

## For Anne Gregory

1. Read the extracts given below and answer the questions that follow:

*"Never shall a young man,  
Thrown into despair  
By those great honey-coloured  
Ramparts at your ear, Love you for yourself alone And not your yellow hair."*

Questions:

- (i) Who is being addressed to?

- (a) the poet
- (b) Anne Gregory
- (c) a lover
- (d) a woman

- (ii) What can no young man admire and love in a lady?

- (a) her moral beauty
- (b) her physical beauty
- (c) her yellow hair
- (d) her inner beauty

- (iii) The word 'ramparts' refer to\_\_\_\_\_.

- (iv) Explain the central idea of the lines (stanza) in 30-40 words.

2. *"But I can get a hair-dye  
And set such colour there,  
Brown, or black, or carrot,  
That young men in despair  
May love me for myself alone  
And not my yellow hair."*

- (i) Who is the speaker?

- (a) a young man
- (b) a young lady
- (c) the poet
- (d) an old lady

- (ii) Why would she dye her hair brown, black or pink?

- (a) to attract men

- (b) to look beautiful
- (c) to look not so attractive
- (d) to make others love her as she is and not for her looks

(iii) Complete the analogy about the speaker's hair.

yellow: blonde :: carrot : \_\_\_\_\_

(iv) What causes the young men to 'despair', according to the extract? Answer in 30-40 words.

### 3 Marks

1. In what way is physical love different from spiritual love?

Ans. Physical love does not last long. It fades away as soon as the loved person loses physical attractions. Spiritual love is for the inner self of the loved person and it lasts long.

2. What does the poet remind Anne Gregory?

Ans. The poet quotes from a priest to conclude his argument. He says that he heard a priest stating (on the authority of a religious text) that only God can love a person for himself/herself alone and not for this person's physical grace. In other words, only God's love is non-physical.

3. What attracts the attention of the poet towards Anne Gregory?

Ans. The poet says that the hair of Anne Gregory is honey-coloured. Her hair covers her ears just as a huge wall protects a fort. Many young men admire the beauty of her hair, but the lady does not relish it.

4. What is the subject of the first stanza?

Ans. The poet wants to make it clear to the lady that it is impossible to love her for herself alone. Nobody can ignore the charming locks of hair which cover her ears. The poet himself seems to be entrapped in the locks of her hair.

### 6 Marks

1. Bring out the theme of the poem 'For Anne Gregory'.

'For Anne Gregory' underlines the idea that physical charms are short-lived. Love for youth and beauty called physical love is transient. Those who fall in love with someone for physical charms do not really respect the person for what he or she is.

That is why, the lady in the poem is not delighted to hear that many of her lovers are in love with her because of her beautiful, golden hair. She retorts that she will dye her hair brown, black or carrot-colour. She hopes that the young men will then love her for her own sake and not for the sake of her beautiful, yellow hair. The poet reminds the lady that human beings are selfish. They are attracted to each other only because of physical charms. It is only God who is selfless and loves human beings for themselves alone. This remark reveals that it is not possible for humans to love selflessly. Only God can have selfless love.

2. Discuss the development of thought in the poem 'For Anne Gregory'.

The poem comprises three stanzas. In the first stanza, the poet pays a compliment to Lady Gregory for having beautiful honey-colour hair. Many young men, he says, are in love with her because of her golden hair which cover her ears on both sides like the ramparts of a fort.

In the second stanza, the lady gives vent to her feelings. She reacts to the poet's remark somewhat irritably. She says that she will dye her hair brown, black or carrot-colour so that young man will love her for her own sake.

In the third stanza the poet concludes by quoting that he heard from a priest only on the previous night. The priest, giving a reference to a holy book, said that only God loves human beings for themselves alone. What the poet wants to say is that it is futile to expect human beings to love a person for his or her own sake.

## QUESTION BANK SOCIAL SCIENCE CLASS X

SESSION-2022-23

### CHAPTER---1. POWER SHARING

	<b>2 MARKS</b>	
1	Define ethnic	2
2	Belgium and Sri Lanka both are democracies. Yet, they dealt with the question of power sharing differently. Explain	
3	Why is power may also be shared among different social groups	2
4	In modern democracies, power is often shared among different organs of the government. Explain.	2
	<b>3 MARKS</b>	
5	What is power sharing? Why power sharing is important in a democracy?	3
6	Explain any three consequences of the majoritarian policies adopted by the Sri Lankan government.	3
7	How far do you agree with the statement that power sharing is keeping with the “Spirit” of democracy?	3
8	Which three demands of the Sri Lankan Tamils accepted and met with, can settle the ethnic conflict in Sri Lanka for good? Explain. or Mention any three demands of Sri Lankan Tamils.	3
9	Explain any three consequences of the majoritarian policies adopted by the Sri Lankan Government.	3
10	Why power sharing is desirable? Explain giving any three prudential reasons.	3
11	Why is power sharing desirable? Explain moral reasons in this regard.	3
	<b>5 MARKS</b>	
12	How majoritarianism has increased the feeling of alienation among the Sri Lankan	5

	Tamils? Explain. [CBSE 2014]	
13	State the main elements of the power sharing model evolved in Belgium.	5

## Chapter-2 FEDERALISM

	Read and learn the following:	
1.	What is Federalism?	2
2.	Which type of power does the Community Government of Belgium enjoy?	2
3.	What do you mean by Panchyati Raj?	2
4.	Define State List and Residuary subjects.	2
5.	State two agreements through which federations have been formed. Give an example of each.	3
6.	Enumerate any three important features of Federalism.	3
7.	State any three major steps taken by the Indian Government towards decentralization in 1992.  OR  Which five provisions of the constitutional amendment of 1992 really strengthened the third tier of democracy in India? Explain.	3
8.	Distinguish between the Unitary and Federal systems of government.	3
9.	How is federal power sharing more effective today than in the early years? Explain.	5
10.	Describe the language policy of India.	5
11.	Why is decentralisationfavoured in democracy?	5
12.	Describe the three forms of power sharing among different organs of Government in India.	5

## CHAPTER 3- GENDER, RELIGION AND CASTE

Q. NO	QUESTIONS	MARKS
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Q.1.	Mention different aspects of life in which women are discriminated or disadvantaged in India.	3
Q2	State different forms of communal politics with one example of each.	3
Q3	What is the status of women's representation in India's legislative bodies?	3
Q4	Mention any five constitutional provisions that make India a secular state.	5
Q6	Suggest any two measures to integrate the people belonging to different ethnic group in a society.	3
Q7	What do you understand by casteism?	3
Q8	Describe any five features of the caste system in India.	5
Q9	Mention the problem of 'Casteism' in Indian politics.	3
Q10	Besides caste, which other factors do matter in electoral politics?	3
Q11	"Secularism is not an ideology of some political parties or persons, but it is one of the foundations of our country." Examine the statement. <b>OR</b> Mention any three features of 'secularism' described in the Indian Constitution.	3
Q12	What is communal politics? Explain the idea behind the communal politics.	3
Q13	How far is it correct to say that it is not politics that gets caste ridden, but it is the caste that gets politicised? Explain.	5
Q14	What do you mean by 'Feminist'?	2
Q15	In which countries, women's representation in politics is very high?	2
Q16	What is meant by sex ratio?	2
Q17	How many seats are reserved for women in the local bodies in India?	2
Q18	Suggest any one way to protect women from domestic oppression.	2

#### CHAPTER 4- POLITICAL PARTIES

1.	What is meant by Political Parties? Describe three components of Political parties.	2
2.	What is the guiding philosophy of Bharatiya Janata Party? [ Board Term –II,2015]	2
3.	What is meant by regional political party? State the conditions required to be recognized as a regional political party	3
4.	What is meant by regional national political party? State the conditions required to be recognized as a 'national political party'	3

5.	"No party system is ideal for all countries and all situations"-justify the statement	3
6.	"Serious efforts were made by the legal organizations to reform political parties in India"- support the statement.	
7.	Explain how Political Parties are still in the grip of some serious challenges.	3
8.	What steps shall be taken to reform the Political parties in India. Suggest any four steps. (CBSE 12, 16)	5
9.	"The Political Parties are necessary for democracy"-justify the statement [CBSE 2011, 2016]	5
10.	State the various functions political parties perform in a democracy.	5

#### CHAPTER---5. OUTCOMES OF DEMOCRACY

	<b>2 MARKS</b>	
1	Explain the relationship between democracy and development.	2
2	What are the two conditions to accommodate social diversities in a democracy? Mention any one exception to this.	2
3	How is democratic government known as responsive government? Explain with an example.	2
4	Explain the condition under which dignity and freedom of the citizens can be promoted.	2
	<b>3 MARKS</b>	
5	When democracy is considered successful? Explain.	3

6	Examine the political outcome of democracy.	3
7	“Democratic governments in practice are known as accountable.” Support the statement with arguments.	3
8	“Democracy accommodates social diversities”. Support the statement with examples.	3
9	What outcomes can one reasonably expect of democracies?	3
10	How can a democratic government be made accountable? Explain.	3
11	What are the expected outcomes of democracy? Explain.	3
12	How democracies have been able to reduce poverty? Elaborate.	3
13	“Democracy is seen to be good in principle but felt to be not so good in practice.” Justify the statement.	3
14	“A public expression of dissatisfaction with democracy shows the success of democratic project.” Justify the statement.	3
15	“Democracies are not appearing to be very successful in reducing economic inequalities.” Analyse the statement.	3
	<b>5 MARKS</b>	
16	Evidence shows that in practice, many democracies did not fulfill the expectations of producing economic development in the country. Validate the statement with the help of relevant example.	5
17	“Democracy stands much superior in promoting dignity and freedom of the citizens”. Justify the statement.	5
18	“Some people think that democracy produces a less effective government.” Analyse the statement.	5



*LIEUTENANT IOTA: I can't figure it out, Captain. (holding up a book) I've counted two thousands of these peculiar items. This place must be some sort of storage barn. What do you think, Sergeant Oop?*

*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: 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."*

**Questions:**

**Why was the team unable to figure out 'this place'?**

- A) They had never seen such a place before.
- B) They thought it was the control room of Earth's armed forces.
- C) They wanted to investigate further before answering.
- D) They did not like the place.

**2. 'Perhaps the Great and Mighty Think-Tank will give us the benefit of his thought on the matter.' Choose the option that DOES NOT display what 'benefit of his thought' means.**

- A) Think-Tank's ideas
- B) Think-Tank's opinions
- C) Think-Tank's suggestions
- D) Think-Tank's doubts

**3. Which of these words is a synonym for 'peculiar'?**

- A) Unusual
- B) Ordinary
- C) Abnormal
- D) Distinct

**4. How would you describe the mood in this extract?**

- A) Scared
- B) Confused
- C) Bored
- D) Furious

**5. Why did Lieutenant Iota think that the place could be a storage barn?**

- A) The place was a storage barn in reality.

- B) The place was muddy and dusty.
- C) The place was full of 'peculiar items'.
- D) There was an image of a storage barn in a book.

**Answers:**

**1. A) They had never seen such a place before.**

**2. D) Think-Tank's doubts**

Omega believed that Think-Tank would help them know more about the 'peculiar items' or give them more knowledge about them.

**3. A) Unusual**

The word 'unusual' refers to something being out of the ordinary. So, it is a synonym for the word 'peculiar'.

**4. B) Confused**

Think-Tank and his team are confused as they try to understand the 'peculiar items' that they have found on Earth.

**5. C) The place was full of 'peculiar items'.**

A barn is a place where things are stored. Lieutenant Iota found a number of 'peculiar items' and thought that the place was a storage barn.

## **The Book that Saved the Earth**

### **Extra EBQ, SAQ, LAQ**

#### **1. Read the extract below and answer the questions that follow.**

*“OMEGA: Yes, sir. (She reads with great seriousness.) Mistress Mary, quite contrary, How does your garden grow? With cockle shells and silver bells And pretty maids all in a row.*

*OOP: Ha, ha, ha. Imagine that. Pretty maids growing in a garden.*

*THINK-TANK: (alarmed) Stop! This is no time for levity. Don't you realise the seriousness of this discovery? The Earthlings have discovered how to combine agriculture and mining. They can actually grow crops of rare metals such as silver. And cockle shells. They can grow high explosives, too. Noodle, contact our invasion fleet.*

*NOODLE: They are ready to go down and take over Earth, sir.*

*THINK-TANK: Tell them to hold. Tell them new information has come to us about Earth. Iota, transcribe.”*

#### **Questions:**

**1. ‘Don't you realise the seriousness of this discovery?’ What event led to this statement?**

- A) The space crew read a book.
- B) The space crew found Earth's secret research labs.
- C) The space crew found plans to a Mars invasion.
- D) The space crew discovered a secret code.

**2. Why did Think-Tank order Noodle to contact the invasion fleet?**

- A) Think-Tank was alarmed at the Earthlings superior technology.
- B) Think-Tank wanted to invade some other planet.
- C) They could not understand the nursery rhyme.
- D) They wanted help from other Martians to understand the code.

**3. ‘Don't you realise the seriousness of this discovery?’ This is an example of irony as**

- A) Lieutenant Oop was making fun of Think-Tank.
- B) Think-Tank misinterpreted a simple nursery rhyme as a secret code.
- C) Think-Tank discovered the reality of the Earthlings.
- D) Think-Tank discovered a secret book about the Martians.

**4. What is the meaning of the word 'levity'?**

- A) Wittiness
- B) Absurdity
- C) Light-heartedness
- D) Happiness

**5. Which of these titles best suits this extract?**

- A) A Smooth Journey
- B) A Beautiful Dream
- C) Journey and Freedom
- D) Reversal of Expectations

**Answers:**

**1. A) The space crew read a book.**

**2. A) Think-Tank was alarmed at the Earthlings superior technology.**

**3. B) Think-Tank misinterpreted a simple nursery rhyme as a secret code.**

**4. C) Light-heartedness**

**5. D) Reversal of Expectations**

**2. Read the extract and answer the questions given below.**

*"THINK-TANK: Mirror, mirror, in my hand. Who is the most fantastically intellectually gifted being in the land?"*

*OFFSTAGE VOICE: (after a pause) You, sir.*

*THINK-TANK: (smacking mirror) Quicker. Answer quicker next time.*

*I hate a slow mirror. (He admires himself in the mirror.) Ah, there I am.*

*Are we Martians not a handsome race? So much more attractive than those ugly Earthlings with their tiny heads. Noodle, you keep on exercising your mind, and someday you'll have a balloon brain just like mine."*

**Questions:**

**1. To which question was Think-Tank expecting an answer from the mirror?**

- A) Will he become the supreme ruler of Earth?
- B) Will the space probe team achieve success in their mission?
- C) Who is the most intellectually gifted being in the land?
- D) Are we Martians not a handsome race?

**2. What word would you use to describe Think-Tank's character?**

- A) Brave

- B) Reckless
- C) Vain
- D) Humble

**3. Which of these statements is not true about the given extract?**

- A) Think-Tank considers himself superior to the Earthlings.
- B) Noodle had a tinier head than Think-Tank.
- C) Think-Tank believes that Earthlings looked ugly with their little heads.
- D) The mirror is honest about Think-Tank's question of intelligence.

**4. Why does Think-Tank believe that the Earthlings are ugly?**

- A) Earthlings have no brains.
- B) Earthlings have colourful heads.
- C) Earthlings have bigger heads than the Martians.
- D) Earthlings have tiny heads.

**5. Think-Tank asks Noodle to 'exercise' his mind. The word 'exercise' suggests that\_\_\_\_\_.**

- A) Noodle should meditate to become intelligent
- B) Noodle should exercise to become stronger
- C) Noodle should learn ways to become more intelligent
- D) Noodle should contact the Earthlings

**Answers:**

**1. C) Who is the most intellectually gifted being in the land?**

**2. C) Vain**

**3. D) The mirror is honest about Think-Tank's question of intelligence.**

**4. D) Earthlings have tiny heads.**

**5. C) Noodle should learn ways to become more intelligent**

**Short Answer Questions**

**1. Why did Think-Tank send his crew on the earth?**

**Answer:** Think-Tank, the ruler of Mars regarded the Earth as a mass of mud, and Earthlings as ugly, tiny-headed creatures. He planned to

invade Earth and expand his domain. He sent Probe One to Earth to get more information about the Earthlings.

## **2.Why did Think-Tank decide to evacuate Mars?**

**Answer:** Think-Tank misinterpreted the rhymes and thought Earthlings were a threat to him as well as to Mars. He got scared and called back Probe One, dropped the idea of invading and escaped to Alpha Centauri, a hundred million miles away from Mars.

## **3.Describe Think-Tank and his role in the play.**

**Answer:** The think-tank is the Commander-in-Chief and the ruler of Mars and its two moons. He is considered as the most powerful and intelligent person in the universe. He himself thinks so. He is proud of belonging to a handsome race of Martians. He is dominating, loves no arguments, expects obedience and compliance. But all these claims fall short of realities and belie his claims of greatness.

## **Long Answer Questions**

### **1.'Pride has a fall'. Justify this statement giving relevant points from how Think-Tank reacted to the readings from Mother Goose.**

**Answer:** Martians invaded the earth and reached in a library. Think-Tank was their boss. He was very proud of his wisdom, as he was having a big balloon-like head. He thought that he was the wisest person on Mars. Nobody could disobey him, or even dare to speak against him. He claimed that he had a quick mind. He had no respect for anyone and regarded other views as trifling. He was also fickle-minded.

He misinterpreted the rhymes in a complete verbal manner. The rhyme mistress Mary made him ponder over the discovery of the earth. From the poem diddle-diddle he was more alarmed and from the poem Humpty-Dumpty, he was so frightened that he decided to leave his kingdom and run away to Alpha Centauri. Thus his great wisdom was defeated and had a great fall.

### **2.Give a character sketch of Noodles highlighting his diplomatic handling of Think-Tank and even suggesting things without offending his mighty chief.**

**Answer:** Noodle has to walk on a tightrope. He has to maintain a very delicate balance. And he succeeds to some extent in his mission. The think-tank is the Commander-in-Chief and the ruler of Mars. Naturally, nobody can argue with him. It is difficult to disagree with him. And it is impossible to disobey him. Noodles know the real worth of Think\_Tank but still, he tries to keep him in good humor. Think-Tank is called the most intelligent and powerful person in the whole universe. But Noodle is a clever manipulator of things. He uses his convincing skills and humility to disarm an arrogant but all-powerful Commander-in-Chief.

Regarding the books, he very subtly but humbly goes on making new suggestions. Think-Tank is made to accept them. The noodle is gifted with a rare understanding of men and situations. Historian tells that the wise and wonderful Noodle replaces Great and Mighty Think Tank in the end. It is the victory of sanity and good sense over arrogance and insanity.

## CHAPTER---1THE RISE OF NATIONALISM IN EUROPE

Q. NO	QUESTIONS	MARKS
	2 marks	
1	What was Zollverien?	2
2	Conservative regimes set up in 1815 were autocratic. Justify the statement?	2
3	What is romanticism?	2
4	How had the female figures become an allegory of the nation during the 19th century in Europe? Analyse.	2
	3 marks	
5	Describe any three economic hardships faced by Europe in 1830s.	3
6	Culture had played an important role in the development of nationalism in Europe during the 18th and 19th centuries. Support the statement with examples.	3
7	Explain any three beliefs of the conservatism that emerged after 1815.	3
8	Describe any three reforms introduced by Napoleon in the territories he conquered.	3
9	Explain any three causes of conflict in the Balkan area after 1871.	3
10	Explain any three measures introduced by the French revolutionaries to create a sense of collective identity amongst the French people.	3
	5 marks	
11	“Nationalism spreads when people begin to believe that they are all part of the same nation.” Support the statement.	5
12	‘The 1830s were years of great economic hardship in Europe.’ Support the statement with four examples	5
13	Describe the process of unification of Italy.	5
14	“Napoleon had, no doubt destroyed democracy in France, but in the administrative field he had incorporated revolutionary principles in order to make the whole system more rational and efficient”. Support the statement.	

## CHAPTER 2 NATIONALISM IN INDIA

	Read and the following:	
1.	Explain the idea of ‘Satyagraha’ according to Gandhiji.	2
2.	Gandhiji decided in 1919 to launch a nationwide ‘Satyagraha’ against the proposed ‘Rowlatt Act’. Mention any two conditions of the proposed ‘Rowlatt Act’.	2
3.	“DR. B. R. Ambedkar ultimately accepted Gandhiji’s position and the te result was the ‘Poona pact’” in 1932- Describe the main features of ‘Poona pact’.	2



4.	Who had designed the 'Swaraj Flag'? Mention its significance.	2
5.	How was the Civil Disobedient Movement different from the Non-Cooperation Movement?	2
6.	Name the leaders of the Khilafat Movement. Why did Gandhiji want to merge Khilafat Movement with Non-cooperation Movement?	2
7.	Why did Gandhiji withdraw the Non- Cooperation Movement?	2
8.	How did the salt Satyagraha become an effective tool of resistance against British colonialism in India during 1930? Explain.	3
9.	Discuss various stages of the Non Cooperation Movement launched by Mahatma Gandhi.	3
10.	Write a short note on JallianwalaBagh massacre.	3
11.	Interpret the implication of the 'First World War' on the economic and political situation of India. OR Elucidate the effects of 'First World War' on India.	5
12.	How did people belonging to different communities, regions or language groups in India develop a sense of collective belonging? Elucidate.	5
13.	Explain the importance of 'Salt March' initiated by Gandhiji as a symbol to unite the nation.	
14.	How did the Non-Cooperation Movement spread to the countryside and drew into its fold the struggles of peasants and tribal communities? Elaborate.	

#### CHAPTER-The Making of a Global World

Q. NO	QUESTIONS	MARKS
Q.1.	Explain how the global transfer of disease in the pre-modern world helped in the colonisation of the Americas.	3
Q.2.	Which was the most powerful weapon used by the Spanish to conquer America?	1
Q.3.	Describe the significance of silk routes in the pre-modern period in the field of trade cultural exchange and religion.	3
Q8.	'Food offers many examples of long distance cultural exchange'. Justify this statement.	3
Q9.	Explain the word El Dorado	2
Q10.	Why did smallpox kill a large number of native Americans?	2

## PRINT CULTURE AND THE MODERN WORLD

	2 marks	
1	Why did the Roman Catholic Church impose control over publishers and booksellers?	2
2	Why couldn't the production of hand written manuscripts satisfy the ever increasing demand for books? Give any two reasons.	2
3	How' were magazines different from novels? Write any two differences.	2
4	What was Protestant reformation?	2
5	What were the limitations of the written manuscripts in India? Explain.	2
6	"By the end of 19th century a new visual culture was taking shape." Explain.	2
	3 marks	
7	Explain any three factors responsible for the invention of new printing techniques.	3
8	In what three ways did the printed books at first closely resemble the written manuscripts?	3
9	Explain any three reasons which created a large number of new readers in the nineteenth century.	3
10	Explain the effects of print culture in the religious sphere in early modern Europe.	3
11	How did new form of popular literature appear in print targeting new audience in the 18th century? Explain with examples.	3
12	What was the attitude of the liberal and conservative Indians towards women's reading? How did women like Kailashbhashini Debi respond to this in their writings?	3
13	Explain with examples the role of print culture in the bringing of the French revolution.	3
14	Martin Luther remarked, "Printing is the ultimate gift of god and the greatest one." Explain his remarks in the light of religious reforms that took place in Europe.	3
15	By the nineteenth century, what were te series of further innovations in printing technology ?	3
16	Why Mercier did commented 'Tremble, therefore, tyrants of the world! Tremble before the virtual writer!'	3
17	What was Vernacular press act?	3
18	What were DEMERITS OF MANUSCRIPTS?	3

**I. Read the following extracts and answer the questions that follow:**

**1.** *Mark! While relatives are looking on and lamenting deeply, one by one mortals are carried off, like an ox is led to the slaughter. So the world afflicted with death and decay, therefore, the wise do not grieve, knowing the terms of the world.*

**(i)** Those who do not grieve are.....

- (a) happy                      (b) arrogant                      (c) proud                      **(d) wise**

**(ii)** Fill in the blank with one word only:

The fate of mortals is **death**

**(iii)** Why don't the wise grieve?

→ The wise don't grieve because they know the terms of the world: that death is inevitable.

**(iv)** Which animal are men compared to?

- (a) All animals  
(b) Someone named Mark  
(c) All wise people  
**(d) An ox**

**(v)** Which of the following words from the extract means the same as 'bothering'?

- (a) Lamenting  
(b) Decay  
**(c) Afflicting**  
(d) Grieve

**2.** *The Buddha said, "The life of mortals in this life is troubled and brief and combined with pain. For there is not any means by which those that have been born can avoid dying; after reaching old age there is death; of such a nature are living beings. As ripe fruits are early in danger of falling, so mortals when born are always in danger of death."*

**(i)** Which of the following is the eternal aspect of life according to the Buddha?

- (a) Life                      (b) Food                      (c) Destiny                      **(d) Death**

**(ii)** Fill in the blank appropriately;

Human life has been compared to .....

- (a) Ripe fruits**                      (b) Hatred                      (c) Death                      (d) Belief

**(iii)** When did he say the lines given in the extract?

→ When Kisa Gotami finds no such house which had not witnessed death, then the Buddha says the given lines.

**(iv)** The life of mortals is

- (a) Brief    (b) troubled    (c) combined with pain    **(d) All of these**

**(v)** Which word in the extract is the antonym of 'prolonged'?

- (a) Brief**                      (b) Troubled                      (c) Avoid                      (d) Early

**3. Why did Kisa Gotami go to the Buddha? What did he ask her to do? Why?**

→

*Kisa Gotami went to the Buddha in search of medicine for her dead son. He asked her to arrange mustard seeds from a house where no one had died. He must have perceived that Kisa is in grave pain and in no condition to understand mere words. So, he gave her an activity to realise the harsh truth of life herself.*

**4. What prompted Prince Siddharta to seek enlightenment?**

→

*The sights of a sick man, a dead man, a monk begging for alms and old man stimulated an unsettling quest in Prince Siddharta. This prompted him to seek answers. In the process, he attained enlightenment and became the Buddha from Prince Siddharta.*

**5. What qualities did the Buddha demonstrate when he gave up his status and family?**

→

*The Buddha demonstrated strong will, the power of renunciation, inquisitiveness and his tendency to immerse in deep thought to seek*

*answers to his quest. Despite being a prince, he at once renounced his status and luxuries to seek enlightenment which is difficult for any common personage without a powerful will to renounce everything and pursue one's quest for self-realisation.*

## **6. Can Kisa Gotami also attain enlightenment?**

→

*Yes, it is possible for Kisa Gotami too, to attain enlightenment because she, like the Buddha is affected by the four sights, is deeply moved by the death of her son. Both seek answers which are hard to realise. If Kisa Gotami retains the realisation that she had at the sight of the city lights, she also will be able to attain enlightenment.*

## **7. What medicine did the Buddha give Kisa Gotami?**

→

*When Kisa Gotami approached the Buddha seeking medicine for her dead son, he asked her to procure mustard seeds from a house where no one had ever died. She followed the instructions and roamed house to house in vain as there was and can never be a house where no one had ever died.*

*Although disappointed, she had a deep realisation while sitting by the street looking at the flickering city lights. She metaphorically draws similarity between the flickering of the lights and the instability and uncertainty of human life and the exhaustion of the city lights with death. Through this activity, she understands that death is common to all and no amount of lamentation will do any good or revive the dead. She realises that her dead son can never be brought back to life and that she had to accept this harsh reality and make peace with it.*

## **8. Describe the journey of Siddhartha becoming the Buddha.**

→

*Siddhartha Gautama, a prince in ancient India, embarked on a life-altering journey that ultimately led to his transformation into the Buddha. At the age of 29, he left the comforts of his palace after witnessing four profound sights: an old man, a sick man, a corpse, and a wandering ascetic. These sights stirred his curiosity about the nature of suffering and impermanence.*

*Siddhartha spent six years in rigorous ascetic practices but realized they didn't bring enlightenment. Undeterred, he meditated under the Bodhi tree for several days, overcoming temptations and gaining deep insight. Finally, he attained enlightenment, becoming the Buddha. This journey, marked by his contemplation and fasting, culminated in his discovery of the Self. The Buddha's teachings spread, and he founded a monastic order, leaving a lasting legacy of wisdom and compassion.*

# SAMPLE QUESTION PAPER

## Class X (MATHEMATICS)

Session 2023-24

TIME: 3 hours

MAX. MARKS: 80

### General Instructions:

1. This Question Paper has 5 Sections A, B, C, D and E.
2. Section A has 20 MCQs carrying 1 mark each
3. Section B has 5 questions carrying 02 marks each.
4. Section C has 6 questions carrying 03 marks each.
5. Section D has 4 questions carrying 05 marks each.
6. Section E has 3 case based integrated units of assessment (04 marks each) with subparts of the values of 1, 1 and 2 marks each respectively.
7. All Questions are compulsory. However, an internal choice in 2 Qs of 5 marks, 2 Qs of 3 marks and 2 Questions of 2 marks has been provided. An internal choice has been provided in the 2marks questions of Section E
8. Draw neat figures wherever required. Take  $\pi = 22/7$  wherever required if not stated.

### SECTION A

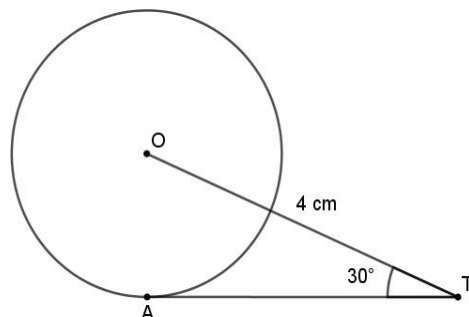
(Section A consists of 20 questions of 1 mark each)

1. A quadratic polynomial, has  
(a) at most two roots (b) at least two roots  
(c) exactly two roots (d) at least one root
2. If the LCM of a and 18 is 36 and the HCF of a and 18 is 2, then a =  
(a) 2 (b) 3 (c) 4 (d) 1
3. If a pair of equations is consistent, then the lines representing them are  
(a) always intersecting (b) intersecting or coincident  
(c) always coincident (d) parallel
4. If the quadratic equation  $x^2 - 8x + k = 0$  has real roots, then  
(a)  $k < 16$  (b)  $k \leq 16$  (c)  $k > 16$  (d)  $k \geq 16$
5. The sum of first  $n$  even natural number is  
(a)  $2n$  (b)  $n^2$  (c)  $n^2 + 1$  (d)  $n^2 - 1$
6. If the ratio of 18<sup>th</sup> term to 11<sup>th</sup> term of an AP is 3:2, then the ratio of 21<sup>st</sup> term to 5<sup>th</sup> term is  
(a) 3:2 (b) 3:1 (c) 1:3 (d) 2:3
7. If in two triangles, DEF and PQR,  $\angle D = \angle Q$  and  $\angle R = \angle E$ , then which of the following is not true?  
(a)  $\frac{EF}{PR} = \frac{DF}{PQ}$  (b)  $\frac{EF}{RP} = \frac{DE}{PQ}$   
(c)  $\frac{DE}{QR} = \frac{DF}{PQ}$  (d)  $\frac{EF}{RP} = \frac{DE}{QR}$

8. Two poles of height 6m and 11m stand vertically upright on a plane ground. If the distance between their foot is 12m, the distance between their tops is

- (a) 12m                      (b) 14m                      (c) 13m                      (d) 11m

9. In given figure, AT is a tangent to the circle with centre O such that  $OT = 4$  cm and  $\angle OTA = 30^\circ$ . Then AT is equal to



- (a) 4 cm                      (b) 2 cm  
(c)  $2\sqrt{3}$  cm                      (d)  $4\sqrt{3}$  cm

10. If  $\cos \theta = \frac{1}{2}$ , then  $\cos \theta - \sec \theta =$

- (a)  $\frac{3}{2}$                       (b)  $-\frac{3}{2}$                       (c)  $\frac{1}{2}$                       (d)  $-\frac{1}{2}$

11. An arc of length 15.7 cm subtends a right angle at the center of the circle. The radius of the circle is

- (a) 20cm                      (b) 10cm                      (c) 15cm                      (d) 12cm

12. Two cubes each with 6 cm edge are joined end to end. The surface area of the resulting cuboid is

- (a)  $180 \text{ cm}^2$                       (b)  $360 \text{ cm}^2$                       (c)  $300 \text{ cm}^2$                       (d)  $260 \text{ cm}^2$

13. The curved surface area of a right circular cone of height 15cm and base diameter 16cm is

- (a)  $60\pi \text{ cm}^2$                       (b)  $68\pi \text{ cm}^2$                       (c)  $120\pi \text{ cm}^2$                       (d)  $136\pi \text{ cm}^2$

14. If the points (t, 2t), (-2, 6) and (3, 1) are collinear, then t =

- (a)  $\frac{3}{4}$                       (b)  $\frac{4}{3}$                       (c) 3                      (d) 4

15. The coordinates of the fourth vertex of the rectangle formed by the points O (0, 0), A(2,0) and B(0,3) are

- (a) (3,0)                      (b) (0, 2)                      (c) (2, 3)                      (d) (3, 2)

16. The pair of linear equations  $y=0$  and  $y=-5$  has

- (a) one solution                      (b) two solutions  
(c) infinitely many solutions                      (d) no solution

17. If mode of some data is 7 and their mean is also 7 then their median is

- (a) 10                      (b) 9                      (c) 8                      (d) 7



18. A girl calculates that the probability of her winning the first prize in a lottery is 0.06. If 8000 tickets are sold, then how many tickets has she brought?

- (a) 420                      (b) 480                      (c) 840                      (d) 48

### **ASSERTION REASON BASED QUESTIONS:**

**In the question number 19 and 20, a statement of Assertion(A) is followed by a statement of Reason (R).**

**Choose the correct answer out of the following choices**

- (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) is false but (R) is true.

19. **Assertion(A):** The probability of getting a bad egg in a lot of 400 is 0.035. The number of good eggs in the lot is 386.

**Reason(R):** If the probability of an event is p, the probability of its complementary event will be 1-p

20. **Assertion(A):** For any acute angle  $\theta$ , the value of  $\sin \theta$  cannot be greater than 1.

**Reason(R):** Hypotenuse is the longest side in any right angled triangle.

### **SECTION B**

**(Section B consists of 5 questions of 2 marks each)**

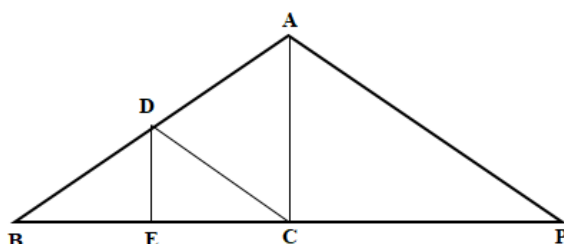
21. The largest number that divides 1251, 9377 and 15628 leaving remainder 1, 2 and 3 respectively.

**OR**

Express the HCF of 468 and 222 as  $468x + 222y$  where x, y are integers in 2 different ways.

22. Find the value of k for which the quadratic equation  $(3k+1)x^2 + 2(k+1)x + 1 = 0$ , has equal roots. Also find these roots.

23. In the given figure,  $DE \parallel AC$  and  $DC \parallel AP$ . Prove that  $\frac{BE}{EC} = \frac{BC}{CP}$



24. If the area of a semi-circular field is 30800 sq.m, then find the perimeter of the field.

**OR**

Find the difference of the areas of two segments of a circle formed by a chord of length 5cm subtending an angle of  $90^\circ$  at the centre.

25. Find the value of  $\sin^2 \theta + \frac{1}{1 + \tan^2 \theta}$

### **SECTION C**

**(Section C consists of 6 questions of 3 marks each)**

26. Prove that  $2 - 3\sqrt{7}$  is irrational.
27. The ages of two friends Ani and Bijju differ by 3 years. Ani's father Dharam is twice as old as Ani and Bijju is twice as old as his sister Cathy. The ages of Cathy and Dharam differ by 30 years. Find the ages of Ani and Bijju.
- OR**
- If 16 is subtracted from twice the greater of two positive numbers, the result is half the other number. If 1 is subtracted from half the greater number, the result is still half the other number. Find the two numbers.
28. Two tangents TP and TQ are drawn to a circle with centre O from an external point T. Prove that  $\angle PTQ = 2 \angle OPQ$ .
29. Prove that  $\sec 4\theta(1 - \sin^4\theta) - 2 \tan^2\theta = 1$
- OR**
- Prove the identity  $(1 + \cot\theta - \operatorname{cosec}\theta)(1 + \tan\theta + \sec\theta) = 2$
30. A vessel is in the form of a hollow hemisphere mounted by a hollow cylinder. The diameter of the hemisphere is 14cm and the total height of the vessel is 13cm. Find the inner surface area of the vessel.
31. One card is drawn from a well shuffled deck of 52 cards. Find the probability of getting
- (i) a face card or a black card
  - (ii) neither an ace nor a king
  - (iii) a jack and a black card

### **SECTION D**

**(Section D consists of 4 questions of 5 marks each)**

32. The following table gives the literacy rate (in percentage) of 35 cities. Find the mean literacy rate.

Literacy rate (in %)	45 - 55	55-65	65-75	75-85	85-95
Number of cities	3	10	11	8	3

**OR**

The distribution below gives the weight of 30 students of a class. Find the median weight of the students.

Weight (in KG)	40-45	45-50	50-55	55-60	60-65	65-70	70-75
Number of Students	2	3	8	6	6	3	2

33. State and prove Basic proportionality theorem.

In  $\triangle ABC$ , if  $DE \parallel BC$ ,  $AD = x$ ,  $DB = x - 2$ ,  $AE = x + 2$  and  $EC = x - 1$ , then using

the above result, find the value of  $x$

34. The angles of depression of the top and the bottom of an 8m tall building from the top of a multi-storeyed building are  $30^\circ$  and  $45^\circ$ , respectively. Find the height of the multi storeyed building and the distance between the two buildings.

**OR**

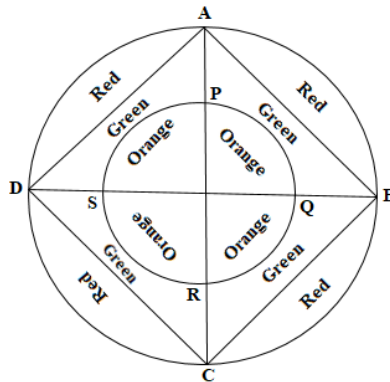
A straight highway leads to the foot of a tower. A man standing at the top of the tower observes a car at an angle of depression of  $30^\circ$ , which is approaching the foot of the tower with a uniform speed. Six seconds later, the angle of depression of the car is found to be  $60^\circ$ . Find the time taken by the car to reach the foot of the tower from this point.

35. A fast train takes 3 hours less than a slow train for a journey of 600km. If the speed of the slow train is 10km/hr less than that of the fast train, find the speeds of the two trains.

### **SECTION E**

**(Section E consists of 3 Case Studies of 4 marks each)**

36. Pookalam is the flower bed or flower pattern designed during Onam in Kerala. It is similar as Rangoli in North India and Kolam in Tamilnadu. During the festival of Onam, your school is planning to conduct a Pookalam competition. Your friend who is a partner in competition suggests the following design below.



Observe it carefully and answer the following questions:

1. If the diameter of the outer circle is 28cm, find the area of sector AOD where AC and BD are drawn perpendicular to each other. (1)
2. What area of the pookalam is coloured orange where P, Q, R, S are the midpoint of OA, OB, OC, OD respectively. (1)
3. Find the area covered with Red flowers.

**OR**

What is the difference in the areas covered by Green and Orange flowers. (2)

37. India is competitive manufacturing location due to the low cost of manpower and strong technical and engineering capabilities contributing to higher quality production runs. The production of TV sets in a factory increases uniformly by a fixed number every year. It produced 16000 sets in the 6<sup>th</sup> year and 22600 in the 9<sup>th</sup> year.

Based on the above information, answer the following questions:

1. Find the production during first year. (1)
2. In which year, the production is Rs. 29,200. (1)
3. Find the difference of the production during 7<sup>th</sup> year and 4<sup>th</sup> year.

**OR**

Find the sum of production for the first 3 years.

(2)

38. To conduct Sports Day activities, in your rectangular shaped school ground ABCD, lines have been drawn with chalk powder at a distance of 1m each. 100 flower pots have been placed at a distance of 1m from each other along AD, as shown in the figure below.

Reehan runs  $\frac{1}{4}$ <sup>th</sup> the distance AD on the 2<sup>nd</sup> line and posts a Green flag. Jasleen runs

$\frac{1}{5}$ <sup>th</sup> the distance AD on the eighth line and posts a red flag.

Based on this information, answer the following questions:

1. What is the distance between both the flags? (1)
2. If Raj wants to post a blue flag exactly halfway between the line segment joining the two flags, where should he post his flag? (1)
3. If Joy has to post a flag at one-fourth distance from green flag, in the line segment joining the green and red flags, then where should he post his flag?

**OR**

Find the coordinates of the mid-point of line segment joining Green and Red flags. (2)

## **MULTIPLE CHOICE QUESTIONS**

### **BASIC ICT SKILLS - II**

1. I am capable to store and display all icons available in PC
  - Power On Self Test
  - Welcome Screen
  - Desktop
  - Login Screen
2. What is responsible for performing the POST (Power On Self Test)?
  - The User
  - Operating System
  - Desktop
  - BIOS
3. Identify the operating system out of the following:
  - Google Chrome
  - Adobe Photoshop
  - Microsoft Windows
  - Adobe Dreamweaver
4. Which of the following item is not present on desktop?
  - Folder
  - Disk drive
  - Icon
  - Taskbar
5. The login screen appears after
  - POST
  - Welcome Screen
  - Windows Start Screen
  - BIOS Screen
6. The \_\_\_\_\_ function key is used to get help in most programs.
  - F12
  - F2
  - F3
  - F1
7. Manisha pressed a key on keyboard that moved the cursor to the beginning of a new line. But she did not know which key has been presses by her. Identify the key pressed by her:
  - Enter
  - Shift
  - Ctrl
  - Windows
8. Rekha wants to move the cursor to the beginning of the line to the left side. Select a key which she should press:
  - Left Arrow
  - End
  - Home
  - Page Up
9. Which of the following statement is correct for delete and backspace key?
  - Any key can be used to remove the text from center

- Delete erases characters from left side where as Backspace erases characters from right side
  - Delete erases characters from right side where as Backspace erases characters from left side
  - Anyone can overwrite the content selected by use
10. When the mouse is dragged on the file or icon it displays the information about the file. This process is known as
- Left Click
  - Right Click
  - Mouse Hover
  - Drag and Drop
11. Each file stored in the computer has
- Filename and Extension
  - Data and Information
  - Particular Size and Location
  - All of these
12. The filename and extension are separated by
- . (Period)
  - , (Comma)
  - \_ (Underscore)
  - ' (Single Quote)
13. A \_\_\_\_\_ is location or container in which the files can be stored.
- Folder
  - Recycle Bin
  - Library
  - Utility
14. The shortcut key to open run command is :
- ctrl + r
  - shift + r
  - ctrl + r
  - windows + r
15. The short cut key to open a new file in notepad is
- ctrl + e
  - ctrl + n
  - ctrl + w
  - alt + n

## **DATABASE MANAGEMENT SYSTEM**

Roll No	Class	Name	Game	Grade	Marks
11	9	Surjeet	Cricket	B	68
12	8	Mohit	Tennis	A	80
13	9	Arvind	Swimming	B	60
14	7	Paras	Tennis	A	81
15	6	Shivangi	Football	A	87
16	7	Bhawna	Basket Ball	B	64
17	8	Lalit	Chess	A	88

### **Sport**

Use above Table for MCQs (1 to 10):

1. Which DDL command is used to build a table "Sport " in SQL?  
A) Create table Sport (Roll No Char(3), Class Char(3), Name varchar(15), Game char(5), Marks Int);  
B) Make table Sport (Roll No Char(3), Class Char(3), Name varchar(15), Game char(5), Marks Int)  
C) Build table Sport (Roll No Char(3), Class Char(3), Name varchar(15), Game char(5), Marks Int);  
D) Create Sport (Roll No Char(3), Class Char(3), Name varchar(15), Game char(5), Marks Int);
2. This DML command is used to enter record in table "Sport" in SQL.  
A) Enter into Sport values ( 11, 9, "Surjeet", "Cricket", "B", 68);  
B) Put into Sport ( 11, 9, "Surjeet", "Cricket", "B", 68);  
C) Insert in Sport value ( 11, 9, "Surjeet", "Cricket", "B", 68);  
D) Insert into Sport values ( 11, 9, "Surjeet", "Cricket", "B", 68);
3. \_\_\_\_ is the DML command to display all record from table "Sport" in SQL.  
A) Display record from table Sport:  
B) Select \* from Sport;  
C) Select all record from Sport;  
D) Select \* from table Sport;
4. Which DML command is used to display "Class & Name" columns from table "Sport" in SQL?  
A) Select class, Name from table Sport;  
B) Query class, Name from Sport;  
C) Select class, Name from Sport;  
D) Display class, Name from Sport;
5. Replace Grade = A where class = 9 using DML command in SQL.  
A) Change table Sport set Grade = "A" where class = 9;

- B) Update Sport replace Grade = "A" check class = 9;
- C) Update table set Grade = "A" where class = 9
- D) Update Sport set Grade = "A" where class = 9;

6. \_\_\_\_\_ is the DML command to display all records of class = 8 students in SQL.

- A) Show all from Sport Where class = 8;
- B) Select \* from Sport Where class = 8;
- C) Display all from Sport Where class = 8;
- D) Select \* from table Sport Where class = 8

7. Which DML command is used to display all record, who have got Marks  $\geq 70$ , from table "Sport" in SQL.

- A) Select \* from Sport where marks  $\geq 70$ ;
- B) Select \* from Sport check marks  $\geq 70$ ;
- C) Display all from Sport where marks  $\geq 70$ ;
- D) Display all from Sport find marks  $\geq 70$ ;

8. \_\_\_\_\_ DML command is used to delete the record of "Surjeet" from table "Sport" in SQL.

- A) Drop from Sport Where Name = "Surjeet";
- B) Delete from Sport check Name = "Surjeet";
- C) Delete from Sport Where Name = "Surjeet";
- D) Delete from table Sport Where Name = "Surjeet";

9. This DDL command is used to delete the table "Sport" in SQL.

- A) Drop table Sport;
- B) Delete table Sport;
- C) Drop Sport table;
- D) Drop table Sport

10. Which DDL command is used to delete one column "Class" from table "Sport" in SQL?

- A) Drop column class from Sport:
- B) Drop column class from table Sport
- C) Delete column class from Sport;
- D) Alter table Sport drop column class;

11. \_\_\_\_\_ DDL command is used to build a table in SQL.

- A) Make
- B) Form
- C) Develop
- D) Create

12. \_\_\_\_\_ key setup a relationship among tables in a database.

- A) Primary Key
- B) Foreign Key



- C) Composite Key
- D) Main Key

13. \_\_\_\_ key helps to access records in a table in a database.

- A) Primary Key
- B) Foreign Key
- C) Composite Key
- D) Main Key

14. A table can have only one \_\_\_\_ key in a table in a database.

- A) Primary Key
- B) Foreign Key
- C) Composite Key
- D) Main Key

15. A table can have more than one \_\_\_\_ keys in a table in a database.

- A) Primary Key
- B) Foreign Key
- C) Composite Key
- D) Main Key

## **WEB APPLICATIONS AND SECURITY**

1. Karan lives at a hostel in Shimla. He calls his mother who lives in Delhi, to get her approval for the robotics class which is going to start in his school next week onwards. However, due to disruption in the phone line, his mother could not understand and reply to him. He got very upset. Which another medium can he use to get immediate approval of his mother?

- A) E-mail
- B) Letter
- C) Message through Friend
- D) Fax

2. \_\_\_\_\_ is not an instant messaging service.

- A) Skype
- B) Yahoo! Messenger
- C) Firefox
- D) Whatsapp

3. Richard needs to set up a network for his office where he wants to save all the data in a centralized system and other computers will take the services from the centralized system. Which architecture will be the best suitable for him?

- A) Peer to Peer
- B) Client-Server
- C) Point to Point
- D) Ring

4. A \_\_\_\_\_ is a device that converts digital computer signals into a form (analog signals) that can travel over phone lines and vice versa.

- A) Repeater
- B) Switch
- C) Router
- D) Modem

5. \_\_\_\_\_ uses the keyboard as a pointing device instead of a mouse.

- A) MouseKeys
- B) Toggle key
- C) Filter key
- D) Sticky key

6. A \_\_\_\_\_ is one which connects computers and devices in a limited geographical area such as home, school, computer laboratory, office building, or closely positioned group of buildings.

- A) LAN
- B) WAN
- C) MAN
- D) PAN

7. Identify the measure to protect computer from threats and viruses:

- A) Sharing password with friends
- B) Allow anyone to use your device
- C) Use Antivirus
- D) Leave computer without logging out

8. Millennium University is organizing a reunion meet for their alumnae students. For this purpose, university wants to send the invite to all these students with their different addresses. Which feature of the Word Processor University should use to accomplish the task?

- A) Mail Merge
- B) E-Mail
- C) Templates
- D) Data Source

9. \_\_\_\_\_ is the example of ISP(Internet Service Provider).

- A) Adobe
- B) Google
- C) Microsoft Tab
- D) JIO

10. \_\_\_\_\_ device is used to connect LAN with WAN.

- A) Switch
- B) Gateway
- C) Router
- D) Firewall

## **ENTREPRENEURIAL SKILLS**

1. \_\_\_\_ isn't the quality of an Entrepreneur.
  - A) Leadership
  - B) Risk taking
  - C) Distracted
  - D) Innovative
2. Which isn't the function of an Entrepreneur?
  - A) Maintaining Records
  - B) Making Decisions
  - C) Public Relations
  - D) Organizing Resources
3. Entrepreneurship plays an important role in \_\_\_\_ aspect.
  - A) Job Creator
  - B) Complete need of Consumers
  - C) Increase GDP of a country
  - D) All of these
4. \_\_\_\_ isn't the myth about Entrepreneurship.
  - A) Born Entrepreneurs
  - B) Leadership
  - C) Instant Profit
  - D) Luxuries Future
5. Which is the business field to make careers in Entrepreneurship?
  - A) Service Business
  - B) Manufacturing Business
  - C) Buying a Franchise
  - D) All of these
6. \_\_\_\_ is the reward to be an Entrepreneur.
  - A) Freedom
  - B) Status
  - C) Wealth Creator

D) All of these

7. What is the disadvantage to be an Entrepreneur?

A) Excitement

B) Independence

C) Uncertain Income

D) Ambition

8. Why are small businesses important to a country's economy?

A) They give an outlet for entrepreneurs.

B) They can provide specialist support to larger companies.

C) They can be innovators of new products.

D) All the above

9. Which of the following is the reason for business failure?

A) Lack of market research

B) Poor financial control

C) Poor management

D) All the above

10. An individual who initiates, creates and manages a new business can be called

---

A) A leader

B) A manager

C) An entrepreneur

D) A professional

## **Unit-1 Communication Skills**

**1. Which of the following is NOT an element of communication within the communication process cycle?**

- a) Channel
- b) Receiver
- c) Sender
- d) Time

**2. You need to apply for leave at work? Which method of communication will you use?**

- a) e-mail
- b) Poster
- c) Newsletter
- d) Blog

**3. Which of these sentences is in active voice?**

- a) A movie is being watched by them.
- b) The car was repaired by Raju
- c) He is reading a book.
- d) The thief was being chased by a policeman

**4. Which of the following is an effective component of good feedback?**

- a) Detailed and time consuming
- b) Indirect
- c) Specific
- d) Opinion-based

**5. Which of these are examples of negative feedback?**

- a) I hate to tell you this but your drawing skill is poor.
- b) You can surely improve your drawing
- c) These are good drawings but you can do better.
- d) None of the above

**6. Which of these is NOT an appropriate non-verbal communication at work?**

- a) Keeping hands in pockets while talking
- b) Talking at moderate speed
- c) Sitting straight
- d) Tilting head a bit to listen

**7. What does an upright (straight) body posture convey or show?**

- a) Pride
- b) Professionalism
- c) Confidence
- d) Humility

**8. What are the types of words we should use for verbal communication?**

- a) Acronyms
- b) Simple
- c) Technical
- d) Jargons

**9. What is a sentence?**

- a) A group of ideas.
- b) A group of words that communicate a complete thought.
- c) A set of rules to write correctly.
- d) A set of words that is grammatically correct

**10. Sending a letter is which type of communication?**

- a) Listening
- b) Writing

- c) Speaking
- d) Reading

## Unit-1 Digital Documentation

1. Which of the following styles are not supported in OpenOffice Writer?
  - a) Character Styles
  - b) Page Styles
  - c) Paragraph Styles
  - d) Table Styles
2. \_\_\_\_\_ menu contains the option of inserting pictures in a document of OpenOffice Writer.
  - a) Home
  - b) Insert
  - c) View
  - d) Page Layout
3. What is the effect of Smooth graphic filters in OpenOffice Writer?
  - a) Soften the contrast of an image
  - b) Harden the contrast of an image
  - c) Decreases the contrast of an image
  - d) Increases the contrast of an image
4. \_\_\_\_\_ refers to the alignment of text with respect to the objects around them.
  - a) Text grouping
  - b) Text wrapping
  - c) Object grouping
  - d) Object wrapping
5. \_\_\_\_\_ refers to a sample document which is not completely blank.
  - a) Saved file
  - b) Template
  - c) Saved document
  - d) All of the above
6. \_\_\_\_\_ feature in OpenOffice Writer allows user to build an automated table of content from headings in their document.
  - a) Template
  - b) Table of content
  - c) Default document
  - d) All of these
7. Which application can be used for creating a data source for mail merge?
  - a) Impress
  - b) Corel Draw
  - c) Calc
  - d) None of these
8. \_\_\_\_\_ Styles in OpenOffice Writer is used to format numbered or bulleted lists.
  - a) Paragraph Styles
  - b) Page Styles
  - c) Frame Styles
  - d) List Styles
9. Prashant is a writer. He has just completed writing his book using Writer software. Now he wants to add a page which will contain the title of each chapter and its respective page number. Suggest the feature that can be used to do this task.
  - a) Mail merge
  - b) Templates
  - c) Styles
  - d) Table of contents



**10. In the Mail Merge dialog box, you can select the \_\_\_\_\_ option if you want to save the merged documents.**

- a) File
- b) Edit
- c) View
- d) Format

**11. Which of the following is not a type of text wrapping option?**

- a) Wrap off
- b) Optimal wrap
- c) Page wrap
- d) Wrap center

**12. By dragging any \_\_\_\_\_ handle you can increase or decrease the \_\_\_\_\_ of the image diagonally.**

- a) corner, size
- b) top, depth
- c) side, quality
- d) corner, quality

**13. \_\_\_\_\_ is the shortcut key to cut the image from a Writer document.**

- a) Ctrl + X
- b) Ctrl + P
- c) Ctrl + C
- d) Ctrl + V

**14. Select the correct steps for printing Labels in OpenOffice Writer.**

- a) Click on Edit → Print
- b) Click on File → Print
- c) Click on Format → Print
- d) Click on Tools → Print

**15. Which of the following ways cannot be used to create a template?**

- a) Document
- b) Wizard
- c) File
- d) Dialog box

## **Unit-5 Green Skills**

- 1. How many sustainable development goals are given by the United Nations?**
  - a) 18
  - b) 17
  - c) 15
  - d) 20
- 2. Choose the option which defines sustainable development.**
  - a) Taking care of future generations
  - b) Taking care of only ourselves
  - c) Taking care of ourselves and the future generations
  - d) Well-being of all
- 3. Which organisation has made the Sustainable Development Goals.**
  - a) United Nations
  - b) League of Nations
  - c) UNICEF
  - d) World Health Organisation
- 4. Which of the following sources of energy is from a renewable source?**
  - a) Solar energy
  - b) Wood
  - c) Coals
  - d) Petrol
- 5. Choose the option which is not a sustainable development goal according to the United Nations.**
  - a) Clean Water and Sanitation
  - b) Gender Equality
  - c) Population
  - d) Reduced Inequalities

## **Unit-1 Self Management Skills**

**1. Stress is identified as a condition in which a person is .....**

- a) tensed
- b) worried
- c) relaxed
- d) both (a) and (b)

**2. What plays a major role in reaction to stress.**

- a) Emotions
- b) Personality
- c) Confidence
- d) None of these

**3. The feeling of self-awareness enhances our.....**

- a) Self-confidence
- b) Self-monitoring
- c) Self-Regulation
- d) All of the above

**4. The internal stress caused by .....**

- a) pent-up worries
- b) laziness
- c) survival stress
- d) experiences

**5. .... is not a symptom of stress?**

- a) Increased sweating
- b) Cold hands or feet
- c) Dry mouth
- d) None of these

**6. What is 'M' in the 'SMART' goal setting method**

- a) Must
- b) Meaning
- c) Measurable
- d) None of these

**7. Physical exercise is used as a stress management technique because**

- a) It improves blood circulation
- b) improves self-image
- c) make us feel better
- d) All of the above

**8. Stress management prevents \_\_\_\_\_**

- a) psychological disorders
- b) behavioural problems
- c) both of the above
- d) none of the above

**Q9. Self-Reliance means \_\_\_\_\_**

- a) Ability to Work Independently
- b) Complete the task effectively
- c) Both of the above
- d) None of the above

**Q10. What is 'S' in the 'SMART' method of goal setting?**

- a) Smart
- b) Special

- c) Speed
- d) Specific

## Unit-2 Electronic spreadsheet

1. Which of the following type of package does Calc refer to?
  - a) Spreadsheet
  - b) Multi sheet
  - c) Double sheet
  - d) Cannot be determined
2. Which of the following is the extension of a worksheet created in Calc ?
  - a) .ods
  - b) .odd
  - c) .xls
  - d) .obj
3. How can one calculate total of values entered in a worksheet in a Calc document?
  - a) By manual entry
  - b) By AutoSum
  - c) By formula
  - d) All of these
4. In Calc, how many spreadsheets are there by default?
  - a) 2
  - b) 3
  - c) 4
  - d) 5
5. \_\_\_\_ is used to automatically create groups and apply inbuilt function in Open Office Calc.
  - a) Consolidate
  - b) Subtotal
  - c) Autosum
  - d) None of these
6. \_\_\_\_ provides a way to combine data from same or multiple worksheet.
  - a) Consolidate
  - b) Subtotal
  - c) Solver
  - d) All of these
7. \_\_\_\_ is the by default function in consolidating data in Open Office Calc.
  - a) Min
  - b) Product
  - c) Average
  - d) Sum
8. \_\_\_\_ symbol is used before writing a formula in Open Office Calc.
  - a) &
  - b) %
  - c) =
  - d) @
9. \_\_\_\_ function is not present in subtotal in Open Office Calc.
  - a) Subtract
  - b) Count
  - c) Max
  - d) Average
10. Scenarios are a tool to test \_\_\_\_ questions.

- a) Auto
- b) Goal Seek
- c) What-if
- d) Drop Down

**Class X Question Bank: Physics 2023 – 24**

1. Why do we prefer a convex mirror as a rear view mirror in vehicles?
2. A ray of light travelling in air enters obliquely into water. Does the light ray bend towards the normal or away from the normal? Why? [CBSE - 2014]
3. Name the type of mirror which facilitates (a) Shaving, (b) Observing large images of the teeth of a patient, and (c) Observing the rear view in vehicles. Give reason to justify your answer in each case.
4. What happens after refraction, when:
  - (i) a ray of light parallel to the principal axis passes through a concave lens?
  - (ii) a ray of light falls on a convex lens while passing through its principal focus?
  - (iii) a ray of light passes through the optical center of a convex lens?
5. (a) State Snell's law of refraction.  
  
(b) When a ray of light travelling in air enters obliquely into a glass slab, it is observed that the light ray emerges parallel to the incident ray but it is shifted sideways slightly. Draw a ray diagram to illustrate.
6. Define the principal focus for
  - i) spherical mirror
  - ii) spherical lens
7. What is meant by power of a lens? Write its SI unit. A student uses a lens of focal length 40 cm and another of -20 cm. Write the nature and power of each lens.
8. Discuss the position and nature of the image formed by a concave mirror when the object is moved from infinity towards the pole of the mirror.
9. To practise all ray diagrams.
10. Define the term power of accommodation. Write the modification in the curvature of the eye lens which enables us to see the nearby objects clearly.
11. Why does the clear sky appear blue? How would the sky appear in the absence of earth's atmosphere? [CBSE-2011]
12. When do we consider a student sitting in the class to be myopic? List two causes of this defect. Explain using a ray diagram how this defect of the eye can be corrected.[CBSE-2019]
13. (i) What is meant by dispersion of white light? Draw a diagram to show the dispersion of white light by a glass prism.  
(ii) Light of two colours A and B pass through a prism. A deviates more than B from its path of incidence. Which colour has a higher speed in the prism?
14. Is the position of a star as seen by us its true position? Justify your answer.
15. List two causes of presbyopia. Draw labelled diagram of a lens used for the correction of this defect of vision.
16. Why do the stars twinkle but planets don't?
17. (a) What is presbyopia? State its cause. How is it corrected?  
  
(b) Why does the Sun appear reddish early in the morning? Explain with the help of a labelled diagram.
18. What is meant by resistance of a conductor? Name and define its SI unit. List the factors on which the resistance of a conductor depends. How is the resistance of a wire affected if: (i) its length is doubled, (ii) its radius is doubled?
19. What do you mean by heating effect of electric current? Explain the production of heat in a resistor by flow of electric current through it. Name two devices based on heating effect of current.

20. Although an electric kettle and electric toaster were used simultaneously in the kitchen to prepare breakfast for the family, yet the two devices could work efficiently due to fuse used in the electric circuit.

(i) What is a fuse? Write the material used in fuse wires. How is a fuse connected in an electric circuit?

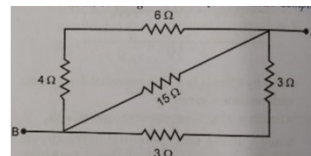
(ii) State the ratings of fuse used in an electric circuit.

(iii) What is the function of a fuse? How does it perform its function?

(iv) A device uses 1 kW electric power when operated at 220 V. Calculate the rating of the fuse to be used. [

21. (a) List two disadvantages of using a series circuit in homes.

(b) Calculate the effective resistance between A and B in the circuit given below:



22. Calculate the number of electrons that would flow per second through the cross-section of a wire when 1A current flows in it. [CBSE-2016]

23. State Ohm's law. Draw a labelled circuit diagram to verify this law in the laboratory. If you draw a graph

between the potential difference and current flowing through a metallic conductor, what kind of curve will you get? Explain how would you use this graph to determine the resistance of the conductor.

24. For the series combination of three resistors current in each resistor, establish the relation  $R = R_1 + R_2 + R_3$  where the symbols have their usual meanings. Calculate the equivalent resistance of the combination of three resistors of 6  $\Omega$ , 9  $\Omega$  and 18  $\Omega$  joined in parallel.

25. Show how would you join three resistors, each of resistance 9  $\Omega$  so that the equivalent resistance of the combination is (a) 13.5  $\Omega$  (b) 6  $\Omega$ ?

26. (a) Write Joule's law of heating.

(b) Two lamps, one rated 100 W; 220 V, and the other 60 W; 220 V, are connected in parallel to electric mains supply. Find the current drawn by two bulbs from the line, if the supply voltage is 220 V.

27. A compass needle is placed near a current carrying wire. State your observation for the following cases and give reason for the same in each case:

(a) Magnitude of electric current in the wire is increased.

(b) The compass needle is displaced away from the wire.

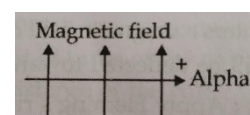
28. What is a solenoid? Explain with the help of a figure how a solenoid behaves like a bar magnet.

29. A student while studying the force experienced by a current carrying conductor in a magnetic field records the following observations:

(i) The force experienced by the conductor increases as the current is increased.

(ii) The force experienced by the conductor decreases as the strength of the magnetic field is increased. Which of the two observations is correct and why? [CBSE-2020]

30. An alpha particle (+ve charged particle) enters a magnetic field at right angle to it as shown in figure. Explain with the help of a relevant rule, the direction of force acting on the alpha particle.



31. (a) Describe an activity to show the pattern of magnetic field lines of a bar magnet, with the help of a cardboard piece and iron filings.

(b) Compare the field of a bar magnet with that of a solenoid with the help of figure.

32. a) What is the function of an earth wire in electrical instruments? Why is it necessary to earth the metallic electric appliances?



(b) Explain what is short-circuiting and overloading in an electric supply.

33. A compass needle is placed near a current carrying straight conductor. State your observation for the following cases and give reasons for the same in each case:

(a) Magnitude of electric current is increased.

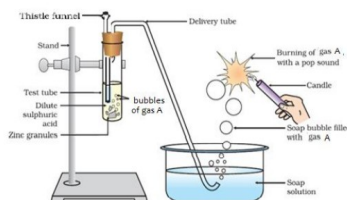
(b) The compass needle is displaced away from the conductor.

### **CHEMISTRY CLASS X QUESTION BANK: 2023 – 24**

1. Elements P, Q, R and S have atomic numbers 11, 15, 17 and 18 respectively. Which of them are reactive non-metals?

- i) P and Q
- ii) P and R
- iii) Q and R
- iv) R and S

2. Identify gas A in the following experiment.



- A. Nitrogen
- B. Hydrogen
- C. Oxygen
- D. Carbon dioxide

3. How will you protect yourself from the heat generated while diluting a concentrated acid?

- A. By adding acid to water with constant stirring.
- B. By adding water to acid with constant stirring.
- C. By adding water to acid followed by base.
- D. By adding base to acid with constant stirring

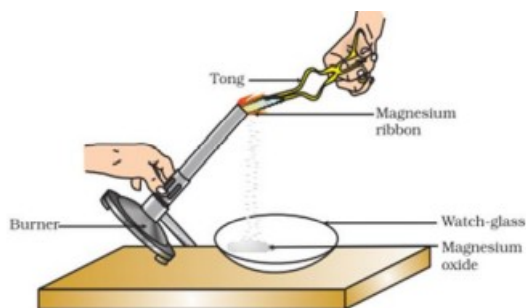
4. Why is it important to balance a skeletal chemical equation?

- A. To verify law of conservation of energy.
- B. To verify the law of constant proportion.
- C. To verify the law of conservation of mass.
- D. To verify the law of conservation of momentum

5. A magnesium ribbon is burnt in oxygen to give a compound X accompanied by emission of light. If the burning ribbon is now placed in an atmosphere of nitrogen, it continues to burn and forms a compound Y. The chemical formula of X and Y are-

- A. X-  $\text{MgO}$ , Y-  $\text{Mg}_3\text{N}_2$
- B. X-  $\text{Mg}_3\text{N}_2$ , Y-  $\text{MgO}$
- C. X-  $\text{MgO}_2$ , Y-  $\text{Mg}_2\text{N}_3$
- D. X-  $\text{Mg}_2\text{N}_3$ , Y-  $\text{MgO}_2$

OR



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) Colourless 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

6. The element which constitutes large number of organic compounds.

- a) nitrogen
- b) Sulphur
- c) Phosphorus
- d) carbon

7. Which of the following statements are usually correct for carbon compounds? These

- (a) are good conductors of electricity.
- (b) are poor conductors of electricity.
- (c) have strong forces of attraction between their molecules.
- (d) do not have strong forces of attraction between their molecules.

The correct option is-

(a) and (c)

(b) and (c)

(a) and (d)

(b) and (d)

8. Which one of the following can be used as an acid- base indicator by a visually impaired student?

- A. Litmus      B. Turmeric      C. Methyl Orange      D. Clove Oil.

9.Assertion: Silver bromide decomposition is used in black and white photography.

Reason: Light provides energy for this exothermic reaction

10. Assertion: Fresh milk in which baking soda is added, takes a longer time to set as curd.

Reason: Baking soda decreases the pH value of fresh milk to below

11.Assertion: Decomposition of vegetable matter into compost is an endothermic reaction.

Reason: Decomposition reaction involves breakdown of a single reactant into simpler products

12.Assertion: After white washing the walls, a shiny white finish on walls is obtained after two to three days. Reason: Calcium Oxide reacts with Carbon dioxide to form Calcium Hydrogen Carbonate which gives shiny white finish

13.Assertion: The given chemical equation  $\text{CuO (s)} + \text{Zn (s)} \rightarrow \text{ZnO(s)} + \text{Cu (s)}$  is redox reaction

Reason: CuO loses oxygen and Zn gains Oxygen

(a) Both Assertion and Reason are True and Reason is the correct explanation of the Assertion.

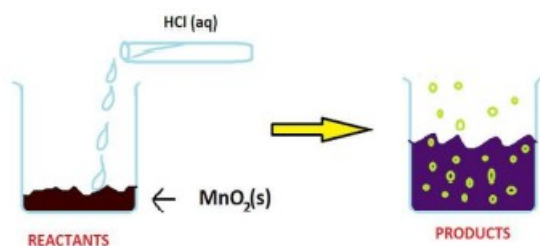
(b) Both Assertion and Reason are True but Reason is not the Correct explanation of the Assertion.

(c) Assertion is True but the Reason is False.

(d) Both Assertion and Reason are False

14. Read the following and answer any of the four.

The reaction between  $\text{MnO}_2$  with  $\text{HCl}$  is depicted in the following diagram. It was observed that a gas with bleaching abilities was released.



1. The chemical reaction between  $\text{MnO}$

- a) displacement reaction
- b) combination reaction
- c) redox reaction
- d) decomposition reaction.

2. Chlorine gas reacts with \_\_\_\_\_ to form bleaching powder.

- a) dry  $\text{Ca (OH)}_2$
- b) dil. solution of  $\text{Ca (OH)}_2$
- c) conc. solution of  $\text{Ca (OH)}_2$
- d) dry  $\text{CaO}$ .

3. Identify the correct statement from the following:

- a)  $\text{MnO}$  is getting reduced whereas  $\text{HCl}$  is getting oxidized
- b)  $\text{MnO}_2$  is getting oxidized whereas  $\text{HCl}$  is getting reduced.
- c)  $\text{MnO}_2$  and  $\text{HCl}$  both are getting reduced.
- d)  $\text{MnO}_2$  and  $\text{HCl}$  both are getting oxidized.

4. In the above discussed reaction, what is the nature of  $\text{MnO}_2$ ?

- a) Acidic oxide
- b) Basic oxide
- c) Neutral oxide
- d) Amphoteric oxide

5. What will happen if we take dry  $\text{HCl}$  gas instead of aqueous solution of  $\text{HCl}$ ?

- a) Reaction will occur faster.
- b) Reaction will not occur.
- c) Reaction rate will be slow
- d) Reaction rate will remain the same

15. List any two observations when Ferrous Sulphate is heated in a dry test tube?

OR

Identify the products formed when 1 mL of dil. Hydrochloric acid is added to 1g of Sodium metal

16. The following observations were made by a student on treating four metals P, Q, R and S with the given salt solutions

Sample	MgSO <sub>4</sub> (aq)	Zn(NO <sub>3</sub> ) <sub>2</sub> (aq)	CaSO <sub>4</sub> (aq)	Na <sub>2</sub> SO <sub>4</sub> (aq)
<b>P</b>	No reaction	Reaction occurs	Reaction occurs	No reaction
<b>Q</b>	Reaction occurs	Reaction occurs	Reaction occurs	Reaction occurs
<b>R</b>	No Reaction	Reaction Occurs	No Reaction	No Reaction
<b>S</b>	No Reaction	No Reaction	No Reaction	No Reaction

Based on the above observations:

(a) Arrange the given samples in the increasing order of reactivity

(b) Write the chemical formulae of products formed when Q reacts with CuSO<sub>4</sub> solution

17. What are isomers? "Isomers of the first three members of alkane series are not possible". Give reason to justify this statement and draw structures of two isomers of butane, C<sub>4</sub>H<sub>10</sub>.

OR

a) State two main reasons for carbon forming a very large number of compounds.

b) Give reason why carbon forms compound (i) Namely by Covalent bonding (ii) Having low melting and boiling points

c) What happens when (Write chemical equations of the reactions)

(i) A piece of sodium metal is added to ethanol.

(ii) Ethanoic acid reacts with sodium hydroxide

18. In the electrolysis of water,

a) Name the gas collected at anode and cathode

b) Why is the volume of gas collected at one electrode double than the other?

c) What would happen if dil. H<sub>2</sub>SO<sub>4</sub> is not added to water?

19. "pH has a great importance in our daily life" explain by giving three examples.

OR

A compound which is prepared from gypsum has the property of hardening when mixed with a proper quantity of water. Identify the compound and write its chemical formula. Write the chemical equation for its preparation. Mention any one use of the compound

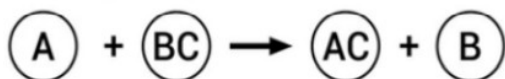
20. a) What is reactivity series? How does the reactivity series of metals help in predicting the relative activities of various metals?

b) Suggest different chemical processes used for obtaining a metal from its oxides for metals in the middle of the reactivity series and metals towards the top of the reactivity series. Support your answer with one example each.

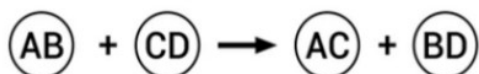
21. What happens when aqueous solutions of Sodium sulphate and Barium chloride are mixed? Give a balanced equation for the reaction with state symbols. Name and define the type of chemical reaction involved in the above change.

OR

i)



ii)



Identify the types of reaction mentioned above in (i) and (ii). Give one example for each type in the form of a balanced chemical equation.

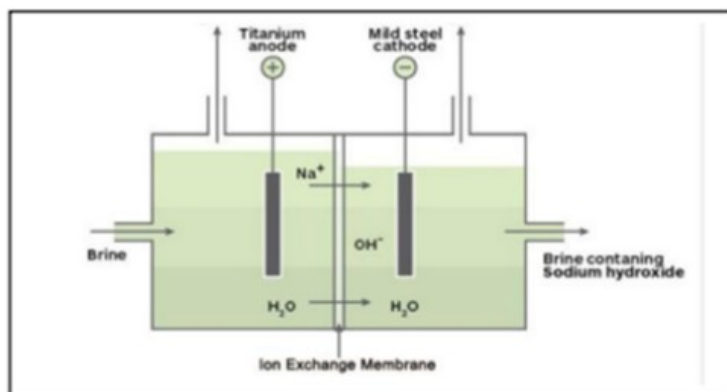
22. A. Match the following pH values 1, 7, 10, 13 to the solutions given below: • Milk of magnesia • Gastric juices • Brine • Aqueous Sodium hydroxide.

B. Amit and Rita decided to bake a cake and added baking soda to the cake batter. Explain with a balanced reaction, the role of the baking soda. Mention any other use of baking soda.

OR

- (i) Four samples A, B, C and D change the colour of pH paper or solution to Green, Reddish-pink, Blue and Orange. Their pH was recorded as 7, 2, 10.5 & 6 respectively. Which of the samples has the highest amount of Hydrogen ion concentration? Arrange the four samples in the decreasing order of their pH.
- (ii) Rahul found that the Plaster of Paris, which he stored in a container, has become very hard and lost its binding nature. What is the reason for this? Also, write a chemical equation to represent the reaction taking place.

23.



(a) Identify the gasses evolved at the anode and cathode in the above experimental set up.

(b) Name the process that occurs. Why is it called so?

(c) Illustrate the reaction of the process with the help of a chemical equation

24. An organic compound 'X' is a liquid at room temperature. It is also a very good solvent and has the molecular formula  $\text{C}_2\text{H}_6\text{O}$ . On oxidation 'X' gives 'Y' which gives effervescence on reacting with  $\text{NaHCO}_3$ . X reacts with Y in the presence of conc.  $\text{H}_2\text{SO}_4$  to give another compound 'Z' which has a pleasant smell. Identify X, Y and Z. Also write chemical equations to show the formation of Y and Z.

25. A compound 'X' of sodium is used as an antacid and it decomposes on strong heating.

- (i) Name the compound 'X' and give its chemical formula.
- (ii) Write a balanced chemical equation to represent the decomposition of 'X'.

- (iii) Give one use of compound 'X' besides an antacid.

OR

You are provided with 90 mL of distilled water and 10 mL of concentrated sulphuric acid to prepare dilute sulphuric acid.

- (i) What is the correct way of preparing dilute sulphuric acid? Give reason.  
(ii) How will the concentration of  $\text{H}_3\text{O}^+$  ions change on dilution?

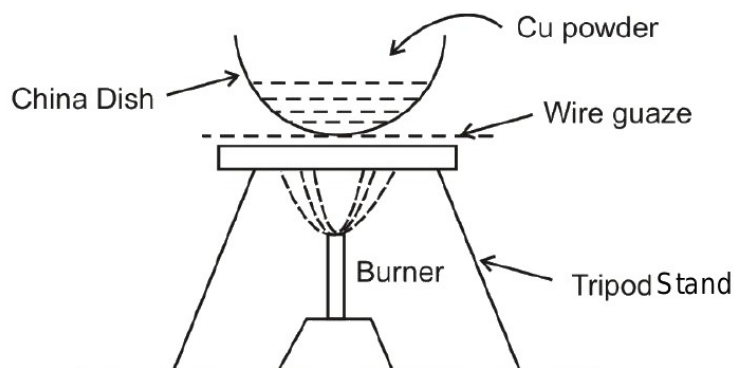
26. Shristi heated Ethanol with a compound A in presence of a few drops of concentrated sulphuric acid and observed a sweet-smelling compound B is formed. When B is treated with sodium hydroxide it gives back Ethanol and a compound C.

- (a) Identify A and C  
(b) Give one use each of compound 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 443 K. 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

27. In the given diagram below, copper powder is heated in a china dish, the reddish brown surface of copper



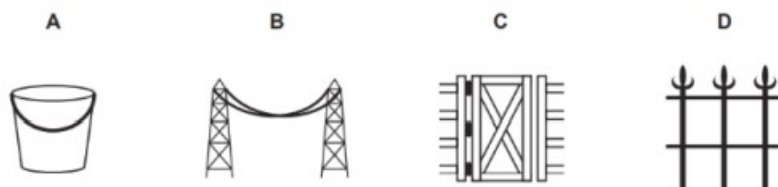
powder becomes coated with a black substance

- A. Why has this black substance formed?  
B. Name the black substance and its formula.  
C. Write the chemical equation of the reaction that takes place.

28. 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

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

29. Identify the compound of calcium which is used for plastering of fractured bones. With the help of chemical equation show how is it prepared and what special precautions should be taken during the preparation of this compound.

OR

'Sweet tooth may lead to tooth decay'. Explain why? What is the role of tooth paste in preventing cavities?

30. a) How will you show experimentally that metals are good conductors of heat.

b) Describe the extraction of Mercury metal from its ore Cinnabar (HgS).

31. A. Metal X is found in nature as its sulphide XS. It is used in the galvanisation of iron articles. Identify the metal X. How will you convert this sulphide ore into the metal? Explain with equations.

(B) How is Magnesium Chloride formed by the transfer of electrons?

OR

State the reason for the following: (i) Aluminium oxide is called an amphoteric oxide. (ii) An iron strip dipped in a blue copper sulphate solution turns the blue solution pale green. (iii) Hydrogen gas is not evolved when most metals react with nitric acid. (iv) Calcium does not occur in free state in nature. (v) Sodium or potassium metals are kept immersed under kerosene

32. A clear solution of slaked lime is made by dissolving  $\text{Ca(OH)}_2$  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

(i) Write two observations when lead nitrate is heated in a test tube.

(ii) Name the type of reaction.

(iii) Write a balanced chemical equation to represent the above reaction

33. Read the given passage and answer the questions-

Carbon is one of the more widespread heavy elements – it may make up almost 0.5 percent of the universe mass. The solar system formed from a material that was quite rich in carbon. Even then the element only makes up 0.025 percent of Earth's crust and most of this carbon bound up in rocks and minerals such as limestone and chalk. But carbon is highly concentrated in living creatures and accounts for nearly one-quarter of atoms in our tissues. Carbon is known to form a number of compounds due to the salient properties it carries with itself. The most general or the basic compound formed by the combination of hydrogen and carbon are known as hydrocarbons. the molecular formula of such type of compounds are formed by just adding hydrogen to satisfy the valency of carbon atoms.

1. Draw the electron dot structure of second member of alkane series.

2. Name the functional group present in the following compound-

A.  $\text{CH}_3\text{COOH}$

B.  $\text{CH}_3\text{COCH}_3$

3. What is Hydrogenation of oil?

OR

Give one difference between saturated and unsaturated hydrocarbon.

34. How is sodium hydroxide manufactured in industries? Name the process. In this process, a gas X is formed as a by-product. This gas reacts with lime water to give a compound Y, which is used as a bleaching agent in the chemical industry. Identify X and Y and write the chemical equation of the reaction involved.

OR

A. Write the chemical name and formula of product formed by heating Gypsum at 373K.

B. During electrolysis of brine, a gas G is liberated at anode. When this gas G is passed through slaked lime, a compound C is formed, that is used for disinfecting drinking water.

- What is chemical name and formula of C?
- Write the balanced chemical equation involved.

35. What are micelles? Why does it form when soap is added to water? Why scum is formed with soap solution? State briefly how micelle formation helps to clean dirty clothes?

OR

An organic compound 'X' is a liquid at room temperature. It is also a very good solvent and has the molecular formula  $C_2H_6O$ . On oxidation 'X' gives 'Y' which gives effervescence on reacting with  $NaHCO_3$ . X reacts with Y in the presence of conc.  $H_2SO_4$  to give another compound 'Z' which has a pleasant smell. Identify X, Y and Z. Also write chemical equations to show the formation of Y and Z.

### Biology Question Bank for revision 2023 -24

#### Class – X

#### TOPIC :HERIDITY

- Why did Mendel select pea plant for his experiment ?
- How do Mendel's experiments show that –
  - Traits may be dominant or recessive.
  - Traits are inherited independently.
- In an asexually reproducing species if trait X exists in 5% of a population and trait Y exists in 70% of the same population, which of the two traits is likely to have arisen earlier ? Give reason.
- In the following crosses write the genotype and characteristics of the progeny :
  - $RRYY \times RRYy$  (Round yellow x Round yellow)
  - $RrYy \times RrYy$  (Round yellow x Round yellow)
  - $rryy \times rryy$  (Wrinkled green x wrinkled green)
  - $RRYY \times rryy$  (Round yellow x wrinkled green)
- In a pea plant, the trait of flowers bearing purple color (PP) is dominant over white color (pp). Explain the inheritance pattern of F1 and F2 generations with the help of a cross following the rules of inheritance of traits. State the visible characters of F1 and F2 progenies.
- After self-pollination in pea plants with round, yellow seeds, the following types of seeds were obtained by Mendel :  
Round and yellow – 630  
Round and green – 216  
Wrinkled and Yellow – 202  
Wrinkled and green – 64

Analyze the result and describe the mechanism of inheritance which explains these results.



7. What are chromosomes ? Mention the total number of chromosomes that are present in a human female and a human male. Explain how in sexually reproducing organisms the number of chromosomes in the progeny remains the same as that of the parents.
8. Mustard was growing in two fields – A and B. While field A produced brown colored seeds, field B produced yellow-coloured seeds. It was observed that in field A, the offspring showed only the parental trait for consecutive generations, whereas in field B, the majority of the offspring showed a variation in the progeny. What are the probable reasons for these ?

#### TOPIC : CONTROL AND COORDINATION

9. What do you understand by Tropic movement and Nastic movement. Mention the various types of tropic and Nastic movement with one example of each type.
10. Mention the different types of phytohormones with one function of each.
11. Write the classification of Human nervous system. Also mention the function of different parts of brain taught to you.
12. Explain reflex action with the help of labeled diagram.
13. Mention the different types of endocrine glands with the name of hormones secreted by them. Also mention at least one function of each hormone.
14. Explain :
  - A. Why plants bend towards sunlight
  - B. Why tendrils get wrapped around the support.
15. We do not clean ponds or lakes, but an aquarium needs to be cleaned. Why? Write the common food chain of a pond ecosystem.
16. Indicate the flow of energy in an ecosystem. Why is it unidirectional ? Justify. Also explain 10% law of energy transfer with example.
17. Explain some harmful effects of agricultural practices on the environment. Why are some substances biodegradable and some non-biodegradable ? If all the waste we generate is biodegradable, will this have no impact on the environment ?
18. What are trophic levels ? Give an example of food chain and state the different trophic levels in it. Will the impact of removing all the organisms in a trophic level be different for different trophic levels ? Can the organisms of any trophic level be removed without causing any damage to the ecosystem ?
19. What is ozone, how it is formed and how does it affect any ecosystem? Why is damage to the ozone layer a cause for concern? What steps are being taken to limit this damage?
20. What is biological magnification? Will the levels of this magnification be different at different levels of the ecosystem?

#### TOPIC: (LIFE PROCESSES)

21. What is photosynthesis ? Explain the significance of photosynthesis. Write the balanced chemical equation involved in the process. Also write the major events taking place in this process.
22. Explain with the help of neat and well labelled diagrams the different steps involved in nutrition in Amoeba.
23. Diffusion is insufficient to meet the oxygen requirement of multicellular organisms like human. State reason.
24. Write two different ways in which glucose is oxidised to provide energy in human body. Write the products formed in each case.
25. Answer the following :
  - A. Mention the characteristics of ideal respiratory surface.
  - B. Rate of breathing in aquatic organisms is much faster than that in terrestrial organisms. Give reasons.
  - C. Why do fishes die when taken out of water?
26. Draw a diagram of human respiratory system and label – pharynx, trachea, lungs, diaphragm and alveolar sac on it.
27. Answer the following :
  - A. What is peristaltic movement?

- B. Stomata remain closed in desert plants during daytime'. How do they do photosynthesis?
- C. "All plants give out oxygen during day and carbon dioxide during night". Do you agree with this statement? Give reason.

28. Answer the following :

- A. What will happen if mucus is not secreted by the gastric glands?
- B. What will happen if gall bladder is removed from the human body by surgery ?
- C. Why does absorption of digested food occur mainly in the small intestine?

Q29. a) Describe the flow of blood through the human heart.

b) How does the human circulatory system ensure to provide maximum energy in the body?

Q30. Write a note on – a) Valves in heart b) Blood c) Structure of blood vessels c)Transpiration

d)Root

pressure theory of transportation of water and minerals.

Q31." The rate of transportation of water in plants is higher during day time". Explain.

Q 32. Draw and label parts of the human excretory system and write the functions each part.

Q33. a) Name the excretory organ of the following - i)Earthworm ii)Prawn iii)Frog.

b) Mention various methods by which our body excretes the wastes.

Q34. How is a natural kidney different from the artificial kidney in function?

Q35. Mention various excretory materials in plants and the method through which they are excreted by them.

### **Topic: How Do organisms reproduce?**

Q36. Enlist different mode of Asexual reproduction in organisms. Explain each method by diagram and two examples each.

Q37. Write the specific features of sexual reproduction in points.

Q38. Draw and label the following – a) Human male reproductive system b) Human female reproductive system c) Structure of a complete flower d) Structure of a dicot seed with embryo.

Q39.a) Briefly describe various methods of contraception.

b) Write the significance of using contraceptive methods.

Q.40. What is STD? Describe the following STDs under the heads- Pathogen,Symptoms,Preventions.

- a) AIDS b) Gonorrhoea c) Syphilis d) Genital warts

## THE NECKLACE

**Read the following extracts carefully and answer the questions that follow.**

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

Questions:

(i) She longed to be .....

(a) pretty                      (b) authoritative                      (c) social                      (d) known and loved

(ii) Why was Mme Loisel always unhappy? (30-40 words)

(iii) She was born into a family of clerks perhaps.....

a) through an error of destiny                      (b) due to her past Karmas  
(c) due to the will of God                      (d) due to her high ambitions

(iv) Her husband worked in the office of the...

Answers:

(i) (d)

(ii) Mrs Loisel was a pretty and charming young woman. She had great expectations in life. Though she was born poor, she dreamt of a rich and luxurious life. That is why she was always unhappy.

(iii) (a)

(iv) Board of Education

2. She had a rich friend, a schoolmate at the convent, who she did not like to visit - she suffered so much when she returned. She wept for whole days from despair and disappointment. One evening her husband returned elated bearing in his hand a large envelope.

"Here", he said, "here is something for you."

(i) Why did Matilda avoid her rich friend from school? (30-40 words)

(ii) Her husband treated her

(a) kindly                      (b) harshly                      (c) lovingly                      (d) commandingly

(iii) When she returned from her friend's house she ....

(a) felt happy      (b) felt upset      (c) suffered very much      (d) repented

(iv) She wept for whole days out of despair and .....

Answers:

*(i) Matilda was married to a petty clerk. She was forced to live a simple life against her dreams. She was unhappy and suffered endlessly. She felt that she deserved a better life. After visiting her rich friend, she felt more sad. So she avoided her rich friend...*

*(ii) (a)*

*(iii) (c)*

*(iv) disappointment*

**3. He threw around her shoulders that modest wraps they had carried whose poverty clashed with the elegance of the ball costume. She wished to hurry away...**

(a) What precedes these lines?

(b) 'She' wished to hurry away. Why?

(c) Which word in the given extract is a synonym of 'not expensive'?

(d) What is the opposite of 'poverty'?

**Answer:**

(a) These lines follow Matilda's success at the ball where she was idolised. Her beauty and elegance was praised by everyone.

(b) She, 'Matilda' did not wish to shatter the illusion of her grandeur that she had so successfully managed to convey others by putting on such a shabby wrap. So, she wished to hurry away to escape the notice of the rich women.

(c) 'Modest' is the synonym of 'not expensive' from the extract.

(d) Its opposite is 'affluence'.

**4. He threw around her shoulders the modest wraps they had carried whose poverty clashed with the elegance of the ball costume. She wished to hurry away in order not to be noticed by the other women who were wrapping themselves in rich furs.**

(a) Who is she?

(b) What was the cause of her inferiority complex?

(c) How can you say that Mr Lisle was a loving husband?

(d) Why do you think the tendency to show off becomes a curse for Matilda?

**Ans.** (a) 'She' is Matilda.

- (b) She thought that they are poor and all the guests of the party belong to the upper class. This was the cause for her inferiority complex.
- (c) When his wife was enjoying the dance and gratifying her vanity through the admiration of the men-folk, he waited patiently.
- (d) She wasted her youth and suffered for ten long years only because of her vanity. He will desire for short-lived pleasure had become a curse for her.

### **Short Answer Questions:-**

1. What was the cause of Matilda's ruin? How could she have avoided it?

Answer:

The cause of Matilda's ruin was her constant discontentment with her circumstances. It was her sense of frustration which made her and her husband borrow the necklace for the party which was subsequently lost. She could have avoided it by firstly, not borrowing the necklace and secondly by telling the truth to Mrs. Forestier.

2. What is the twist at the end of the tale in the story 'The Necklace'?

Answer:

The Loisels bought a necklace for thirty-six thousand francs and gave it in place of Mme Forestier's false and cheap necklace. They underwent a life of misery, suffering and denial to earn the money to repay the debt of the necklace. She must have been crestfallen after realising the real worth of the necklace.

3. Why was Matilda's wrap most humiliating for her?

Answer:

Matilda's wrap was most humiliating for her because she had a poverty-stricken look. The other women in the ball had wrapped themselves in rich furs. She wanted to hurry away from the ball. She was suffering from inferiority complex.

4. What happened at the ball? Was her dream fulfilled?

Answer:

Matilda was on top of the world at the ball. She looked gorgeous and elegant. Yes, her dream was fulfilled because the people at the ball asked her name and expressed admiration for her.

### **Long Answer Questions:-**

1. What could have happened to Matilda if she had confessed to her friend that she had lost the necklace?

Answer:

If Matilda had confessed to her friend that she had lost her necklace, she could have avoided the years of suffering they had to undergo. She would not have become a

physical wreck. She could have paid her five hundred francs easily. So it is quite necessary to be truthful and honest. Moreover, Mme Forestier was a kind lady and full of compassion. She would have forgiven her for the loss. Confession would have saved her from such hardships.

2. Matilda suffered because she was not content with what life has given to her. Do you agree we should be content with what life gives us.

Answer:

It is true that 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 content in her life. She was a pretty beautiful lady and married and honest person. He was rich in values but monetarily moderate.

Matilda was not content with his job and salary. She wanted to lead a luxurious life which he could not afford. Once she got an opportunity to attend a high profile party. She did not have a proper dress and jewels. She borrowed a necklace from her friend. She lost it in the party and had to suffer for a long period of time just to pay for it. Her over ambition and craze for luxury ruined her life. One must be satisfied with what one has is the lesson that I learn from her life.

3. To err is human. We all make mistakes in our life. Those who make a confession may suffer less than those who don't. Give your opinion with reference to the story of Matilda who ruined her life just because she did not have the courage to confess her mistake.

Answer:

It has been rightly said that 'to err is human'. We all make one or the other mistake in our life. No one is perfect. Sometimes the situation is not in our hand. We make some mistakes and face losses. The same thing happened to Matilda. She was an overambitious lady. She wanted to go to the party with an expensive dress and necklace. She didn't have her own sources so she borrowed it from her friend.

Unfortunately she lost it in the party. She did not want to tell it to her friend and bought a new one as a replacement. She was in debt and paid for it throughout her life. Her life was ruined. She came to know in the end that the lost necklace was not the real one. But it was too late. The course of her life could have changed had she confessed the loss. She suffered just because she did not have the courage to confess her mistake.