

**MOUNT COLUMBUS SCHOOL
DAKSHINPURI, NEW DELHI – 62**

CLASS X WORKSHEET (APRIL)

ENGLISH

Q-1. Read the extracts and answer the questions that follow.

In the north-east huge mountains of clouds could be seen approaching. The air was fresh and sweet. The man went out for no other reason than to have the pleasure of feeling the rain on his body, and when he returned, he exclaimed, “These aren’t raindrops falling from the sky, they are new coins. The big drops are ten cent pieces and the little ones are fives.”

- (a) Why did Lencho go out in the rain?**
- (b) Why were the raindrops like ‘new coins’ for Lencho?**
- (c) How did these new coins ultimately bring disaster to his cornfield?**
- (d) Explain the description: ‘The air was fresh and sweet.’**

**Q-2. The way a crow Shook down on me
The dust of snow From a hemlock tree
Has given my heart A change of mood
And saved some part Of a day I had rued.**

- (a) What do the ‘crow’ and ‘hemlock’ symbolise?**
- (b) The mood of the poet changed because _____ .**
- (c) What does the poet mean when he says and saved some part of the day**
- (d) Who shook the dust of snow?.**

Q-3. Answer the following questions in 30-40 words each.

- a. Whom did Lencho write a letter? What did he ask for?**
- b. To say that for destruction ice is also great for the poet, what does ‘ice’ stand for? How is it sufficient to bring destruction?**
- c. What made Mrs Pumphrey call the vet?**
- d. Hari Singh did not catch the train deliberately while he could catch it easily. Why?**

हिंदी

1. निम्नलिखित गद्यांश को पढ़कर नीचे दिए गए प्रश्नों के उत्तर लिखिए –

अकाल के बीच भी अच्छे काम और अच्छे विचार का एक सुंदर छोटा सा उदाहरण राजस्थान के अलवर क्षेत्र का है जहाँ तरुण भारत संघ पिछले बीस बरस से काम कर रहा है। वहाँ पहले अच्छा विचार आया तालाबों का, हर नदी, नाले को छोटे-छोटे बाँधों से बाँधने का। इस तरह वहाँ आसपास के कुछ और जिलों के कोई 600 गाँवों ने बरसों तक वर्षा की एकएक बूंद को सहेज लेने का काम चुपचाप किया। इन तालाबों, बाँधों ने वहाँ सूखी पड़ी पाँच नदियों को ‘सदानीरा’ का नाम वापस दिलाया।

अच्छे विचारों से अच्छा काम हुआ और फिर आई चुनौती भरे अकाल की पहली सूचना। नदियों में, तालाबों में, कुओं में वहाँ तब भी पानी लबालब भरा था। फिर भी इस क्षेत्र के लोगों ने, किसानों ने आज से सात-आठ माह पहले यह निर्णय किया कि पानी कम गिरा है इसलिए ऐसी फ़सलें नहीं बोनी चाहिए जिनकी प्यास ज़्यादा होती है। तो कम पानी लेने वाली फ़सलें लगाई गईं। इसमें उन्हें कुछ आर्थिक नुकसान उठाना पड़ा पर आज यह क्षेत्र अकाल के बीच में एक बड़े हरे द्वीप की तरह खड़ा है। यहाँ सरकार को न तो टैंकरों से पानी ढोना पड़ रहा है न अकाल राहत का पैसा बाँटना पड़ा है। गाँव के लोग, किसी के आगे हाथ नहीं पसार रहे हैं।

उनका माथा ऊँचा है। पानी के उम्दा काम ने उनके स्वाभिमान की भी रक्षा की है। अलवर में नदियाँ एक दूसरे से जोड़ी नहीं गई हैं। यहाँ के लोग अपनी नदियों से, अपने तालाबों से जुड़े हैं। यहाँ पैसा नहीं बहाया गया है, पसीना बहाया है, लोगों ने और उनके अच्छे काम और अच्छे विचारों ने अकाल को एक दर्शक की तरह पाल के किनारे खड़ा कर दिया है।

- (i) तरुण भारत संघ कहाँ काम कर रहा है?
- (ii) लोगों के परिश्रम के कारण अकाल की स्थिति कैसी हो गई है?
- (iii) 'सदानीरा' किन्हें कहा जाता है ? राजस्थान की पाँच नदियों को यह नाम कैसे वापस मिला? (iv) राजस्थान के किसानों ने अकाल का किस तरह मुकाबला किया?
- (v) अच्छे विचार लोगों का स्वाभिमान बनाए रखने में सहायक होते हैं, कैसे?

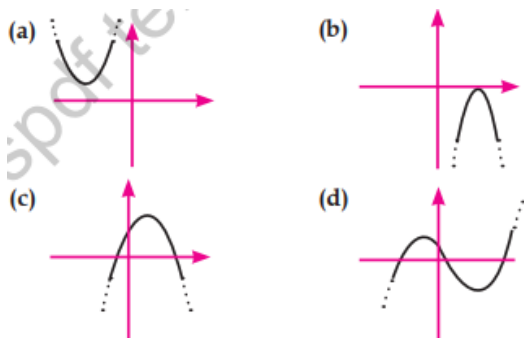
2. कबीर की उद्धृत साखियों की भाषा की विशेषता स्पष्ट कीजिए।
3. मीराबाई ने श्रीकृष्ण के रूप-सौंदर्य का वर्णन कैसे किया है?
4. एक परिवार में बड़े भाई या बहन का अपने छोटे भाई-बहनों के साथ कैसा व्यवहार होता है?
5. क्या पाठ में बड़े भाई का बचपन जिम्मेदारियों तले दबकर गायब हो गया है?

MATHEMATICS

Q1. The zeroes of the quadratic polynomial $x^2 + 99x + 127$ are :

- (a) both positive (b) both negative (c) one positive and one negative (d) both equal

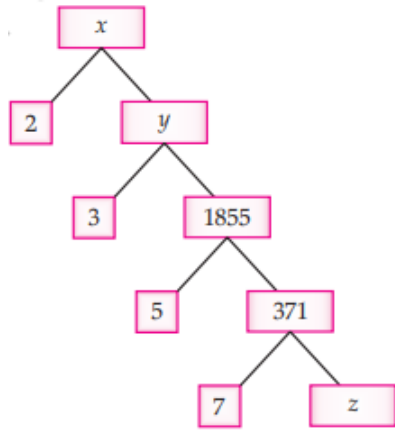
Q2. Which of the following is not the graph of a quadratic polynomial?



Q3. If m and n are the zeroes of the polynomial $3x^2 + 11x - 4$, find the value of $\frac{m}{n} + \frac{n}{m}$

Q4. Quadratic polynomial $2x^2 - 3x + 1$ has zeroes as α and β . Now form a quadratic polynomial whose zeroes are 3α and 3β .

Q5. Complete the following factor tree and find the composite number x :



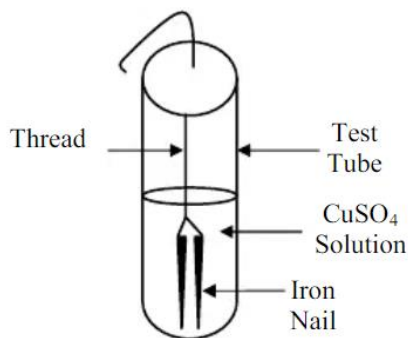
Q6. Explain whether $3 \times 12 \times 101 + 4$ is a prime number or a composite number.

Q7. There is a circular path around a sports field. Priya takes 18 minutes to drive one round of the field, while Ravish takes 12 minutes for the same. Suppose they both started at the same point and at the same time and went in the same direction.

- (i) After how many minutes will they meet again at the starting point?
- (ii) Which mathematical concept is used in this problem?

SCIENCE

1. How is 'respiration' different from 'breathing'? Explain the process of aerobic and anaerobic respiration.
2. I) Name the blood vessel that brings oxygenated blood to the human heart.
 II) Which chamber of the heart received oxygenated blood?
 III) Explain how is the oxygenated blood from this particular chamber sent to all the body parts?
3. What is the advantage if a four chambered heart?
4. Name the type of reaction seen in the diagram below Write the reaction for the same.



5. A student burnt a metal A found in the form of ribbon. The ribbon burnt with a dazzling flame and a white powder B is formed which is basic in nature. Identify A and B. Write the balanced chemical reaction also.

SOCIAL SCIENCE

1. Define-
 - a. Natural resource
 - b. Sustainable development
 - c. Land degradation
 - d. Soil erosion
 - e. Gross cropped area
 - f. Ethnic
 - g. Majoritarianism

- h. Civil War**
- i. Community government**

2. Answer the following questions.

- a. Why is the humus content low in laterite soil?**
- b. Which problem arises due to over-irrigation?**
- c. Which ethnic group in Belgium has the largest population?**
- d. Which ethnic group is in majority in Sri Lanka?**
- e. Name the two sub groups of Tamils in Sri Lanka.**
- f. Name the country which has lost peace due to majoritarianism.**
- g. Name the organs of the government of India.**
- h. What do you understand by land under other non-agricultural uses?**
- i. What is a wasteland?**
- j. How are the huge cattle population in India fed on very few percentages of pasture land?**
- k. What is bad land?**
- l. What was the importance of the Rio de Janeiro Earth Summit of 1992?**
- m. Why is the equitable distribution of resources essential?**
- n. Why are human beings considered as essential components of resources?**
- o. What is resource development?**
- p. Why cannot resource be a free gift of nature? Give reasons to support of answer.**
- q. Why does soil type varies from region to region?**
- r. What are the advantages of the increasing area under the forest?**
- s. Which economic activities over utilizes soil?**

INFORMATION TECHNOLOGY & ARTIFICIAL INTELLIGENCE

Communication skills -II

Q1. Multiple Choice Questions_

1. Which of the following is an example of formal communication?

- a) Talking to a friend**
- b) Writing a letter to a company**
- c) Discussing a project with a team**
- d) Chatting on social media**

2. Which barrier to communication occurs when the sender and receiver have different languages or dialects?

- A) Physical barrier**
- b) Linguistic barrier**
- c) Psychological barrier**
- d) Cultural barrier**

3. Which of the 7Cs of communication refers to being clear and concise?

- a) Clarity**
- b) Completeness**
- c) Correctness**

d) Conciseness

Q4. What are the three main types of communication? Explain briefly.

Q5. What is the significance of the 7Cs of communication?

Q6. Discuss the barriers to effective communication (physical, linguistic, psychological, and cultural) and how to overcome them.

Q7. Fill in the Blanks

- a. The 7Cs of communication are: Clarity, _____, Correctness, Consideration, Concreteness, Courtesy, and _____.
- b. Effective communication helps to build trust, resolve conflicts, and improve _____.

Q8. Case Study

Read the following case study and answer the questions that follow:

A manager, Mr. Singh, wants to communicate a new policy to his team. He sends an email, but some team members misunderstand it, while others don't receive it due to a technical issue.

- 1. What type of communication barrier occurred in this scenario?**
- 2. How could Mr. Singh have communicated more effectively?**
- 3. What could he do to ensure that his message is received correctly by all team members?**