water and acids as well as displacement reactions, the metals have been arranged in the decreasing order of their reactivity. This arrangement is known as activity series or reactivity series of metals. The basis of reactivity is the tendency of metals to lose electrons. If a metal can lose electrons easily to form positive ions, it will react readily with other substances. Therefore, it will be a reactive metal. On the other hand, if a metal loses electrons less rapidly to form a positive ion, it will react slowly with other substances. Therefore such a metal will be less reactive.

(a) Among the given metals such as *Al*, *Zn*, *Fe* and *Ag*, Which metal is less reactive than hydrogen? Justify your answer.

(b) Which metal reacts vigorously with oxygen?

(c) Give the correct order of reactivity for the metals, *Na*, *Cu*, *Mg*, *Al*.

(or)

(d) Hydrogen gas is not evolved when a metal reacts with nitric acid. It is because HNO_3 is a strong oxidizing agent. It oxidizes the H_2 produced to water and itself gets reduced to any of the nitrogen oxides (N_2O , NO , NO_2). Give the names of the metals which react with very dilute HNO_3 to evolve H_2 gas.

38. Mendel was educated in a monastery and went on to study science and mathematics at the University of Vienna. Failure in the examinations for a teaching certificate did not suppress his zeal for scientific quest. He went back to his monastery and started growing peas. Many others had studied the inheritance of traits in peas and other organisms earlier, but Mendel blended his knowledge of science and mathematics and was the first one to keep count of individuals exhibiting a particular trait in each generation. This helped him to arrive at the laws of inheritance.

Based on the above information, answer the following questions.

(a) Why Mendel selected garden pea as his experimental material?

(b) A pea plant with blue colour flower denoted by 'BB' is cross-bred with a pea plant with white flower denoted by 'bb'.

(i) What is the expected colour of the flowers in their F1 progeny?

(ii) What is the expected phenotypic ratio in F2 generation?

(c) What do you mean by dominant and recessive trait?

(or)

Name the segment of DNA that codes for a specific character.

39. The molecules of air and other fine particles in the atmosphere have size smaller than the wavelength of visible light. So they are more effective in scattering light of shorter wavelengths at the blue end than light of longer wavelengths at the red end. The red light has a wavelength about 1.8 times greater than blue light. Thus, when sunlight passes through the atmosphere, the fine particles in air scatter the blue colour more strongly than red. The scattered blue light enters our eyes. If the earth had no atmosphere, there would not have been any scattering. Why do stars appear higher than they actually are? Does this have something to do with the scattering of light? Well, the answer to this is 'No'. Stars appear higher than they are because of 'Atmospheric Refraction'.

- (a) The sky appears dark to an astronaut. Why?
- (b) Arrange the following colours of visible light in their increasing order of wavelength Orange, Blue, Violet, Green and Red
- (c) Why do stars appear to twinkle but planets do not?

(or)

What do you mean by Tyndall effect? Give one example

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What do you mean by Tyndall effect? Give one example

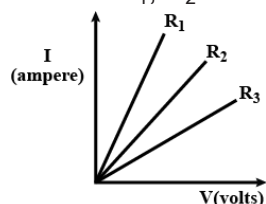
General instructions:

- This question paper consists of 39 questions in 5 sections.
- All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.
- Section A consists of 20 objective type questions carrying 1 mark each.
- Section B consists of 6 Very Short questions carrying 02 marks each. Answers to these questions should be in the range of 30 to 50 words.
- Section C consists of 7 Short Answer type questions carrying 03 marks each. Answers to these questions should be in the range of 50 to 80 words.
- Section D consists of 3 Long Answer type questions carrying 05 marks each. Answers to these questions should be in the range of 80 to 120 words.
- Section E consists of 3 source-based/case-based units of assessment of 04 marks each with sub-parts.

SECTION – A

Select and write one most appropriate option out of the four options given for each of the questions: 1 – 20.

- Name the compound used for removing permanent hardness of water.
a) Caustic Soda b) Washing Soda c) Bleaching Powder d) Baking Soda
- Chips packets are generally flushed with an inert gases to prevent rancidity. Find the gas used.
a) H_2 b) N_2 c) Cl_2 d) O_2
- The chemical reaction in which heat energy is liberated during the reaction is known as-
a) Precipitation b) Endothermic c) Exothermic d) None of these
- Amalgamation is the process of making alloys with one of the following metals.
a) Silver b) Copper c) Mercury d) Nickel
- Which allotrope of carbon shows the property of electrical conduction?
a) Fullerene c) Diamond (c) Coke d) Graphite
- If we add some sodium carbonate in distilled water, the pH of solution will be
a) less than 7 b) exactly 7 c) very close to 7 d) more than 7
- Name the pores in a leaf through which respiratory exchange of gases takes place.
a) Lenticels b) Vacuoles c) Xylem d) Stomata
- The directional orientation of part of plant in response to gravity is termed as
a) Chemotropism b) Phototropism c) Geotropism d) Hydrotropism
- Fertilisation in human beings takes place in
a) Uterus b) Vagina c) Fallopian tube d) Cervix
- The process where characteristics are transmitted from parent to offspring's is called
a) Heredity b) Variation c) Evolution d) None of these
- Rings of cartilage present in the throat ensure that
a) Air is filtered b) Air is at room temperature
c) Air passage does not collapse d) Air is free of microbes
- A complete circuit is left on for several minutes, causing the connecting copper wire to become hot. As the temperature of the wire increases, the electrical resistance of the wire _____
a) decreases b) remains the same
c) increases d) increases for some time and then decreases.
- How will the size of the image have formed by a convex lens change, when an object moves closer to the lens.
a) Image becomes highly magnified b) Image becomes point sized
c) Size of the image remains unchanged d) Image becomes diminished
- The strength of magnetic field due to a current carrying solenoid is _____
a) Independent of the material of the coil
b) Uniform inside the solenoid
c) independent of the number of turns per unit length of the solenoid
d) Independent of the strength of flowing current
- The far point of a myopic person is 60 cm in front of the eye. What should be the power of lens required to correct this defect of vision?
a) 0.16 D b) -0.16 D (minus 0.16D) c) 1.67 D d) -1.67 D (minus 1.67D)
- A student carries out an experiment and plots the $V-I$ graph of three samples of nichrome wire with resistances R_1 , R_2 and R_3 respectively (Figure). Which of the following is true ?



- $R_1 = R_2 = R_3$
- $R_1 > R_2 > R_3$
- $R_3 > R_2 > R_1$
- $R_2 > R_3 > R_1$

Q. no 17 to 20 are Assertion- Reasoning based questions.

These consist of two statements - Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- a) Beth A and R are true and R is the correct explanation of A
b) Both A and R are true and it is not the correct explanation of A
c) A is true but R is false
d) A is False but R is true

17) Assertion: A chemical reaction is a short hand method of representing a chemical reaction.

Reason: Formulae of elements and compounds are changed to balance an equation

18) Assertion (A): In anaerobic respiration, one of the end product is alcohol.

Reason (R): There is an incomplete breakdown of glucose.

19) Assertion (A): Variations are seen in offspring produced by sexual reproduction.

Reason (R): DNA molecule generated by replication is not exactly identical to original DNA

20) Assertion (A): A ray of light passing through the centre of curvature of a concave mirror after reflection, gets reflected back along the same path

Reason (R): The incident ray fall on the mirror along the normal to the reflecting surface.

SECTION – B

On 21 to 26 are very short answer questions

- 21) a) Define metallurgy b) Define Anode mud

(OR)

- List out any two allotropes of carbon atom?
- Give any two properties of any one of the allotropes of carbon.

22) Write the function of the following in the human alimentary canal

- a) Saliva b) HCl in stomach c) Bile juice d) Villi

23) a) Define synapse.

- b) What happens at the synapse between two neurons

24) Name the wastes which are generated in your house daily. What measures would you take for their disposal?

25) Draw a neat labeled circuit diagram of a domestic household circuit.

26) a) Mention any two components of blood.

- b) Write any two differences between arteries and veins

SECTION – C

Q. no. 27 to 33 are short answer questions

27) Define Oxidation and reduction. Give one example for redox reaction

28) a) How will you prepare washing soda?

- b) Why washing soda is used in water treatment?

29) a) The depletion of ozone layer is a cause of concern. Why?

- b) What destructive effect do chlorofluorocarbons bring about in the atmosphere?

OR

- a) What is biological magnification?
b) What are the problems caused by the non-biodegradable wastes that we generate?

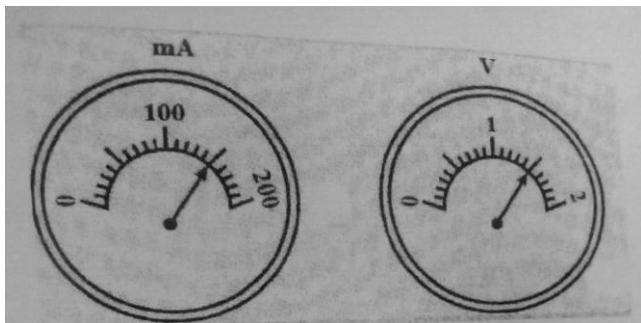
30) a) If an object is placed 20 cm in front of the convex lens of focal length 10 cm, find the distance from the lens at which a screen should be placed in order to obtain a sharp image.

- b) Draw the ray diagram to justify your answer.

31) Explain the function of the following

- a) Iris b) Ciliary muscles c) Optic nerves

32) i) The current flowing through a resistor and the potential difference across its ends are shown in the given diagram. Find the resistance?



- ii) What are the advantages of parallel combination of resistors with respect to the series combination of resistors?

OR

- i) Tungsten is used exclusively for making filament of electric lamps. Give reason.

- ii) Calculate and confirm which of the following uses more energy, a 350W TV set in 2 hours or a 4400W

vacuum cleaner in 15minutes

- 33) a) Define excretion.
b) Name the basic filtration unit present in the kidney
c) Draw excretory system in human beings and label the following organs of excretory system which perform following functions:
i) Form urine
ii) is a long tube which collects urine from kidney.
iii) Store urine until it is passed out.

SECTION - D

Q. no. 34 to 36 are Long answer questions.

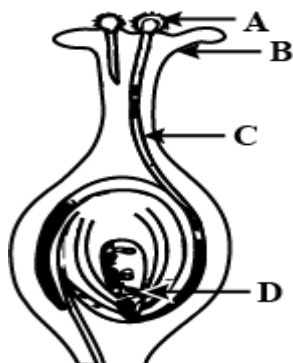
34) In hydrocarbon chain, one or more hydrogen atoms can be replaced by other atoms in accordance with their valencies. The species which replaces the hydrogen atom is called X. These X impart chemical properties to the compound which contain one of the heteroatom is oxygen. The compound which contain X upon heating with $\text{Con H}_2\text{SO}_4$ gives an unsaturated compound Y.

- a) Identify X and Y.
b) Give the respective chemical equation for the formation of compound Y.
c) Draw the electron dot structure of compound Y.
d) Give the respective chemical equation when Y is subject to reduction.

OR

- a) Define combustion and why it is exothermic? Give one example.
b) Describe the oxidation reaction of ethanol with proper reaction conditions and equation

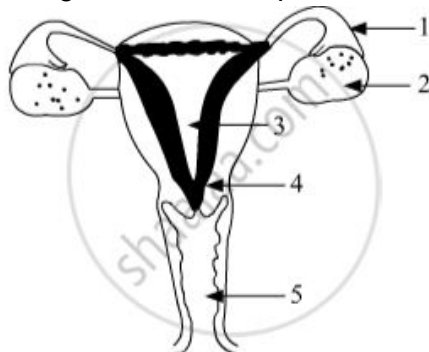
35)



- a) Name the part marked 'A' in the diagram
b) How does 'A' reaches part "B"
c) State the importance of "C".
d) What happens to the part marked 'D' after fertilisation is over.
e) The part of the flower that forms a seed is
i) Ovule ii) Carpel iii) Ovary iv) Stamen

OR

- a) Identify the given diagram. Name the parts of 1 to 5.



- b) What are the various ways to avoid pregnancy? Elaborate any one method.
36) a) Explain with the help of a neat diagram, how a force is exerted on a current carrying conductor placed in a permanent magnetic field.
b) Mark the direction of electric current and magnetic field in the above diagram.
c) State the rule related with this activity.

OR

- a) Explain with the help of neat diagram, how a magnetic field is produced on a current carrying conductor in the form of a circular coil or circular loop.
b) Mark the direction of electric current and magnetic field in the above diagram.
c) State the rule related with this activity

SECTION - E

Q. no 37 to 39 are case-based - data-based questions with 2 to 3 short sub-parts. Internal choice is provided in one sub-parts.

37) Two students decided to investigate the effect of water and air on iron object under identical experimental conditions. They measured the mass of each object before placing it partially immersed in 10 ml of water. After a few days, the object was removed, dried and their masses were measured. The table shows their results.

Student	Object	Mass of Object before Rusting in. g	Mass of the coated object in. g
A	Nail	3.0	3.15
B	Thin plate	6.0	6.33

- a) What might be the reason for the varied observations of the two students?
- b) In another set up the students coated iron nails with zinc metal and noted that, iron nails. coated with zinc prevents rusting. They also observed that zinc initially acts as a physical barrier, but an extra advantage of using zinc is that it continues to prevent rusting even if the layer of zinc is damaged. Name this process of rust prevention and give any two other methods to prevent rusting.

OR

- c) In which of the following applications of Iron, rusting will occur most? Support your answer with valid reason.



- A - Iron Bucket electroplated with Zinc
- B - Electricity cables having iron wires covered with aluminium
- C - Iron hinges on a gate
- D - Painted iron fence

38) Mendel was educated in a monastery and went on to study science and mathematics at the University of Vienna. Failure in the examinations for a teaching certificate did not suppress his zeal for scientific quest. He went back to his monastery and started growing peas. Many others had studied the inheritance of traits in peas and other organisms earlier, but Mendel blended his knowledge of science and mathematics and was the first one to keep count of individuals exhibiting a particular trait in each generation. This helped him to arrive at the laws of inheritance.

Based on the above information, answer the following questions.

- a) Why Mendel selected garden pea as his experimental material?
- b) A pea plant with blue colour flower denoted by BB' is cross-bred with a pea plant with white flower denoted by 'bb'
- i) What is the expected colour of the flowers in their F1 progeny?
- ii) What is the expected phenotypic ratio in F2 generation?
- c) What do you meant by dominant and recessive trait?

OR

Name the segment of DNA that codes for a specific character

39) The molecules of air and other fine particles in the atmosphere have size smaller than the wavelength of visible light. So they are more effective in scattering light of shorter wavelengths at the blue end than light of longer wavelengths at the red end. The red light has a wavelength about 1.8 times greater than blue light. Thus, when sunlight passes through the atmosphere, the fine particles in air scatter the blue colour more strongly than red. The scattered blue light enters our eyes. If the earth had no atmosphere, there would not have been any scattering. Why do stars appear higher than they actually are? Does this have something to do with the scattering of light? Well, the answer to this is 'No' Stars appear higher than they are because of "Atmospheric Refraction.

- a) The sky appears dark to an astronaut. Why?
- b) Arrange the following colours of visible light in their increasing order of wavelength
Orange, Blue, Violet, Green and Red
- c) Why do stars appear to twinkle but planets do not?

OR

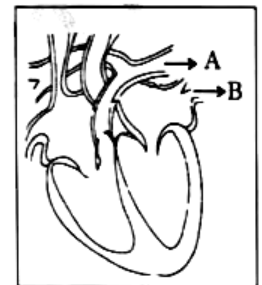
What do you mean by Tyndall effect? Give one example

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SECTION – A

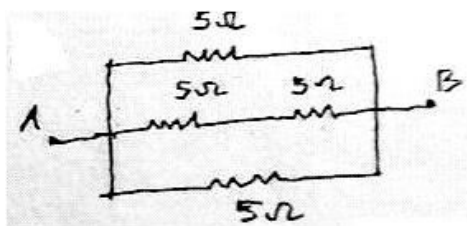
1. What is the correct increasing order of the P^H values of the following solutions with equal concentrations?
(a) $HCl < NaOH < CH_3COOH$ (b) $HCl < CH_3COOH < NaOH$
(c) $NaOH < HCl < CH_3COOH$ (d) $CH_3COOH < HCl < NaOH$
2. A shiny brown substance X on heating on air turns black and a new compound Y is formed. Name the substance X and Y .
(a) $X = Fe$ $Y = FeO$ (b) $X = Cu$ $Y = Cu(OH)_2$
(c) $X = Cu$ $Y = CuO$ (d) $X = Al$ $Y = Al_2O_3$
3. Fatty foods become rancid because of which one of the following
(a) Oxidation (b) Reduction (c) corrosion (d) Hydrogenation
4. An aqueous solution of a salt has basic nature. What are the types of acid and base from which this salt is formed?
(a) a weak acid and weak base (b) strong acid and weak base
(c) a strong acid and strong base (d) weak acid and strong base
5. Name the gas evolved when Magnesium reacts with dilute HCl
(a) Hydrogen (b) Chlorine (c) Oxygen (d) Nitrogen
6. In which of the following compounds – OH is the functional group
(a) Propane (b) Propanone (c) Propanol (d) Propanal
7. A molecule of soap has
(a) one hydrophobic head and one hydrophilic tail (b) one hydrophilic tail and one hydrophilic head
(c) only one hydrophobic head (d) two hydrophilic head
8. Consider the following statements in connection with the functions of the blood vessels marked A and B in the diagram of a human heart as shown.
(i) Blood vessel A - It carries Carbon dioxide rich blood to the lungs.
(ii) Blood vessel B - It carries Oxygen rich blood from the lungs.
(iii) Blood Vessel B - Left atrium relaxes as it receives blood from the blood vessel.
(iv) Blood Vessel A - Right atrium has thick muscular wall as it has to pump blood to this blood vessel.



The Correct Statements are

- (a) (i) and (ii) only (b) (ii) and (iii) only (c) (ii), (iii) and (iv) (d) (i), (ii) and (iii)
9. What prevents backflow of blood inside the heart during contraction?
(a) Valves in heart (b) Thick muscular walls of ventricles
(c) Thin walls of atria (d) All of these
 10. In a synapse, chemical signal is transmitted from
(a) Dendritic end of one neuron to axonal end of another neuron.
(b) Axon to cell body of the same neuron.
(c) Cell body to axonal end of the same neuron.
(d) Axonal end of one neuron to dendritic end of another neuron.
 11. Reflex arc is formed by
(a) muscle → brain → receptor (b) muscle → spinal cord → receptor
(c) receptor → brain → muscle (d) receptor → spinal cord → muscle
 12. Many unicellular organisms reproduce by the process of
(a) fission (b) ovulation (c) regeneration (d) non-disjunction
 13. An electric current of 3 A flows through a circuit for 20 minutes. What is amount of charges flowing
(a) 60 C (b) 1 C (c) 3600 C (d) None of these

14. What are the factors which govern the force experienced by a current carrying conductor placed in a uniform magnetic field depends?
15. Find the equivalent resistance across the two ends A and B of the following circuits



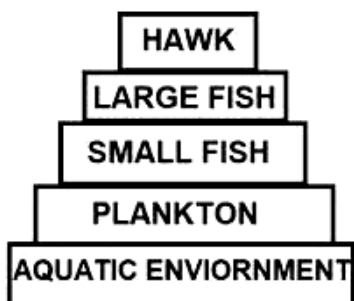
- (a) $2.5\ \Omega$ (b) $2.0\ \Omega$ (c) $0.5\ \Omega$ (d) $1.5\ \Omega$
16. The most important safety method used for protecting home appliances from short circuiting or overloading is
- (a) earthing (b) use of fuse (c) use of stabilizers (d) use of electric meter

Q. no 17 to 20 are Assertion and Reason based questions. These consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- (a) Both A and R are true and R is the correct explanation of A
 (b) Both A and R are true and R is not the correct explanation of A
 (c) A is true but R is false
 (d) A is false but R is true
17. Assertion (A) : Usually the sulphide ore is converted to oxide before reduction
 Reason (R) : Reduction of oxides occurs easier
18. Assertion (A) : Humans are not truly aerobic
 Reason (R) : They produce lactic acid anerobically
19. Assertion (A) : In human male, testies are extra ahdominal which are present inside the scrotum
 Reason (R) : Scrotum has a relatively lower temperature needed for the production and storage of sperms
20. Assertion (A) : A cell is a device which converts chemical energy into electrical energy
 Reason (R) : Cell maintains a constant potential difference between its terminals for a long time

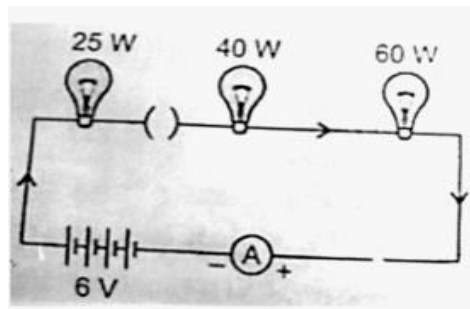
SECTION – B

21. What is methane? Draw its electron dot structure. Name the type of bonds formed in this compound
 (or)
 (i) Why covalent compounds are poor conductor of electricity and have low melting and boiling point
 (ii) What happens when this compound burnt in oxygen
22. Two green plants are kept separately in oxygen free containers, one in the dark and the other in continuous light which one will be longer? Give reasons.
23. Why does absorption of digested food occurs mainly in the small intestine?
24. Two pea plants one with round yellow seeds (RRYY) and another with wrinkled green (rryy) seeds produce F_1 progeny, when the F_1 plants are self – pollinated
 (a) Which new combination of characters are expected in the F_2 progeny?
 (b) What is the phenotypic ratio in the F_2 generation?
25. (a) Define absolute Refractive index
 (b) If the angle of incidence (i) for a light ray in air be 45° and the angle of refraction (r) in glass be 30° . Find refractive index?
 (or)
 (a) Define power of a lens
 (b) A concave lens is of focal length 10 cm what is its power?
26. (a) Define : Food Chain
 (b) DDT was sprayed in a lake to regulate breeding of mosquitoes. How would it affect the trophic levels in the following food chain associated with a lake? Justify your answer.



SECTION – C

27. A sanitary worker uses a white chemical having strong smell of chlorine gas to disinfect the water tank.
- Identify the chemical compound, write the chemical formula and chemical name
 - Give chemical equation for its preparation
 - Write its two uses other than disinfection
28. Write the chemical equations involved in the following chemical reactions
- White washing
 - Black and White Photography
29. (a) What is endocrine gland?
(b) Name any 2 endocrine glands
(c) Write the hormone secreted by them
- (or)
- How is lymph an important fluid involved in transportation?
 - If lymphatic vessels get blocked, how would it affect the human body elaborate?
30. An object 3 cm in height is placed 20 cm from convex lens of focal length 12 cm. Find the nature, position and height of the image
31. (a) Give the usual name of the following:
- The screen which image is formed in the eye
 - the part which control the amount of light entering our eye
- (b) What are the roles of the following in human eye (i) Pupil (ii) Cornea
- (c) Name the muscles responsible for bringing change in focal length of the eye
- (or)
- What is the colour of danger signal? Why?
 - Why does the sky appear dark instead of blue to an astronaut?
 - Out of light blue and red colours which one is scattered most?
32. (a) Would any bulb glow when plug key is open? .
- (b) Write the order of brightness of the bulb when key is closed. Give reason

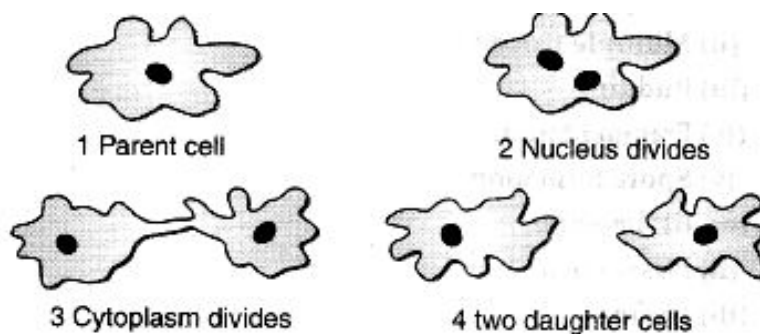


33. (a) Differentiate between Food chain and Food Web
(b) "Energy flow in food chain is always unidirectional". Justify this statement

SECTION – D

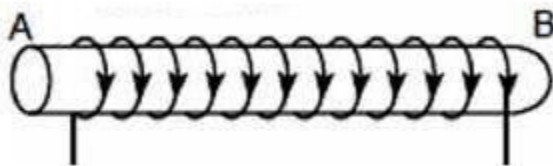
34. (i) How will you show experimentally that metals are good conductors of heat
(ii) Describe the extraction of mercury from its ore cinnabar
- (or)
- What is ionic bond?
 - Show the formation of calcium oxide by transfer of electrons
 - Name the ions present in this compound
 - List four important characteristics of this compound
35. (a) Explain the contraceptive diseases prevent the STD by different methods?
(b) What would be the reason for adopting contraceptive methods?
- (or)

Identify the process depicted in the picture given below and answer the Questions that follows



- Name the organism that divides by the above process.
 - Compare the above process with multiple fission.
 - State the type of reproduction in the above process and define it.
 - Differentiate between fission in Amoeba and Leishmania.
36. (a) Define Solenoid

- (b) Draw a neat diagram to show the magnetic field in a solenoid
- (c) The diagram shows a coil of wire wound on a soft iron core forming an electro magnet. A current is passed through the coil in the direction indicated by the arrows. Mark N and S poles produced in the iron core



- (d) List two distinguish features between a solenoid a bar magnet

SECTION – E

Read the given passage and answer the questions based on passage and related studies Topics

37. Covalent compounds are formed by sharing of electrons each element tries to attain nearest noble gas electron each. Single covalent is formed when atoms of element share two electrons each double bond is formed. It atoms of elements share three electrons each triple covalent bond is formed.

- Draw electron dot structure of ethane
- Which type of bond is present in N_2 show by electron dot diagram
- How many covalent bonds are present in butane

(or)

Draw electron dot diagram of H_2O and NH_3

38. Pure bred pea plant with smooth seeds (dominant characteristic) were crossed with pure bred pea plant with wrinkled seeds (recessive characteristic). The F_1 generation was self pollinated to give rise to the F_2 generation.

- What is the expected observation of the F_1 generation of plants
- What is the expected observation of the F_2 generation of plants?
- What will be the genotype ratio of F_2 offspring, also mention whether it will be homogygous (or) hetrogygous

(or)

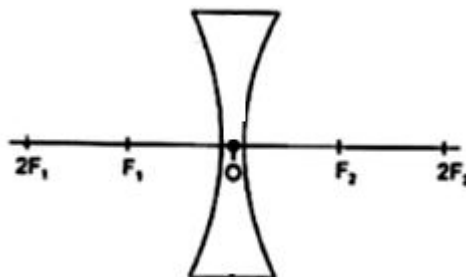
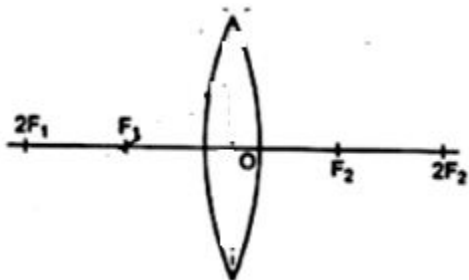
Draw the Punett Square

39. Lenses are objects made of transparent materials such as glass or clear plastic that are curved surface. There are two main kinds of lenses diverging lenses and converging lenses.

- A convex lens is cut horizontally. Its new focal length will
 - reduce to half of its original focal length
 - remain same
 - increase to one half times its original focal length
 - decrease to one half times its original focal length

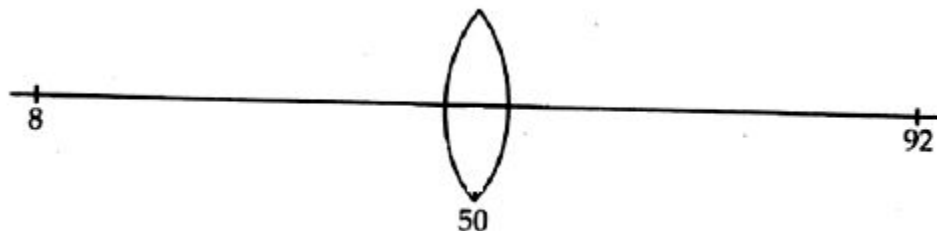
- As light travels from a rarer to a denser medium it will have
 - increased velocity
 - decreased velocity
 - decreased wavelength
 - both (b) and (c)

- Redraw the ray diagram given below in your answer paper



(or)

An object placed on a metrescale at 8 cm mark was focussed on a white screen placed at 92 cm mark. Using a converging lens placed on the scale at 50 cm mark. Find the focal length of the converging lens.



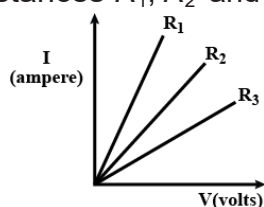
General instructions:

- This question paper consists of 39 questions in 5 sections.
- All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.
- Section A consists of 20 objective type questions carrying 1 mark each.
- Section B consists of 6 Very Short questions carrying 02 marks each. Answers to these questions should be in the range of 30 to 50 words.
- Section C consists of 7 Short Answer type questions carrying 03 marks each. Answers to these questions should be in the range of 50 to 80 words.
- Section D consists of 3 Long Answer type questions carrying 05 marks each. Answers to these questions should be in the range of 80 to 120 words.
- Section E consists of 3 source-based/case-based units of assessment of 04 marks each with sub-parts.

SECTION – A

Select and write one most appropriate option out of the four options given for each of the questions: 1 – 20.

- Name the compound used for removing permanent hardness of water.
 - Caustic Soda
 - Washing Soda
 - Bleaching Powder
 - Baking Soda
- Chips packets are generally flushed with an inert gases to prevent rancidity. Find the gas used.
 - H₂
 - N₂
 - Cl₂
 - O₂
- The chemical reaction in which heat energy is liberated during the reaction is known as-
 - Precipitation
 - Endothermic
 - Exothermic
 - None of these
- Amalgamation is the process of making alloys with one of the following metals.
 - Silver
 - Copper
 - Mercury
 - Nickel
- Which allotrope of carbon shows the property of electrical conduction?
 - Fullerene
 - Diamond
 - Coke
 - Graphite
- If we add some sodium carbonate in distilled water, the pH of solution will be
 - less than 7
 - exactly 7
 - very close to 7
 - more than 7
- Name the pores in a leaf through which respiratory exchange of gases takes place.
 - Lenticels
 - Vacuoles
 - Xylem
 - Stomata
- The directional orientation of part of plant in response to gravity is termed as
 - Chemotropism
 - Phototropism
 - Geotropism
 - Hydrotropism
- Fertilisation in human beings takes place in
 - Uterus
 - Vagina
 - Fallopian tube
 - Cervix
- The process where characteristics are transmitted from parent to offspring's is called
 - Heredity
 - Variation
 - Evolution
 - None of these
- Rings of cartilage present in the throat ensure that
 - Air is filtered
 - Air is at room temperature
 - Air passage does not collapse
 - Air is free of microbes
- A complete circuit is left on for several minutes, causing the connecting copper wire to become hot. As the temperature of the wire increases, the electrical resistance of the wire_____
 - decreases
 - remains the same
 - increases
 - increases for some time and then decreases.
- How will the size of the image have formed by a convex lens change, when an object moves closer to the lens.
 - Image becomes highly magnified
 - Image becomes point sized
 - Size of the image remains unchanged
 - Image becomes diminished
- The strength of magnetic field due to a current carrying solenoid is_____
 - Independent of the material of the coil
 - Uniform inside the solenoid
 - independent of the number of turns per unit length of the solenoid
 - Independent of the strength of flowing current
- The far point of a myopic person is 60 cm in front of the eye. What should be the power of lens required to correct this defect of vision?
 - 0.16 D
 - 0.16 D (minus 0.16D)
 - 1.67 D
 - 1.67 D (minus 1.67D)
- A student carries out an experiment and plots the $V-I$ graph of three samples of nichrome wire with resistances R_1 , R_2 and R_3 respectively (Figure). Which of the following is true ?
 - $R_1 = R_2 = R_3$
 - $R_1 > R_2 > R_3$
 - $R_3 > R_2 > R_1$
 - $R_2 > R_3 > R_1$



These consist of two statements - Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- ## SECTION – B

21) a) Define metallurgy b) Define Anode mud
(OR)

- SECTION – C

27) Define Oxidation and reduction. Give one example for redox reaction

28) a) How will you prepare washing soda?
b) Why washing soda is used in water treatment?

29) a) The depletion of ozone layer is a cause of concern. Why?
b) What destructive effect do chlorofluorocarbons bring about in the atmosphere?

OR

-

- OR

- i) Tungsten is used exclusively for making filament of electric lamps. Give reason.

- ii) Calculate and confirm which of the following uses more energy, a 350W TV set in 2 hours or a 4400W vacuum cleaner in 15 minutes
- 33) a) Define excretion.
 b) Name the basic filtration unit present in the kidney
 c) Draw excretory system in human beings and label the following organs of excretory system which perform following functions:
 i) Form urine
 ii) is a long tube which collects urine from kidney.
 iii) Store urine until it is passed out.

SECTION - D

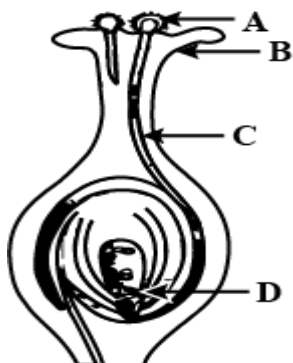
Q. no. 34 to 36 are Long answer questions.

34) In hydrocarbon chain, one or more hydrogen atoms can be replaced by other atoms in accordance with their valencies. The species which replaces the hydrogen atom is called X. These X impart chemical properties to the compound which contain one of the heteroatom is oxygen. The compound which contain X upon heating with $\text{Con H}_2\text{SO}_4$ gives an unsaturated compound Y.

- a) Identify X and Y.
 b) Give the respective chemical equation for the formation of compound Y.
 c) Draw the electron dot structure of compound Y.
 d) Give the respective chemical equation when Y is subject to reduction.

OR

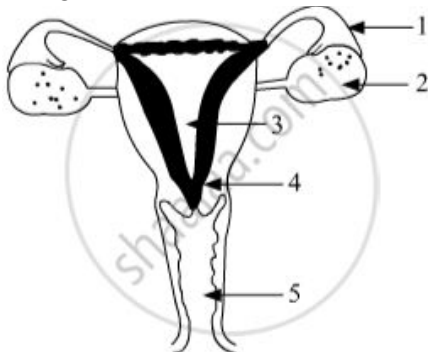
- a) Define combustion and why it is exothermic? Give one example.
 b) Describe the oxidation reaction of ethanol with proper reaction conditions and equation
- 35)



- a) Name the part marked 'A' in the diagram
 b) How does 'A' reaches part "B"
 c) State the importance of "C".
 d) What happens to the part marked 'D' after fertilisation is over.
 e) The part of the flower that forms a seed is
 i) Ovule ii) Carpel iii) Ovary iv) Stamen

OR

- a) Identify the given diagram. Name the parts of 1 to 5.



- b) What are the various ways to avoid pregnancy? Elaborate any one method.
- 36) a) Explain with the help of a neat diagram, how a force is exerted on a current carrying conductor placed in a permanent magnetic field.
 b) Mark the direction of electric current and magnetic field in the above diagram.
 c) State the rule related with this activity.

OR

- a) Explain with the help of neat diagram, how a magnetic field is produced on a current carrying conductor in the form of a circular coil or circular loop.
 b) Mark the direction of electric current and magnetic field in the above diagram.
 c) State the rule related with this activity

SECTION - E

Q. no 37 to 39 are case-based - data-based questions with 2 to 3 short sub-parts. Internal choice is provided in one sub-parts.

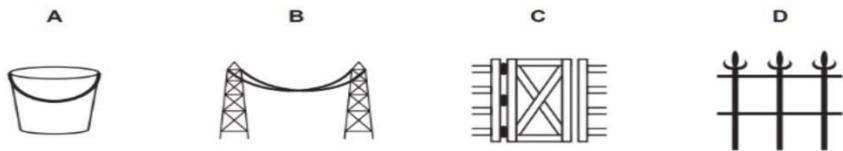
37) Two students decided to investigate the effect of water and air on iron object under identical experimental conditions. They measured the mass of each object before placing it partially immersed in 10 ml of water. After a few days, the object was removed, dried and their masses were measured. The table shows their results.

Student	Object	Mass of Object before Rusting in. g	Mass of the coated object in. g
A	Nail	3.0	3.15
B	Thin plate	6.0	6.33

- a) What might be the reason for the varied observations of the two students?
- b) In another set up the students coated iron nails with zinc metal and noted that, iron nails. coated with zinc prevents rusting. They also observed that zinc initially acts as a physical barrier, but an extra advantage of using zinc is that it continues to prevent rusting even if the layer of zinc is damaged. Name this process of rust prevention and give any two other methods to prevent rusting.

OR

- c) In which of the following applications of Iron, rusting will occur most? Support your answer with valid reason.



- A - Iron Bucket electroplated with Zinc
- B - Electricity cables having iron wires covered with aluminium
- C - Iron hinges on a gate
- D - Painted iron fence

38) Mendel was educated in a monastery and went on to study science and mathematics at the University of Vienna. Failure in the examinations for a teaching certificate did not suppress his zeal for scientific quest. He went back to his monastery and started growing peas. Many others had studied the inheritance of traits in peas and other organisms earlier, but Mendel blended his knowledge of science and mathematics and was the first one to keep count of individuals exhibiting a particular trait in each generation. This helped him to arrive at the laws of inheritance.

Based on the above information, answer the following questions.

- a) Why Mendel selected garden pea as his experimental material?
- b) A pea plant with blue colour flower denoted by BB' is cross-bred with a pea plant with white flower denoted by 'bb'
- i) What is the expected colour of the flowers in their F1 progeny?
- ii) What is the expected phenotypic ratio in F2 generation?
- c) What do you meant by dominant and recessive trait?

OR

Name the segment of DNA that codes for a specific character

39) The molecules of air and other fine particles in the atmosphere have size smaller than the wavelength of visible light. So they are more effective in scattering light of shorter wavelengths at the blue end than light of longer wavelengths at the red end. The red light has a wavelength about 1.8 times greater than blue light. Thus, when sunlight passes through the atmosphere, the fine particles in air scatter the blue colour more strongly than red. The scattered blue light enters our eyes. If the earth had no atmosphere, there would not have been any scattering. Why do stars appear higher than they actually are? Does this have something to do with the scattering of light? Well, the answer to this is 'No' Stars appear higher than they are because of "Atmospheric Refraction.

- a) The sky appears dark to an astronaut. Why?
- b) Arrange the following colours of visible light in their increasing order of wavelength
- Orange, Blue, Violet, Green and Red
- c) Why do stars appear to twinkle but planets do not?

OR

What do you mean by Tyndall effect? Give one example

General Instructions:

1. Question paper comprises of Six Sections – A, B, C, D, E and F. There are 37 questions in the question paper. All questions are compulsory.
2. Section A – From question 1 to 20 are MCQs of 1 mark each.
3. Section B – Question no. 21 to 24 are Very Short Answer Type Questions, carrying 2 marks each. Answer to each question should not exceed 40 words.
4. Section C contains Q.25 to Q.29 are Short Answer Type Questions, carrying 3 marks each. Answer to each question should not exceed 60 words
5. Section D – Question no. 30 to 33 are long answer type questions, carrying 5 marks each. Answer to each question should not exceed 120 words.
6. Section-E - Question no from 34 to 36 are case based questions with three sub questions and are of 4 marks each
7. Section F – Question no. 37 is map based, carrying 5 marks with two parts, 37a from History (2 marks) and 37b from Geography (3 marks).
8. There is no overall choice in the question paper. However, an internal choice has been provided in few questions. Only one of the choices in such questions have to be attempted.
9. In addition to this, separate instructions are given with each section and question, wherever necessary.

SECTION – A (MCQs)

(20 x 1 = 20)

1. Name the writer who was a descendant of indentured labour migrants and also got Nobel Prize?
A] V.S. Naipaul B] Shivnarine Chanderpaul
C] Ramnaresh Sarwan D] Ram Narain Tewary
2. Who set up the first Indian Jute Mill in Calcutta?
A] G.D. Birla B] Seth Hukumchand
C] Jamsetjee Nusserwanjee Tata D] Dwarkanath Tagore
3. The given picture is associated to which event? Identify the event among the following options:



Options:

- A] Champaran Satyagraha B] Chauri Chaura incident
 - C] Jallianwalabagh Massacre D] Dandi March
4. Arrange the following personalities in chronological order:
a) Kitagawa Utamaro was born in Edo b) Rashesundari Debi
c) Rammohan Roy d) Johann Gutenberg
- Choose the correct answer:
A) (a) (b) (d) (c) B] (c) (d) (a) (b) C] (c) (b) (a) (d) D] (d) (a) (c) (b)
5. Identify the species with the help of the following information which is not included in the vulnerable species:
A) Blue sheep B) Asiatic buffalo C) Asiatic elephant D) Gangetic dolphin
 6. The _____ is not grown in rabi cropping season.
A) Wheat B) Mustard C) Peas D) Ragi
 7. Match the following:

a	Requires 50 to 75 cm of annual rainfall evenly distributed over the growing season	1. Dipa
b	This crop is used both as food and fodder.	2. Ragi
c	Very rich in iron, calcium, other micro nutrients and roughage	3. Wheat
d	Bastar district of Chhattisgarh	4. Maize

A) a 3, b4, c1, d2 B) a 2, b4, c3, d1 C) a 3, b 4, c2 , d 1 D) a 3, b 2, c 4, d 1

8. Which one of the following statements is correct regarding the outcomes of Democracy?
A] Democracies can fully and permanently resolve conflicts among different groups
B] Dictatorships can fully and permanently resolve conflicts among different groups
C] No regime can fully and permanently resolve conflicts among different groups
D] Monarchy can resolve the conflicts among different groups
9. The system of Panchayati Raj involves:
A] Village, State and Union levels B] Village, District and State levels

- C] Village and State levels D] Village, Block and District levels
10. Which of the following is not one of the three organs of government powers are shared?
 A] Legislature B] Bureaucracy C] Executive D] Judiciary
11. Match List I with List II and select the correct answer using the list given below:

List - I	List - II
i) Bharatiya Janata Party	A) Welfare of the Dalits
ii) Indian National Congress	B) A Centrist Party
iii) Bahujan Samaj Party	C) Marxism and Leninism
iv) Communist Party of India (M)	D) Cultural Nationalism

- Match list I with List II
- A] i – A, iii – B, ii – C, iv – D B] iii – A, ii – B, iv – C, i – D
 C] ii – A, iii – B, i – C, iv – D D] iii – A, ii – B, i – C, iv – D
12. There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes provided below:
 Assertion: Discrimination can take place because of several reasons.
 Reason: One of the chief reasons why discrimination happens is when people act on their prejudices or stereotypes.
- Options:
 A. Both A and R are true and R is the correct explanation of A.
 B. Both A and R are true but R is not the correct explanation of A
 C. A is true but R is false.
 D. A is false but R is true.
13. Power shared among governments at different levels is also called:
 A] Horizontal Distribution B] Vertical Distribution
 C] Unitary Distribution D] Slant Distribution
- 14 Study the data given below and answer the question that follow Some comparative data on Punjab Kerala and Bihar

States	Infant mortality Rate per, 1,000 live births (2018)	Literacy Rate, %	Net Attendance Ratio (per 100 persons) secondary stage(age 14 and 15 years) 2017-18
		2017 - 2018	
Haryana	30	82	61
Kerala	7	94	83
Bihar	32	62	43

- Which state appears the least developed
 A] Haryana B] Kerala C] Bihar D] Bihar and Haryana
15. Rajiv has a textile firm. For carrying out production, Rajiv spent money on procuring thread from traders, buying machine and equipment and built a warehouse to store the cloth produced. The expenditure incurred by Rajiv for conducting the production process is termed as _____
 A] Investment B] Profits C] Equity D] Interest
16. Which of the following option can be a restriction for foreign trade?
 A] Sales Tax B] Import Taxes C] Local Trade Taxes D] Quality Control
17. How do big private companies contribute in the development of a nation?
 A] By increasing the demands for their products through advertisements.
 B] By increasing their profits.
 C] By increasing productivity of the country in the manufacturing of industrial goods.
 D] By providing private hospital facilities for the rich.
18. Kamal is a daily wage labourer working in a nearby grocery shop. He goes to the shop at 7:30 in the morning and works till 8:00 pm in the evening He gets no other allowances apart from his wages. He is working in
 A] Public sector B] Organised sector C] Unorganised sector D] Secondary Sector
19. What is the main source of income of a bank?
 A] Bank charges that the depositors pay for keeping their money safe is the main source of the bank's income.
 B] The difference between what is charged from the borrowers and paid to the depositors is the main source of bank's income.
 C] Banks earn huge amounts of money by investing the money of the depositors in various company shares.
 D] The Government of India gives huge amounts of money to the banks to help their smooth functioning.
20. MGNREGA (National Rural Employment Guarantee Act of 2005) has guaranteed _____ days of employment in a year in many districts of India. What are the correct number .
 A] 200 days B] 100 days C] 30 days D] 60 days

SECTION - B (VERY SHORT ANSWER QUESTIONS) (2X4=8)

21. Why do lenders ask for collateral while lending?
 22. How can public play an effective role in bringing reforms within political parties? Explain.
 23 . What were 'guilds'?
 24. Explain any two ways of modern adaptations of the traditional rainwater harvesting systems in India.
 (OR)
 Explain any two examples of ancient hydraulic structures in India

SECTION - C (SHORT ANSWER QUESTIONS) (3X5=15)

- 25 Name the most popular variety of commercial coal. Explain any two types of coal found in India. (1+2)

26. Print did not directly shape their minds, but it did open up the possibility of thinking differently. Explain the statement.

(OR)

What was the role of Deoband Seminary in making use of printing press as a means for religious Reform movement?

27. Why is the issue of sustainability important for development?

28 Explain the meaning of the term 'communalism'

29. Describe in brief about Globalization as a process of integration of economy.

SECTION - D (LONG ANSWER QUESTIONS)

(5X4=20)

30. Briefly describe how the peasant movement in the state of Awadh became a part of NCM.

(OR)

In what way the tribal peasants interpreted Mahatma Gandhi's message and idea of Swaraj? Explain With suitable examples.

31. In situations with high risks, credit might create further problems for the borrower. Explain?

(OR)

"Deposits with the banks are beneficial to the depositors as well as to the nation." Examine the statement

32. Why did some national leaders fear when the demand for the formation of states on language was raised?

(OR)

Critically evaluate the functioning of the local self-government in India

33. "Tourism has acquired the status of an industry." Justify the statement. Also, list four types of tourism In India. (3+2) (OR)

What is Balance of Trade? Explain the two aspects of Balance of Trade with Examples. Also explain any two advantages of trade for our country (1+2+2)

SECTION – E (CASE BASED QUESTIONS)

3X4=12)

34. Read the source given below and answer the question that follows:

Mining sites are abandoned after excavation work is complete leaving deep scars and traces of over burdening. In states like Jharkhand, Chhattisgarh, Madhya Pradesh and Odisha deforestation due to mining have caused severe land degradation. In states like Gujarat, Rajasthan, Madhya Pradesh and Maharashtra overgrazing is one of the main reasons for land degradation. In the states of Punjab, Haryana, western Uttar Pradesh, over irrigation is responsible for land degradation due to water logging leading to increase in salinity and alkalinity in the soil. The mineral processing like grinding of limestone for cement industry and calcite and soapstone for ceramic industry generate huge quantity of dust in the atmosphere. It retards the process of infiltration of water into the soil after it settles down on the land. In recent years, industrial effluents as waste have become a major source of land and water pollution in many parts of the country.

34.1. State any two disadvantages of mines (1)

34.2. Name the two states where over irrigation has resulted salinity and alkalinity in the soil? (1)

34.3 Name the two states where overgrazing is the main reason of land degradation (1)

34.4. Suggest one solution to check the land degradation in the areas that have been left after mining (1)

35. Read the source given below and answer the questions that follows:

Take the case of dignity of women. Most societies across the world were historically male dominated societies. Long struggles by women have created some sensitivity today that respect to and equal treatment of women are necessary ingredients of a democratic society. That does not mean that women are actually always treated with respect. But once the principle is recognised, it becomes easier for women to wage a struggle against what is now unacceptable legally and morally. In a non-democratic set up, this unacceptability would not have legal basis because the principle of individual freedom and dignity would not have the legal and moral force there. The same is true of caste inequalities. Democracy in India has strengthened the claims of the disadvantaged and discriminated castes for equal status and equal opportunity. There are instances still of caste-based inequalities and atrocities, but these lack the moral and legal foundations. Perhaps it is the recognition that makes ordinary citizens value their democratic rights.

Answer the following MCQs by choosing the most appropriate option:

35.1. Find out the incorrect statement from the following:

A] Now the condition of women is much better.

B] Men have easily accepted the changes in the society.

C] Still gender based discrimination is a big challenge.

D] Feminist organisations have played important role to establish gender equality.

35.2. Why democracy is having better chance to remove caste discrimination?

A] In non-democracy, rulers are not getting the feedback.

B] In democracy, people are having rights to express their feelings.

C] In democracy, they can claim for equality and dignity.

D] In democracy, people are more aware of caste related problems.

35.3. Which of the following is not correct about Indian caste system?

A] Casteism is present in the society from ancient time.

B] Now, condition is better than before.

C] Laws played important role to remove caste based discrimination.

35.4. The reason behind the discrimination of women in all fields is:

36. Read the source given below and answer the question that follows:

36.1. Which of the following is not correct about smallpox?

- 36.2. Which of the following material was not acquired by European from America?

- 36.3. Find out the incorrect statement from the following:

- 36.4. The silver obtained from Peru was used in India to buy

- ### SECTION - F (MAP SKILL BASED QUESTION)

(2+3=5)

- A) The place where the Indian National Congress held its session in December 1920

37. b. On the same political map of India locate and label any THREE of the following with suitable

Symbols (3)

- *****

General Instructions:

1. Question paper comprises Six Sections – A, B, C, D, E and F. There are 37 questions in the question paper. All questions are compulsory.
2. Section A – From question 1 to 20 are MCQs of 1 mark each.
3. Section B – Question no. 21 to 24 are Very Short Answer Type Questions, carrying 2 marks each. Answer to each question should not exceed 40 words.
4. Section C contains Q.25 to Q.29 are Short Answer Type Questions, carrying 3 marks each. Answer to each question should not exceed 60 words
5. Section D – Question no. 30 to 33 are long answer type questions, carrying 5 marks each. Answer to each question should not exceed 120 words.
6. Section-E - Questions no from 34 to 36 are case based questions with three sub questions and are of 4 marks each
7. Section F – Question no. 37 is map based, carrying 5 marks with two parts, 37a from History (2 marks) and 37b from Geography (3 marks).
8. There is no overall choice in the question paper. However, an internal choice has been provided in few questions. Only one of the choices in such questions have to be attempted.
9. In addition to this, separate instructions are given with each section and question, wherever necessary.

Section-A

(1x20=20)

1. Romantics such as the German philosopher Johann Gottfried Herder held the claim that:-
Identify the correct statement from the following options. (1)

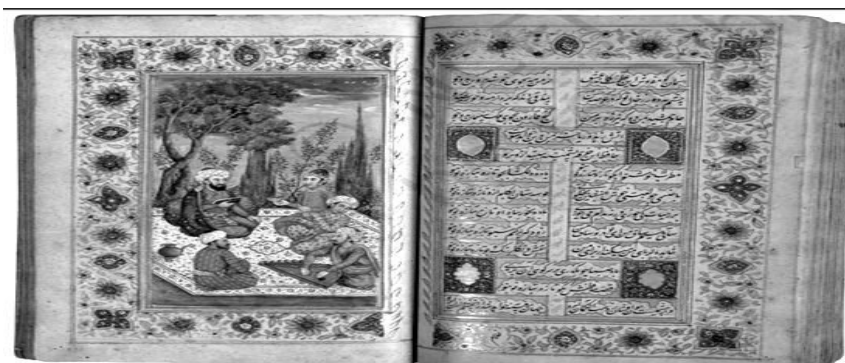
- A. Reason and science was to be glorified.
B. The concept of nation – state was an utopian idea.
C. Development of nationalism can only come about only through wars and territorial expansion.
D. True German culture was to be discovered among the common people.

2. Who wrote about the injustices of the caste system in 'Gulamgiri'? (1)

- A. Raja Rammohan Roy b) Jyotiba phule c) Balgangadhar Tilak d) Bankim Chandra Chattopadhyay.

3. Look at the picture given below and Identify the name of the collected work. (1)

- a) Diamond sutra b) Rigveda c) Diwan of Hafiz d) Gita Govinda



4. Arrange the following statements in chronological order: (1)

- I. The oldest Japanese book is the Buddhist Diamond sutra.
II. Tripitaka koreana were engraved on woodblocks.
III. An art form called as ukiyo was popular in Japan.
IV. The oldest book of korea was printed with movable metal type.

Options:

- A) I, II, IV, III B) II, IV, I, III C) III, II, I, IV D) III, IV, I, II

5. Identify the crop with the help of the following information.

1. It is a leguminous crop
2. It is mostly grown in rotation with other crops.
3. It helps in restoring soil fertility by fixing nitrogen from the air.
4. It is the major source of protein in a vegetarian diet.

Options:

- a) Maize b) Rice c) Sugarcane d) pulses

6. Which of the following description of species is not correct?

- a) Normal species - cattle, sal, pine, rodent
b) Endemic species - Asiatic cheetah, pinkhead duck, Dodo, Dinosaurs.
c) Endangered species - blackbuck, crocodile, Indian wildass, Indian rhino,
d) Rare species - Himalayan brown bear, desert fox, wild Asiatic – buffaloes, hornbill.

7. Match the following:-

Column – A

1. Black soil
2. Laterite
3. Alluvial soil
4. Forest soil

Column – B

- a) Potash, phosphoric acid, & lime
- b) Calcium carbonate, Magnesium, potash & lime
- c) The soil is loamy & silty in valleysides.
- d) leached soil, humus content is Low due to high temperature and heavy rainfall.

Options:

- a) 1-d, 2-a, 3-b, 4-c b) 1-b, 2-d, 3-a, 4-c c) 1-c, 2-a, 3-d, 4-b d) 1-d, 2-c, 3-b, 4-a

8. Consider the following statements regarding powersharing and identify the incorrect one from the following:(1)

- A. Power sharing is good because it helps to reduce the possibility of conflict between social groups.
- B) Powersharing is the very spirit of democracy.
- C) Power can be shared among governments at different levels.
- D) One basic principle of democracy is that political parties are the source of all power.

9. The system of panchayati Raj involves --- (1)

- A) The village, block and district levels.
- B) The village and state levels.
- C) The village, district and state levels.
- D) The village state and union levels.

10. Which of the following statement is true?

- A) The Equal Remuneration Act, 1986 provides that equal wages should be paid to equal work.
- B) In India, the proportion of women in legislature has been very low.
- C) Two – third of seats in local government bodies are now reserved for women.
- D) A bill with the proposal of reservation of one-third seats in Lok Sabha and state assemblies for women has been passed.

11. Which one among the following pairs is correctly matched?

List – I

- a) Communist Party
- b) Bahujan Samajwadi party
- c) Forza Italia
- d) Republican Party

List – II

- Italy
- china
- India
- USA

12. There are two statements marked as Assertion (A) and Reason ®. Mark your answer as per the codes provided below: (1)

Assertion (A): In democracy some delay in decision making is bound to take place.

Reason (R): Democratic government take more time to follow procedures before arriving at a decision.

- A) Both A and R are true and R is the correct explanation of A
- B) Both A and R are true but R is not the correct explanation of A.
- C) A is true but R is false
- D) A is false but R is true

13. Division of powers involving higher and lower levels of government is called:

(1)

- A) Vertical division of power
- b) Horizontal division of power
- C) Balance of power
- d) Coalition government

14. On the basis of the given table answer the following

Which of the following neighboring countries has better performance in terms of humans resource development than India?

TABLE 1.6 SOME DATA REGARDING INDIA AND ITS NEIGHBOURS FOR 2004

Country	Per Capita Income in US\$	Life expectancy at birth	Literacy rate for 15+ yrs population	Gross enrolment ratio for three levels	HDI rank in the world
Sri Lanka	4390	74	91	69	93
India	3139	64	61	60	126
Myanmar	1027	61	90	48	130
Pakistan	2225	63	50	35	134
Nepal	1490	62	50	61	138
Bangladesh	1870	63	41	53	137

NOTES

1. HDI stands for Human Development Index. HDI ranks in above table are out of 177 countries in all.
2. Life expectancy at birth denotes, as the name suggests, average expected length of life of a person at the time of birth.
3. Gross Enrolment Ratio for three levels means enrolment ratio for primary school, secondary school and higher education beyond secondary school.
4. Per Capita Income is calculated in dollars for all countries so that it can be compared. It is also done in a way so that every dollar would buy the same amount of goods and services in any country.

Options:

- a) India b) Myanmar c) Srilanka d) Bangladesh

15. Read the following data and select the appropriate option from the following:

Table 1.2 Comparison Of Two Countries						
Country	Monthly incomes of citizens (in Rupees)					
	I	II	III	IV	V	Average
Country A	9500	10500	9800	10000	10200	
Country B	500	500	500	500	48000	

How is average income calculated?

- Options:
- a) Total National income / Total density of population
 - b) Total National income/ Total state population
 - c) Total National income/Total population
 - d) Total National income/State density of population

16. Find the odd one out from the following options.
- a) Oil India limited, TATA Motors, Jetairways, SAIL.
 - b) Tourist guide, barbes, Tailore, potter.
 - c) Teacher, doctor, Vegetable vender, lawyer,
 - d) Postman, cobbler, soldier, police constable

17. Fill in the blank.

Place of work	Nature of empioyment
People work in offices and factories registered with the government	Organized sector
People working on the street, construction workesrs, domestic workers	?

- Options:
- a) Public sector
 - b) unorganized sector
 - c) Joint sector
 - d) Quaternary sector

18. Read the information given below and select the correct option:



Swapna, a small farmer, grows ground nut on her three acres of land. She takes loan from the moneylender to meet the expenses of cultivation, hoping that her harvest would help repay the loan. Midway through the season the crop is hit by pests and the crop fails.

What was the risk swapna faced?

- a) Collateral
- b) Terms of credit
- c) Pest attack
- d) Debt – Trap

19. Which of the following steps have been taken by the government to attract foreign Investment?

- i) Establishing special economic zones.
- ii) Making labour laws flexible
- iii) Curbing trade barriers.
- iv) Granting compulsory licensing

options:

- a) I & III
- b) II & IV
- c) I & II
- d) II & III

20. Identify the correct battements about WTO.

- I) It aims at liberalizing international trade
- II) It controls production in more than one Nation
- III) It establishes rules regaling International trade and sees that these rules are obeyed.
- IV) At present 174 countries of the world are curently Members of the WTO.

Options:

- a) II &III
- b) II & IV
- c) I & III
- d) I & IV

Section-B

Very short answer questions:

- 21. What were canal colonies? (2)
- 22. What do you mean by sexual division of labour? Give example. (2)

23. “Conservation of Minerals is More important than other resources”- suggest any 2 points.

(or)

Suggest any 2 – ways to improve the usage of solar energy .

24. Why do you think MGNREGA-2005 is referred to as “Right to work”?

Section-C

25. Why did Gandhiji decide to launch a nationwide ‘satyagraha’ against the proposed Rowlatt Act?

How was it opposed? Explain. (3)

(or)

Why did the Non-cooperation Movement gradually slowdown in towns and cities?

26. “Road transport scorer over Railtransport in India”. Justify the statement with atleast three points.

27. What are the various ways in which MNCs set up (or) control production in other countries?

28. What is Gram sabha? Describe any two functions of a Gramsabha. (3)

29. Classify economic activities into sectors on the basis of ownership. Give examples.

Section-D

Long answer based questions:

30. Describe any five steps taken by the French Revolutionaries to create a sense of collective identity among the French people. (5)

(or)

Who hosted ‘viennacongress’ in 1815? Analyse the main changes brought by the ‘vienna Treaty’

31. How do industries pollute the environment?

(or)

Discuss the steps to be taken to minimize environmental degradation by Industry.

32. what are the various challenges faced by political parties? (5)

(or)

Name the political party which gets inspiration from India’s ancient culture and values. Mention four features of that party.

33. Why do we need to expand formal sources of credit in India?

(or)

What is the basic idea behind the SHG for the poor? Explain in your own words.

Section-E

Case based questions:

34. Read the source given below and answer the question that follows:

The history of many business groups goes back to trade with China. From the late eighteenth century, as you have read in your book last year, the British in India began exporting opium to China and took tea from China to England. Many Indians became junior players in this trade, providing finance, procuring supplies, and shipping consignments. Having earned through trade, some of these businessmen had visions of developing industrial enterprises in India. In Bengal, Dwarkanath Tagore made his fortune in the China trade before he turned to industrial investment, setting up six joint-stock companies in the 1830s and 1840s. Tagore’s enterprises sank along with those of others in the wider business crises of the 1840s, but later in the nineteenth century many of the China traders became successful industrialists. In Bombay, Parsis like Dinshaw Petit and Jamsetjee Nusserwanjee Tata who built huge industrial empires in India, accumulated their initial wealth partly from exports to China, and partly from raw cotton shipments to England. Seth Hukumchand, a Marwari businessman who set up the first Indian jute mill in Calcutta in 1917, also traded with China. So did the father as well as grandfather of the famous industrialist G.D. Birla.

1. When did the first Jute mill in Calcutta come up? (1)

2. Which businessman in Bengal setting up six joint – Stock companies? (1)

3. Name the businessman who built huge industrial empires in India? (1)

4. Which product was exported to china from India from the late 18th century? (1)

Section-E

Case based questions

Geography

Airways



The air travel, today, is the fastest, most comfortable and prestigious mode of transport. It can cover very difficult terrains like high mountains, dreary deserts, dense forests and also long oceanic stretches with great ease. Think of the north-eastern part of the country, marked with the presence of big rivers, dissected relief, dense forests and frequent floods and international frontiers, etc. in the absence of air transport. Air travel has made access easier. The air transport was nationalised in 1953. Air India provides domestic and international air services. Pawanhans Helicopters Ltd. provides helicopter services to Oil and Natural Gas Corporation in its off-shore operations, to inaccessible areas and difficult terrains like the north-eastern states and the interior parts of Jammu and Kashmir, Himachal Pradesh and Uttarakhand. Find out the names of the countries connected by Air India. Air travel is not within the reach of the common people. It is only in the north-eastern states that special provisions are made to extend the services to the common people.

1. Why is air transport preferred in the north eastern states?
2. When was air transportation nationalized in India?
3. In which areas pawan Hans helicopter service is used in India?
4. What are the advantages & disadvantages of air transport? (each-1-point)
36. Read the given extract and answer the following questions:

Every party in the country has to register with the Election Commission. It offers some special facilities for large and established parties. The Election Commission has laid down detailed criteria of the proportion of votes and seats that a party must get in order to be a recognised party.

1. A party that secures at least 6% of the total votes in an election to the Legislative Assembly of a State and wins at least 2 seats is recognised as a **State Party**.
2. A party that secures at least 6% of the total votes in Lok Sabha elections or Assembly elections in 4 States and wins at least 4 seats in the Lok Sabha is recognised as a **National Party**.

1. What are national parties? (2)
2. Where does every political party have to register in India? (1)
3. What are recognised parties? (1)

Section-F

Map Skill Based Questions:

37. a) Two places A and B have been marked on the given political map of India. Identify them and write their correct names on the lines drawn near them. (2)

- A) The place associated with peasant satyagraha in 1917. (1)
- B) The place associated with congress session of 1927. (1)

37. On the same outline Map of India Locate and label any 6 – of the following with suitable symbols. Write the question number and name of each item near its location. (6x ½ =3)

1. Hirakud dam
2. Indira Gandhi [International air port]
3. Noida – software technology park
4. Paradwip- sea port.
5. Leading producer of coffee
6. Arid soil
7. Mumbai high – oilfield
8. Tarapur – Atomic power station.
