



DELHI PUBLIC SCHOOL
Steel Township, Rourkela
(Under the aegis of the Delhi Public School Society, New Delhi)



HOLIDAY HOMEWORK (2026-27)
CLASS X

CLASS X ENGLISH VACATION HOMEWORK

Dear Students,

As part of your holiday assignment, you are required to prepare an innovative project on the Theme **Threads of a Tricolour: Weaving Unity from Diversity** from your MCB textbook. The project is designed as per CBSE guidelines to enhance your analytical, creative, and critical thinking skills.

Project Topic: Threads of a Tricolour: Weaving Unity from Diversity. A project based on Unit 6: National Integration

(With reference to my Communication Book - MCB)

NOTE: Project Guidelines (15 Pages)

1. Cover Page

- School's Name
- Title of the Project
- Student's Name, Class, Section, Roll Number

2. Acknowledgement

Express gratitude to the principal, teachers, parents, and the school

3. Index

List of contents with page numbers

4. Main Content

- a) Resplendent Diversity of India**
- b) Challenges to National Integration**
- c) Spirit of Unity**
- d) Popular Slogans for Promotion of National Integration**

5. Conclusion

Personal reflection and final thoughts

6. Bibliography

NCERT textbook

Other references (if used)

Important Instructions:

- The project must be handwritten on project papers
- Maintain neatness and proper presentation
- Paste relevant pictures/images to enhance the content
- Use proper headings, margins, and creativity

NOTE: Submission Date: Reopening day after Summer break



DELHI PUBLIC SCHOOL
SEC-14, ROURKELA

ENGLISH PROJECT

TOPIC:

NAME:
CLASS:
SECTION:
ROLL NO:

LITERATURE QUESTIONS (Answers to be written in a separate notebook)

A. Read the following extracts and answer the questions given below

Q1." You will get fruit much better in Verona. Besides, these boys..."

- (a) Who is the speaker?
- (b) To whom is he speaking?
- (c) What does the speaker's comment reveal about his attitude towards the boys?

Q2. "They were seated at the bedside of a girl of about twenty..."

- (a) Who are 'they' in this extract?
- (b) Who is the girl and what is her relation to the boys?
- (c) What does this scene show about the boys' character?

Q3. "They must be selling newspapers still."

- (a) Who thinks this line and why?
- (b) What impression of the boys does this line reinforce?

Q4." We were not surprised... they were not tourists."

- (a) Why were the boys not surprised by the narrator's visit?
- (b) What does this episode reveal about their intention?

Q5. "They took him towards the shining city of Verona."

- (a) Who is being taken and why?
- (b) What does this line suggest about the narrator's attitude towards the boys?

Q6. "They must have suffered a lot," I thought. "Yet, they looked neat and respectable."

- (a) What hardships did the boys actually suffer?
- (b) How does their appearance contrast with their suffering?

Q7. "We preferred to avoid urchins."

- (a) Who says this line and to whom?
- (b) How does this line later contrast with the narrator's admiration for the boys?

Q8. "They were brothers with a purpose."

- (a) What was their purpose?
- (b) How did their conduct prove their nobility?

Q9. "As he talked, he scanned the hills almost fiercely." _

- (a) Who is 'he'?

(b) What does the line reveal about his feelings?

Q10. "They had a secret and were proud of it."

(a) What 'secret' is being referred to?

(b) Why were they proud of it?

B. Answer the following questions

Q11. Why did the narrator initially feel uneasy about the two boys? Mention two reasons.

Q12. What daily activities did Nicola and Jacopo do to earn money?

Q13. Why did the boys dislike revealing their secret to the narrator?

Q14. How did the war change Nicola and Jacopo's lives?

Q15. What impression do the boys give about their sister's health?

Q16. How does the narrator's attitude towards the boys change from the beginning to the end of the story?

Q17. Why did the narrator feel proud to have "nothing" to do with them?

Q18. What lesson about family and sacrifice can be learned from the story?

C. Value-based Questions

Q19. The boys kept their suffering hidden and continued to work hard. What values do they display? Discuss in about 40–50 words.

Q20. The narrator gradually discovers that appearances can be deceiving. How does this experience teach him about compassion and non-judgment?

Q21. The brothers sacrifice their youth for their sister. How does this inspire one to value duty and love in family life?

Q22. The story shows that true nobility lies in character, not in appearance. Elaborate on this value with reference to Nicola and Jacopo.

Q23. Write a short paragraph on how hope and determination helped the boys face poverty and war.

Q24. Imagine you are the narrator and write a diary entry on what the two boys taught you about humanity and self-respect.

II. Read the following extracts and answer the questions given below

Q1. "Once upon a time, a frog / Croaked away in Bingle Bog."

(a) Where does the frog sing?

(b) How do the other creatures react to his song?

Q2 "And the whole admiring bog / Stared towards the sumac."

(a) Why are the creatures "staring towards the sumac"?

(b) What change does this line bring in the atmosphere of the bog?

Q3. "This is a fairy tale / And you're Mozart in disguise."

(a) Who says these lines?

(b) What does this reveal about the nightingale's attitude towards the frog?

Q4. "Don't be upset, Admire my song."

(a) Who is being addressed?

(b) How does this line show the nightingale's changing attitude over time?

Q5. "Well, I charge a modest fee."

(a) Who speaks this line?

(b) How does this expose the frog's exploitative nature?

Q6. "Breath is the length of life; hold on, breathe deep."

(a) Who is being advised here?

(b) What is the tragic irony of this line in the poem?

Q7. "Tremulous with the power of song."

(a) Whose song is being described?

(b) How does the audience react to it?

Q8. "And the frog, stunned, still, sat alone."

(a) Why is the frog "stunned"?

(b) What does this line reveal about his inner state?

Q9. "He was famed till his very last day."

(a) Who is "famed"?

(b) What does this line suggest about public taste and fame?

Q10. "Not a creature passed by."

(a) Whose absence is being described?

(b) What does this line highlight about the nightingale's fate?

B. Answer the following questions.

Q11. Why did the frog feel threatened by the nightingale's song?

Q12. What promises did the frog make to the nightingale? How did he exploit her?

Q13. How did the audience's reaction to the nightingale change over time?

Q14. Why did the nightingale lose her confidence?

Q15. How does the frog become the "unrivalled king" of the bog again?

Q16. What lesson does the poem teach about self-esteem and dependence on others?

Q17. Why is the nightingale called "stupid" and "low"?

Q18. How does the poem show the difference between natural talent and vanity?

C. Value-based Questions

Q19. The nightingale blindly trusts the frog and loses her life. What values should one develop to avoid such exploitation?

Q20. The frog's jealousy and greed lead to the destruction of a beautiful talent. Reflect on how jealousy can be harmful.

Q21. The poem criticises mass admiration based on popularity, not on quality. What values should society adopt towards art and artists?

Q22. How can the nightingale's story teach young people to balance self-confidence and humility?

Q23. After the nightingale's death, the bog returns to the frog's song. What does this suggest about the value of genuine talent versus manipulative power?

Q24. Imagine you are the nightingale and write a short note to her friends, warning them about the dangers of blindly trusting others.

Holiday Homework

Subject Hindi

प्रिय विद्यार्थियो,

आप सभी निम्नलिखित निर्देशों का पालन करते हुए ग्रीष्माकीर्ण अवकाश में गृहकार्य पूरा करेंगे –

1. बड़े भाई साहब, साखी, हरिहरकाका, पदबंध, अनुच्छेद लेखन इत्यादि पाठों के प्रश्नोत्तर हिंदी की उत्तर-पुस्तिका (COPY) में लिखेंगे।
2. आप सभी पार्टी को एक बार अवश्य पढ़ेंगे।
3. आप सभी देशभक्ति की भावना से ओत-प्रोत एक कविता कंठस्थ करेंगे तथा विद्यालय के खुलते ही कक्षा में बारी-बारी से सुनाएँगे। (कविता पाठ का समय 2 मिनट)
4. पंजाब एवं ओडिशा प्रांतों से संबंधित एक कला समेकित परियोजना कार्य स्क्रेप पेपर पर पूरा करेंगे। विषय - "पंजाब एवं ओडिशा के प्रमुख दर्शनीय स्थल" (पाँच-पाँच)

परियोजना कार्य करते समय निम्नलिखित बिंदुओं पर अवश्य ध्यान देंगे –

(क) आवरण पृष्ठ (मुख पृष्ठ) सुंदर और आकर्षक हो।

(ख) अभिस्वीकृति, अनुक्रमणिका, प्रस्तावना, ग्रंथसूची इत्यादि का अवश्य वर्णन करेंगे।

(ग) आवरण पृष्ठ तथा अंतिम पृष्ठ पर पंजाब की कला-संस्कृति से संबंधित चित्र बनाएँगे।

(घ) परियोजना कार्य छात्र की अपनी लिखावट में होना चाहिए। विषय से संबंधित चित्रों का भी प्रयोग करेंगे।

(ड) परियोजना कार्य लगभग 1200-1500 शब्दों में होना चाहिए।

(च) आवरण पृष्ठ पर विद्यालय का नाम, विषय, अपना नाम तथा कक्षा अवश्य लिखेंगे।

5 सभी छात्र 'यूट्यूब' पर राजकपूर द्वारा अभिनीत फिल्म 'तीसरी कसम' तथा धर्मेन्द्र द्वारा अभिनीत 'हकीकत' फिल्म अवश्य देखेंगे।

Holiday Homework
Subject Odia

1. ରଚନା (୨୦୦ - ୩୦୦ ଶବ୍ଦ ଭିତରେ)

୧. ଦେଶ ପ୍ରଗତିରେ ଛାତ୍ରର ଭୂମିକା.
୨. ଭାରତର ସୀମାନ୍ତ ସମସ୍ୟା
୩. ଅରଣ୍ୟ ସମ୍ପଦ ଓ ତା'ର ସୁରକ୍ଷା
୪. ଏକବିଂଶ ଶତାବ୍ଦୀରେ ଭାରତବର୍ଷ
୫. ଛାତ୍ର ଓ ସମାଜ ସେବା
୬. ବିଦ୍ୟାଳୟରେ ନୈତିକ ଶିକ୍ଷାଦାନ
୭. ପରିବେଶ ସୁରକ୍ଷା

2. ପତ୍ର ଲିଖନ

୧. 'ସ୍ଥାନୀୟ ସମ୍ପାଦ' ପ୍ରକାଶନକୁ ଗୁରୁତ୍ୱ ଦେବା ନିମନ୍ତେ ଅନୁରୋଧ ଜଣାଇ କୌଣସି ଏକ ସମ୍ପାଦକପତ୍ର ରସମ୍ପାଦକଙ୍କୁ ପତ୍ର ଲେଖ
୨. 'ସରଳ ଜୀବନ ମହତ ତିକ୍ତନ' ଶୀର୍ଷକ ତୁମର ଏକ ଲେଖା ପ୍ରକାଶନ ନିମନ୍ତେ ଅନୁରୋଧ ଜଣାଇ ସ୍ଥାନୀୟ ସମ୍ପାଦକପତ୍ରର ସମ୍ପାଦକଙ୍କୁ ପତ୍ର ଲେଖ ।
୩. 'ନାରୀ ଜାତିକୁ ସମ୍ମାନ ପ୍ରଦାନ' ଶୀର୍ଷକ ତୁମର ଏକ ଲେଖା ପ୍ରକାଶନ ନିମନ୍ତେ ସ୍ଥାନୀୟ ସମ୍ପାଦକପତ୍ରର ସମ୍ପାଦକଙ୍କୁ ପତ୍ର ଲେଖ ।
୪. 'ସ୍ୱଚ୍ଛ ବିଦ୍ୟାଳୟ ଅଭିଯାନ' କ୍ଷେତ୍ରରେ ଗ୍ରହଣ କରାଯାଇଥିବା ପଦକ୍ଷେପର ବିବରଣୀ ପ୍ରସ୍ତୁତ କରି ତା'ର ପ୍ରକାଶନ ନିମନ୍ତେ ଅନୁରୋଧ ଜଣାଇ କୌଣସି ଏକ ସମ୍ପାଦକପତ୍ରର ସମ୍ପାଦକଙ୍କୁ ପତ୍ର ଲେଖ ।
୫. 'ସ୍ୱାସ୍ଥ୍ୟ ହିଁ ସମ୍ପଦ' ଶୀର୍ଷକ ତୁମର ଏକ ଲେଖା ପ୍ରକାଶନ ନିମନ୍ତେ ଅନୁରୋଧ ଜଣାଇ ସ୍ଥାନୀୟ ସମ୍ପାଦକପତ୍ରର ସମ୍ପାଦକଙ୍କୁ ପତ୍ର ଲେଖ ।
୬. 'ପରିବେଶ ସୁରକ୍ଷା' ଶୀର୍ଷକ ତୁମର ଏକ ଲେଖା ପ୍ରକାଶନ ନିମନ୍ତେ ଅନୁରୋଧ ଜଣାଇ କୌଣସି ଏକ ସମ୍ପାଦକପତ୍ରର ସମ୍ପାଦକଙ୍କୁ ପତ୍ର ଲେଖ ।
୭. 'ବୃକ୍ଷରୋପଣର ଆବଶ୍ୟକତା' ଶୀର୍ଷକ ତୁମର ଏକ ଲେଖା ପ୍ରକାଶନ ନିମନ୍ତେ ଅନୁରୋଧ ଜଣାଇ ସମ୍ପାଦକପତ୍ରର ସମ୍ପାଦକଙ୍କୁ ପତ୍ର ଲେଖ ।

3) QUESTION ANSWERS

ସଂକ୍ଷେପରେ ଉତ୍ତର ଦିଅ ।

- (କ) ଗ୍ରାମର ସାଧାରଣ ଯୁବକମାନେ କିପରି ସମୟ ବିତାନ୍ତି?
- (ଖ) କିଭଳି ଲୋକ ଜୀବନଯୁଦ୍ଧରେ ଦିଗ୍ଵିଜୟୀ ବୀର ବୋଲି ପରିଚିତ ହୁଏ?
- (ଗ) ବ୍ୟାସ ସରୋବରର ମାହାତ୍ମ୍ୟ ଲେଖ ।
- (ଘ) ଉତ୍କଳ ଜନନୀ କେଉଁଠିରେ ପରିପୂର୍ଣ୍ଣ?
- (ଙ) କାଠୁରିଆର ଘର କେଉଁଠି?

4.ଗୋଟିଏ ଶବ୍ଦ /ପଦରେ ଉତ୍ତର ଲେଖ ।

- (କ) କେଉଁମାନଙ୍କ ସମ୍ବେଦ ଯତ୍ନରେ ଧରଣୀ ଶସ୍ୟଶ୍ୟାମଳା ହୋଇଉଠେ?
- (ଖ) କେଉଁଠିରେ କାଠୁରିଆ କୁରାଡ଼ିର ମୁନକୁ ପଜାଉ ଥିଲା?
- (ଗ) କାହାର ଅନ୍ୟନାମ ଶୂଳଧର?
- (ଘ) କେଉଁ ଦୈତ୍ୟ କୈଳାସ ଉପାଡ଼ି ଦେଇଥିଲେ?
- (ଙ) କେତେ ସମୟ ମଧ୍ୟରେ କାଠୁରିଆ ଅଧାଅଧି କାଠ ଚିରିଦେଲା?

5. ଶୂନ୍ୟସ୍ଥାନ ପୂରଣ କର ।

- (କ) ଆସନ କଂପିଲା ଯେ ଦେବ ----- ।
- (ଖ) ତଣ୍ଡୁଳ କହିଲେ ----- କୁ ବୁଝାଯାଏ ।
- (ଗ) ଗାଈକ ----- କାଠ ଗୋଦାମରୁ କାଠ କଣିଥିଲେ ।

6. ସପ୍ତସଙ୍ଗ ସରଳାର୍ଥ ଲେଖ ।

ଏହା ମଧ୍ୟ ତାଙ୍କର କୃତକର୍ମର ପରିଣାମ ।

କିମ୍ବା, "କାଳାନଳ ଜାଣି ବିକାଶି ସିଂଘନାଦ ଜ୍ୟୋତି ଆଦିତ୍ୟ ହୁଁ ଶତେଗୁଣ ତେଜ ବିକାଶନ୍ତି ।

7. PROJECT WORK

ଓଡ଼ିଆ ପ୍ରକଳ୍ପ

୧. ଆପଣମାନେ ସମସ୍ତେ ପଢ଼ାଯାଇ ଥିବା ପାଠ୍ୟକ୍ରମକୁ ଶୁଦ୍ଧ ଉଚ୍ଚାରଣରେ ପଠନ କରିବା ର ଅଭ୍ୟାସ କରିବେ

୨. ପଞ୍ଜାବ ଓ ଓଡ଼ିଶା ରାଜ୍ୟ ସହିତ ସମ୍ପୃକ୍ତ ଏକ କଳା ସମ୍ବନ୍ଧିତ ପ୍ରକଳ୍ପ କାର୍ଯ୍ୟ ସ୍ତ୍ରୀପ୍ ପେପର୍ ଉପରେ ସମ୍ପୂର୍ଣ୍ଣ କରିବେ ବିଷୟ - "ପଞ୍ଜାବ ଓ ଓଡ଼ିଶାର ପ୍ରମୁଖ ଦର୍ଶନୀୟ ସ୍ଥଳ" (ପାଞ୍ଚ-ପାଞ୍ଚ)

ପ୍ରକଳ୍ପ କାର୍ଯ୍ୟ କରିବା ସମୟରେ ନିମ୍ନଲିଖିତ ଲେଖାଗୁଡ଼ିକ ଉପରେ ଅବଶ୍ୟ ଧ୍ୟାନ ଦେବେ ।

(କ) ଆବରଣ ପୃଷ୍ଠା ।

(ମୁଖ୍ୟ ପୃଷ୍ଠା) ସୁନ୍ଦର ଓ ଆକର୍ଷକ ହେବ ।

(ଖ) ଆବରଣ ପୃଷ୍ଠା ଓ ଶେଷ ପୃଷ୍ଠାରେ ପଞ୍ଜାବର କଳା-ସଂସ୍କୃତି ସହିତ ସମ୍ପର୍କିତ ଚିତ୍ର ତିଆରି କରିବେ ।

(ଗ) ପ୍ରକଳ୍ପ କାର୍ଯ୍ୟ ଛାତ୍ରଙ୍କର ଲିଖିତ ଲିପିରେ ହେବ ବିଷୟ ସହିତ ସମ୍ପର୍କିତ ଚିତ୍ରଗୁଡ଼ିକୁ ମଧ୍ୟ ବ୍ୟବହାର କରିବେ ।

(ଘ) ଆବରଣ ପୃଷ୍ଠାରେ ବିଦ୍ୟାଳୟର ନାମ, ନିଜନାମ ଓ ଶ୍ରେଣୀକୁ ଉଲ୍ଲେଖ କରିବେ ।

Holiday Homework
Subject: Sanskrit Communicative

1. निम्नलिखितप्रश्नानाम् उत्तराणि एकपदेन उत्तरत - (1×4=4)

- (क) कीदृशी वाणी पुरुषं प्रह्लादयति ?
(ख) पाठकानां कति गुणाः श्लोके वर्णिताः ?
(ग) भगवान् बोधिसत्त्वः कथं शिवीनां राजा अभवत् ?
(घ) भूयः प्रीतः शक्रः किम् अयच्छत् ?

2. अधोलिखितप्रश्नानाम् उत्तराणि पूर्णवाक्येन लिखत - (2×4=8)

- (क) भारत्याः कोशः कीदृशः विद्यते ?
(ख) धियः गुणाः के के सन्ति ?
(ग) सकलं ब्रह्माण्डं किं ज्ञात्वा व्याकुलं जातम् ?
(घ) शिवेः राज्ये याचकाः किं लब्ध्वा सन्तुष्टाः अभवन् ?

3. स्थूलपदानि आधृत्य प्रश्ननिर्माणं कुरुत - (1×4=4)

- (क) पाठकस्य षट् गुणाः सन्ति ।
(ख) अनुद्वेगकरं वाक्यं वाङ्मयं तपः उच्यते ।
(ग) राजा पुत्रवत् प्रजाः पालयति स्म ।
(घ) दानशालासु विचरन् राजा अचिन्तयत् ।

4. अधोलिखितान् प्रश्नान् यथानिर्देशम् उत्तरत - (1×4=4)

- (क) 'अपूर्वः कोशोऽयं विद्यते तव भारति ।' अत्र क्रियापदं किम् ?
(ख) 'शक्रः तत्रैव अन्तर्हितः अभवत् । अस्मिन् वाक्ये विशेषणपदं किम् ?
(ग) 'जनाः तं देशम् आयान्ति स्म ।' अस्मिन् वाक्ये विशेष्यपदं किम् ?
(ङ) 'शुश्रूषा श्रवणं चैव ग्रहणं धारणं तथा ।' अस्मिन् वाक्ये 'श्रोतुम् इच्छा' इत्यर्थे किं पदं प्रयुक्तम् ?

PROJECT WORK

1. Concept Mind Maps:

Create detailed mind maps on the following topics using project papers:

- a) Introduction to Trigonometry
- b) Triangles

2. Trigonometric Ratios Table:

Make a table showing the values of trigonometric ratios for standard angles using project paper.

3. QUESTIONS AND SOLUTIONS:

Smart Minds Book:

1. Volume 1 : [Pg:No: 389 to 391: Q20 to 36]
2. Volume 2: [Pg:No: 596: Q38 to 52] and [Pg:No: 601: Q66 to 81]

PROJECT WORK SUBMISSION GUIDELINES:

Step 1: Front Page

Prepare a front page with the following details:

School Name: DELHI PUBLIC SCHOOL

Title: Holiday Homework

Subject: Mathematics

Student Name: _____

Class: X

Section: _____

Step 2: Compilation

Arrange all project papers in the correct order and staple them neatly. [don't make a stick file]

ACTIVITIES (To be completed in the Mathematics Lab Manual):

Activity : Basic Proportionality Theorem – I

Activity : Basic Proportionality Theorem – II

Note: Follow the structure below for each activity:

Aim:

Materials Required:

Procedure:

Step1:

Step2

Conclusion:

MCQ Questions:

1. In triangle ABC, $\angle BAC = 90^\circ$ and $AD \perp BC$. Then

- | | |
|--------------------------|--------------------------|
| (a) $BD \cdot CD = BC^2$ | (b) $AB \cdot AC = BC^2$ |
| (c) $BD \cdot CD = AD^2$ | (d) $AB \cdot AC = AD^2$ |

2. If in two triangles ABC and PQR, $AB/QR = BC/PR = CA/PQ$, then

- | | |
|--|--|
| (a) $\triangle PQR \sim \triangle CAB$ | (b) $\triangle PQR \sim \triangle ABC$ |
| (c) $\triangle CBA \sim \triangle PQR$ | (d) $\triangle BCA \sim \triangle PQR$ |

3. In triangles ABC and DEF, $\angle B = \angle E$, $\angle F = \angle C$ and $AB = 3 DE$. Then, the two triangles are

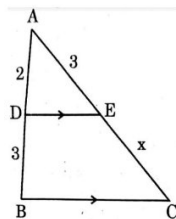
- | | |
|-----------------------------------|----------------------------------|
| (a) congruent but not similar | (b) similar but not congruent |
| (c) neither congruent nor similar | (d) congruent as well as similar |

4. It is given that $\triangle ABC \sim \triangle DFE$, $\angle A = 30^\circ$, $\angle C = 50^\circ$, $AB = 5$ cm, $AC = 8$ cm and $DF = 7.5$ cm.

Then, the following is true:

- | | |
|--|--|
| (a) $DE = 12$ cm, $\angle F = 50^\circ$ | (b) $DE = 12$ cm, $\angle F = 100^\circ$ |
| (c) $EF = 12$ cm, $\angle D = 100^\circ$ | (d) $EF = 12$ cm, $\angle D = 30^\circ$ |

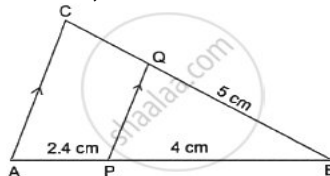
5. If triangle ABC is similar to triangle DEF, then,
- (a) $AB/BD = BC/EF = CA/DE$ (b) $AB/DE = BC/DF = CA/EF$
 (c) $AB/DE = BC/EF = CA/FD$ (d) $AB/BC = CA/DE = EF/FD$
6. In ABC, $DE \parallel AB$. If $CD = 3$ cm, $EC = 4$ cm, $BE = 6$ cm, then DA is equal to
 (a) 7.5 cm (b) 3 cm (c) 4.5 cm (d) 6 cm
7. If $\triangle ABC \sim \triangle DEF$ and $\triangle ABC$ is not similar to $\triangle DEF$ then which of the following is not true?
 (a) $BC \cdot EF = AC \cdot FD$ (b) $AB \cdot ED = AC \cdot DE$
 (c) $BC \cdot DE = AB \cdot EE$ (d) $BC \cdot DE = AB \cdot FD$
8. If in triangles ABC and DEF, $\frac{AB}{DE} = \frac{BC}{FD}$, then they will be similar, if
 (a) $\angle B = \angle E$ (b) $\angle A = \angle D$
 (c) $\angle B = \angle D$ (d) $\angle A = \angle F$
9. In triangle XYZ, a line is drawn parallel to side YZ, intersecting sides XY and XZ at points P and Q respectively. If $XP = 4$ cm, $PY = 8$ cm, and $XQ = 5$ cm, find QZ.
 a) 10 cm b) 9 cm c) 8 cm d) 7 cm
10. In triangle ABC, D and E are points on sides AB and AC respectively, such that $DE \parallel BC$. If $AB = 12$ cm, $AC = 18$ cm, and $AD = 4$ cm, find AE.
 a) 6 cm b) 5 cm c) 7 cm d) 8 cm
11. In triangles ABC and DEF, $AB = 6$ cm, $AC = 8$ cm, $\angle A = 60^\circ$; $DE = 12$ cm, $DF = 16$ cm, $\angle D = 60^\circ$. Are the triangles similar?
 a) Yes, by SAS b) Yes, by SSS c) No d) Cannot be determined
12. In triangles ABC and DEF, $\angle A = \angle D$, $\angle B = \angle E$, and $\angle C = \angle F$. Which similarity criterion justifies that $\triangle ABC \sim \triangle DEF$?
 a) AAA b) SSS c) SAS d) ASA
13. If $\triangle ABC \sim \triangle PQR$ with $\angle A = 32^\circ$ and $\angle R = 65^\circ$, then the measure of $\angle B$ is:
 (A) 32° (B) 65° (C) 83° (D) 97°
14. In the given figure, $DE \parallel BC$. If $AD = 2$ units, $DB = AE = 3$ units and $EC = x$ units, then the value of x is:



- (A) 2 (B) 3 (C) 5 (D) $9/2$

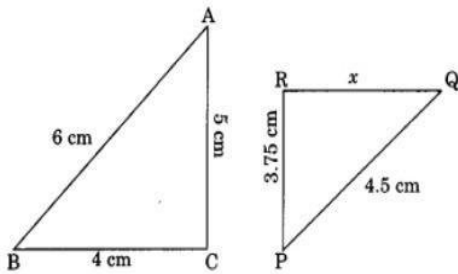
15. If in two triangles DEF and PQR, $\angle D = \angle Q$ and $\angle R = \angle E$, then which of the following is not true?
 (A) $\frac{EF}{PR} = \frac{DF}{PQ}$ (B) $\frac{DE}{PR} = \frac{EF}{PQ}$ (C) $\frac{DE}{QR} = \frac{DF}{PQ}$ (D) $\frac{EF}{QR} = \frac{DE}{PQ}$

16. In the given figure, $PQ \parallel AC$. If $PB = 4$ cm, $AP = 2.4$ cm and $BQ = 5$ cm, then length of BC is:



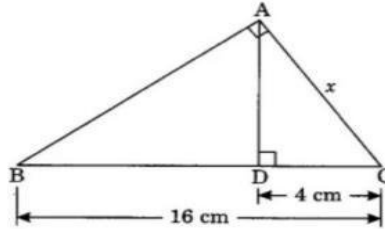
- (A) 8 cm (B) 3 cm (C) 0.3 cm (D) $\frac{25}{3}$ cm

17. In the given figure, if $\Delta ABC \sim \Delta PQR$, the value of x is:



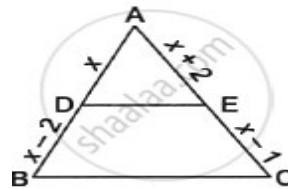
- (A) 2.5 cm (B) 3.5 cm (C) 2.75 cm (D) 3 cm

18. In the given figure, the value of x is:



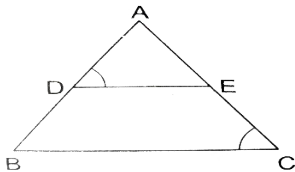
- (A) 4 cm (B) 5 cm (C) 8 cm (D) 3 cm

19. In the figure, if $DE \parallel BC$, then value of x (in cm) is:



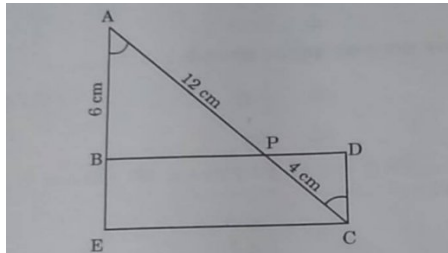
- (A) 2 cm (B) 4 cm (C) 5 cm (D) 1 cm

20. In ΔABC , if $\frac{AE}{EC} = \frac{AD}{BD}$ and $\angle ADE = \angle ACB$, then ΔABC is:



- (A) isosceles triangle (B) right angle triangle (C) equilateral triangle (D) scalene triangle

21. In the given figure, $\angle A = \angle C$, $AB = 6$ cm, $AP = 12$ cm, $CP = 4$ cm. Then length of CD is:



- (A) 2 cm (B) 6 cm (C) 8 cm (D) 18 cm
22. D and E are respectively the points on the sides AB and AC of a ΔABC such that $AD = 2$ cm, $BD = 3$ cm, $BC = 7.5$ cm and $DE \parallel BC$. Then length of DE (in cm) is:
- (A) 2.5 (B) 3 (C) 5 (D) 6

Assertion and Reason Type Questions

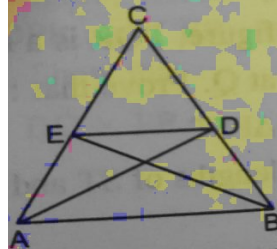
In these questions, a statement of **Assertion (A)** is followed by a statement of **Reason (R)**. Choose the correct option:

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

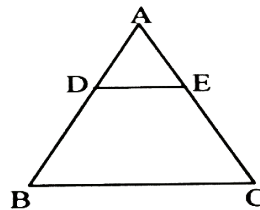
23. **Assertion (A):** If in $\triangle ABC$, a line $DE \parallel BC$ intersects AB in D and AC in E , then $\frac{AB}{AD} = \frac{AC}{AE}$

Reason (R): If a line is drawn parallel to one side of a triangle intersecting the other two sides, then the other two sides are divided in the same ratio.

24. **Assertion (A):** In the given figure, $\angle A = \angle B$ and $AD = BE$, then DE is not parallel to AB .



Reason (R): In the given figure, $DE \parallel BC$. If $AD : DB = 3 : 2$ and $AE = 4.8$ cm, then $EC = 3.2$ cm.



25. In $\triangle ABC$, right-angled at B , $AB = 4$ cm and $\angle ACB = 30^\circ$, then the length of the side AC is:
 a) $5\sqrt{3}$ cm b) $2\sqrt{3}$ cm c) 8 cm d) 15 cm

26. The value of $\frac{2\cot 30^\circ}{1 + \cot^2 30^\circ}$ is :
 a) $\sin 60^\circ$ b) $\cos 60^\circ$ c) $\tan 60^\circ$ d) $\sin 30^\circ$

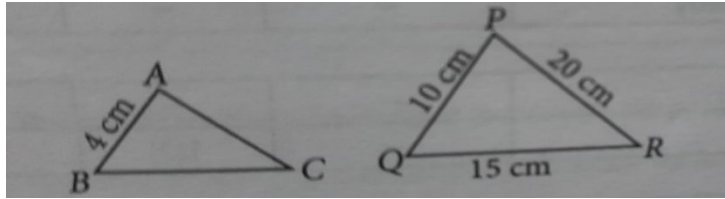
27. Given that $\sin \theta = \frac{a}{b}$, then $\cos \theta$ is equal to :

- a) $\frac{b}{\sqrt{b^2 - a^2}}$ b) $\frac{b}{a}$ c) $\frac{\sqrt{b^2 - a^2}}{b}$ d) $\frac{a}{\sqrt{b^2 - a^2}}$

28. $\cos^4 A - \sin^4 A =$

- a) $2 \cos^2 A - 1$ b) $2 \sin^2 A - 1$ c) $2 \cos^2 A + 1$ d) $2 \sin^2 A + 1$

29. If $\triangle ABC \sim \triangle PQR$, $AB = 4$ cm, $PQ = 10$ cm, $QR = 15$ cm, $PR = 20$ cm, then find the perimeter of $\triangle ABC$.



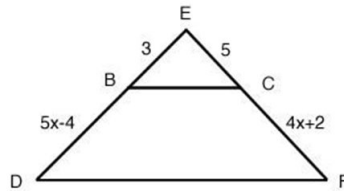
- a) 18 cm (b) 16 cm (c) 45 cm (d) 20 cm

30. If in triangles ABC and DEF, $AB : DE = BC : EF$, then they will be similar, if
 (a) $\angle B = \angle E$ (b) $\angle A = \angle D$ (c) $\angle B = \angle D$ (d) $\angle A = \angle F$

31. ABCD is a trapezium in which $AB \parallel DC$ and P, Q are points on AD and BC respectively such that $PQ \parallel DC$. If $PD = 18$ cm, $BQ = 35$ cm and $QC = 15$ cm, find AD.

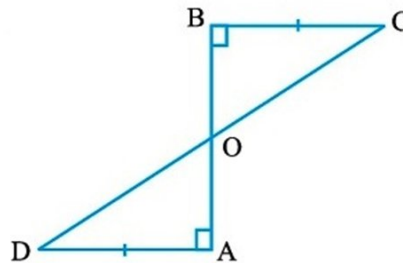
- a) 55cm (b) 57cm (c) 60cm (d) 62cm

32. What value of x will make $BC \parallel DF$ in the following figure?



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

33. In the given figure, $\triangle CBO$ is similar to $\triangle DAO$. If $OB = 10$ cm, $DA = 3.5$ cm and $CB = 7$ cm, find OA.



- a) 2cm b) 20cm c) 3cm d) 5cm

34. If two different dice are rolled together, the probability of getting an even number on both dice, is

- a) $\frac{1}{36}$ (b) $\frac{1}{2}$ (c) $\frac{1}{6}$ (d) $\frac{1}{4}$

35. Two dice are thrown simultaneously. What is the probability that the sum of the numbers appearing on the dice is a prime number?

- a. $\frac{5}{12}$ (b) $\frac{1}{12}$ (c) $\frac{1}{4}$ (d) $\frac{3}{4}$

36. The probability of getting a bad egg from a lot of 400 eggs is 0.035. The number of bad eggs in the lot is:
 a) 7 b) 14 c) 21 d) 28
37. The probability of guessing the correct answer to a certain question is $\frac{p}{12}$. If the probability of not guessing the correct answer to the same question is $\frac{3}{4}$, the value of p is:
 a) 3 b) 4 c) 2 d) 1
38. A school has five houses: A, B, C, D and E. A class has 23 students, 4 from house A, 8 from house B, 5 from house C, 2 from house D, and the rest from house E. A single student is selected at random to be the class monitor. The probability that the selected student is not from A, B and C is:
 a) $\frac{4}{23}$ b) $\frac{6}{23}$ c) $\frac{8}{23}$ d) $\frac{17}{23}$
39. Onkar and Neha play a badminton game. If the probability of Onkar winning the match is 0.75, then what is the probability of Neha winning the match?
 a) 0.15 b) 0.25 c) 0.35 d) 0.75
40. Which of the following cannot be the probability of an event?
 a) -1.5 b) 15% c) 0.7 d) $\frac{2}{3}$

Note : Above mentioned questions from Smart text book and MCQ questions will be done in separate small copy.

HOLIDAY HOMEWORK (2026-27)
SUBJECT: SCIENCE

PROJECT WORK

I. INDIVIDUAL PROJECT:

TOPIC: Solid Waste Management and Recycling

Mode of Preparation: Handwritten

Mode of Submission: Hard copy

Page 1:

Name of the School:

Subject: Science

Name of the student:

Class and section:

Roll No:

Page 2: Title of the project

Page 3: Introduction

Page 4: contents of the project (4 to 5 pages)

- ❖ Types of waste (Biodegradable and non- biodegradable)
- ❖ Methods of waste disposal
- ❖ Concept of 3Rs (Reduce, Reuse, Recycle)
- ❖ Survey of waste produced at your home/school
- ❖ Suggestions to reduce waste
- ❖ Conclusion

IMPORTANT: It is an individual project which every student has to submit. According to the latest syllabus released by CBSE, this project is mandatory for each and every student.

Note:

- a) Paste or draw pictures related to the topic.
- b) Prepare the project in loose sheets (both side ruled), staple and submit. No stick or project file is required.

Date of Submission: 1st week of July 2026**II. GROUP PROJECT (ART INTEGRATED PROJECT)**

As per CBSE guidelines Art Integrated Project is a part of your internal assessment which carries marks.

Go through the important points to be followed regarding the project:

How to proceed for the project:**➤ Title page:**

- Name of the project: NUTRITION AND FOOD CULTURE OF ODISHA AND PUNJAB
- Name of the group members of a particular group with section

➤ Acknowledgement**➤ Introduction****➤ Main body of the project (minimum 4 to 5 pages)****➤ Conclusion****➤ Bibliography****Points to be noted:**

- For this project there is an option that you can do alone as an individual or in a group consisting of maximum 4 to 5 members.
- The project is to be decorated with art forms of Odisha and Punjab
For example: Making the border of the page and drawing pictures/diagrams using crayons, water colour pencil shading, etc.
- Project should be hand written.
- Submit the project papers after stapling them (No stick or project file)

SUBMISSION DATE 1st week of July 2026**QUESTION ANSWERS (To be written in the respective classwork notebook)****PHYSICS****Objective type Questions**

1. Which mirror is used by dentists to see enlarged images?
a) Convex mirror b) Plane mirror c) Concave mirror d) None
2. A virtual, erect and diminished image is formed by:
a) Concave mirror b) Convex mirror c) Plane mirror d) Convex lens
3. When light enters glass from air, it bends:
a) Away from normal b) Towards normal c) No bending d) Randomly
4. If speed of light in a medium decreases, refractive index:
a) Decreases b) Increases c) Remains same d) Becomes zero
5. The focal length of a mirror is half of:
a) Object distance b) Image distance c) Radius of curvature d) Height of object
6. A ray passing through the centre of curvature of a concave mirror will:
a) Reflect parallel b) Reflect back along same path
c) Pass through focus d) Scatter
7. A ray diagram shows an object placed beyond the centre of curvature (C) of a concave mirror. One ray parallel to the principal axis reflects through F, and another passes through C and retraces its path.

The image formed will be:

- a) Virtual, erect, magnified
- b) Real, inverted, diminished
- c) Real, erect, same size
- d) Virtual, diminished

8. A diagram shows an object placed between focus (F) and pole (P) of a concave mirror. Reflected rays diverge and appear to meet behind the mirror.

The image formed is:

- a) Real and inverted
- b) Virtual and magnified
- c) Real and diminished
- d) Virtual and diminished

Assertion and Reason

Directions: In each of the following questions, a statement of Assertion is given, and a corresponding statement of Reason is given just below it. Of the statements, given below, mark the correct answer as:

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

9. **Assertion (A):** A concave mirror can produce an image larger than the object.

Reason (R): The focal length of a concave mirror is always positive.

10. **Assertion (A):** Convex mirrors are used at blind turns on roads.

Reason (R): Convex mirrors always form real images.

11. **Assertion (A):** A ray passing through the centre of curvature of a concave mirror retraces its path after reflection.

Reason (R): The angle of incidence is zero for such a ray.

Very Short Questions:

12. Write down four important characteristics of image formed by a plane mirror.
13. What are the advantages and disadvantages of using a convex mirror for seeing traffic at the rear?
14. Explain why we see the sign AMRITABHAMA front of some vehicles.
15. The radius of curvature of a spherical mirror is 20 cm. What is its focal length?
16. a) What should be the position of the object, when a concave mirror is to be used:
- i) as a shaving mirror
 - ii) in torches producing parallel beam of light?
- b) A man standing in front of a mirror finds his image having a very small head and legs of normal size. What type of mirror is used in designing such a mirror?
17. An object is placed at the following distances from a concave mirror of focal length 15 cm.
- i) 10 cm
 - ii) 20 cm
 - iii) 30 cm
 - iv) 40 cm
- Which position of the object will produce:
- a) Virtual image
 - b) A diminished real image
 - c) An enlarged real image
 - d) An image of same size.

Short Answer Type Questions

18. Define absolute refractive index. Absolute refractive indices of medium A and medium B are n_a and n_b respectively, what is the refractive index of medium B with respect to medium A? How does the velocity of light vary with change in the optical density of the media?
19. As the velocity of light increases, the refractive index of the medium decreases. Light enters from air to water having refractive index $4/3$. Find the speed of light in water. The speed of light in vacuum is 3×10^8 m/s.

- c) A reddish brown gas is evolved d) Water droplets are formed on cooler parts of test tube.
5. $\text{Pb} + \text{CuCl}_2 \rightarrow \text{PbCl}_2 + \text{Cu}$
The above reaction is an example of:
a) Combination b) Double displacement c) Decomposition d) Displacement
6. Calcium oxide can be reduced to calcium by heating with sodium metal. Which compound would act as an oxidizing agent in the above process?
a) Sodium b) Sodium oxide c) Calcium d) Calcium oxide
7. Study the following chemical reaction:
 $4 \text{Na(s)} + \text{O}_2(\text{g}) \rightarrow 2 \text{Na}_2\text{O(s)}$
The oxidising and reducing agent in this reaction is:
a) Na, O_2 b) O_2 , Na c) Na_2O , O_2 d) Na_2O , Na
8. Consider the following chemical equation:
 $P \text{Al} + Q \text{H}_2\text{O} \rightarrow R \text{Al}_2\text{O}_3 + S \text{H}_2\text{O}$
To balance this chemical equation, the values of 'P', 'Q', 'R' and 'S' must be respectively:
a) 3,2,2,1 b) 2,3,3,1 c) 2,3,1,3 d) 3,1,2,2
9. **Assertion(A):** Silver bromide decomposition is used in black white photography.
Reason(R): Light provides energy for this exothermic reaction.
10. **Assertion(A):** Decomposition of vegetable matter into compost is an example of exothermic reaction.
Reason(R): Exothermic reactions are those reactions in which heat is evolved.
11. **Assertion(A):** When HCl is added to zinc granules, a chemical reaction occurs.
Reason(R): Evolution of a gas and change in colour indicate that the chemical reaction is taking place.
12. **Assertion(A):** White silver chloride turns grey in the presence of sunlight.
Reason(R): Decomposition of silver chloride in presence of sunlight takes place to form silver metal and chlorine gas.

Very short questions

13. Write the chemical equation of the reaction in which the following changes have taken place with an example of each: (Write balanced chemical equation)
a) change in colour b) change in temperature.
14. "No precipitation reaction can occur without exchange of ions between the two reactants." Justify this statement giving a balanced chemical equation for the reaction.
15. A clear solution of slaked lime is made by dissolving Ca(OH)_2 in an excess of water. This solution is left exposed to air. The solution slowly goes milky as a faint white precipitate forms, support your response with the help of a chemical equation.
16. A compound 'A' is used in the, manufacture of cement. When dissolved in water, it evolves a large amount of heat and forms compound 'B'.
a) Identify A and B b) Write chemical equation for the reaction of A with water.
c) List two types of reactions in which this reaction may be classified.

Short Answer Type Questions

17. a) Define a double displacement reaction.
b) Write the balanced chemical equation of a double displacement reaction which is also a
i) Neutralization reaction and ii) Precipitation reaction
For both the reactions give justification on behalf of your answer.

18. A reddish brown colour metal, used in electrical wires, when powdered and heated strongly in an open china dish, its colour turns black. When hydrogen gas is passed over this black substance, it regains its original colour. Based on the above information answer the following questions:
- Name the metal and the black coloured substance formed.
 - Write balanced chemical equations for both the reactions.
19. On heating blue coloured powder of copper(II) nitrate in a boiling tube, copper oxide(black), oxygen gas and a brown gas X is formed.
- Write balanced chemical equation of the reaction
 - Identify the brown gas X evolved
 - Identify the type of reaction
 - State heat is released or absorbed during the above mentioned reaction and also give a scientific term for the same.
20. Few quantities of lead nitrate powder is taken in a dry boiling tube and heated over a flame.
- Mention the colour of lead nitrate powder
 - Name the products formed during the reaction
 - Write the balanced chemical equation for it
 - What is the type of chemical reaction called?
 - Give one more example of this type of reaction
21. A metal nitrate 'A' on heating gives yellow residue of metal oxide along with brown fumes 'B' and a colourless and odourless gas 'C'. Aqueous solution of 'A' on reaction with Potassium iodide forms a yellow precipitate of compound 'D'.
- Identify A, B, C and D (Name the compounds)
 - Write balanced chemical equations for both the reactions.

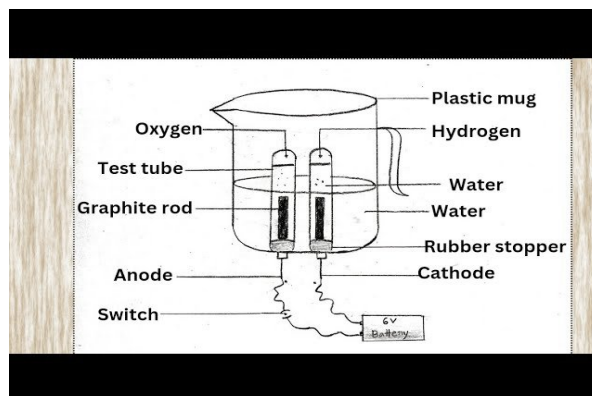
Long Answer Type questions

22. Write a balanced chemical equation for each of the following reactions and also classify them.
- Lead acetate solution is treated with dilute hydrochloric acid to form lead chloride and acetic acid solution.
 - A piece of sodium metal is added to absolute ethanol to form sodium ethoxide and hydrogen gas.
 - Iron(III) oxide on heating with carbon monoxide reacts to form solid iron and liberates carbon dioxide gas.
 - Hydrogen sulphide gas reacts with oxygen gas to form solid sulphur and liquid water.
 - Barium chloride solution is added to copper sulphate solution to form insoluble barium sulphate along with copper chloride solution.
23. About 2 g of ferrous sulphate crystals were taken in a dry boiling tube and heated. Colour of the ferrous sulphate crystals was changed and tiny droplets of water were appeared in the tube.
- What colour change will be observed during heating?
 - Why is the colour of ferrous sulphate crystals change during heating?
 - From where did these water droplets appear in the boiling tube?
 - State and define the type of reaction occur during the reaction.
 - How many molecules of water are attached per molecule of ferrous sulphate crystal?
 - During the heating of the ferrous sulphate crystals why do we get the characteristic odour of burning sulphur?

Case- Based

24. Read the following passage and answer the questions that follow:

The diagram below shows the set-up in which electrolysis of water takes place.



- What type of reaction occurs in the given process?
- Is this reaction endothermic? Justify your answer.
- Write a balanced chemical equation for the reaction that occurs in this process. Name the gas that burn with a pop sound and also name the gas that burn brightly when a burning splinter is brought near the mouth of the test tubes

OR

In the process of electrolysis why is the amount of gas collected at cathode twice the amount of gas collected at anode?

BIOLOGY

Objective type Questions

- In human alimentary canal the digestive juice secreted by the gastric glands are:
 - Bile, Trypsin, Pepsin
 - Hydrochloric acid, Pepsin, Mucus
 - Lipase, Bile, Mucus
 - Salivary amylase, Pepsin, Bile
- The opening and closing of stomatal pore depends upon:
 - Temperature
 - excess of CO_2 in the guard cells
 - High concentration of oxygen in the guard cells
 - Flow of water in and out of the guard's cells
- An organism which breaks down the food material outside the body and then absorbs it is
 - A plant parasite, Cuscuta
 - An animal parasite, Tapeworm
 - A Bacteria, Rhizobium
 - A fungi, Rhizopus
- As compared to terrestrial organisms, the rate of breathing in aquatic organism is:
 - Faster because they need more oxygen for their survival
 - Faster because the amount of dissolved oxygen in water is fairly low
 - Slower because the amount of dissolved oxygen in water is fairly low
 - Slower because the capacity of water of dissolving atmosphere air is limited
- Which is the first enzyme to mix with food in the digestive tract
 - Pepsin
 - Cellulose
 - Amylase
 - Trypsin
- Sphincter muscles are present at the exit of:

22. Name the events occurring during photosynthesis. Do these events occur one after the another immediately?
23. Bile juice does not contain any enzyme, still it plays an important role in digestion. Explain how
24. Two test tubes A and B are taken, each containing one mL of starch solution. Add 1 mL of saliva to test tube 'A' only and leave both the test tubes undisturbed a few minutes. Now add a few drops of dilute iodine solution to both the test tubes.
- Which one of the two test tubes shows change in colour? Write the changed colour observed in this test tube.
 - What can we conclude from this activity?

Long Answer Type Questions

25. With the help of an activity show that chlorophyll is required for photosynthesis.
- 26.a) Draw a neat and labelled diagram of human respiratory system
- b) How do oxygen and carbon dioxide are carried from lungs to body tissues and vice versa?

Case-Based

27. Sneha performed an experiment to prove the importance of sunlight in photosynthesis. She took a healthy potted plant and kept it in darkness for 48 hours to remove all the starch. Then she covered a part of leaf with black paper and kept the plant in sunlight for a few hours. Afterwards, she plucked the leaf, boiled it in alcohol, and tested it with iodine solution. The part of the leaf exposed to sunlight turned blue black, while the covered part did not change colour.
- Why was the plant kept in darkness before the experiment?
 - What is the purpose of boiling the leaf in alcohol?
 - What was the result of the experiment and what does it prove?
 - Why didn't the covered part of the leaf turn blue black?
 - What conclusion can be drawn from Sneha's experiment?

SOCIAL SCIENCE

Holiday Home work

Session 2026-2027

- MAP Work**
- Individual Project on topics given in CBSE syllabus**
- Art Integrated Project**
- Inter Disciplinary Project**
- Revise the portion and read the NCERT Books**
- Solve the Questions in [Economics notebook](#) or [any other social science notebook](#).**
- Update your notebooks with all the work covered in the last class. Ensure that everything is neat, complete and up to date**

1. Map work (concept maps)

Guidelines

Dear students

You are required to purchase/download the India's political maps for doing the map work. A PDF file will be shared with you and you will do it manually the map pointing on the map which you will download. Then after doing it keep it in a file (project file) and submit the same.

2. Individual Project

(Every student has to compulsorily undertake one project on---)

Consumer Awareness

OR

Social Issues

OR

Sustainable development

Project should be developed and presented in this following order—

1. Project should be done in spiral bound copies/papers or Oxford file. No stick files are permitted.
2. The front page will contain "PROJECT OF SOCIAL SCIENCE" and will be decorated nicely.
3. The second page will contain project title (Topic-Consumer Awareness), school name, Student's name, class, section, Roll No and academic session (year)
4. Acknowledgment
5. List of contents
6. Project overview-Purpose, aim and experience while doing the project.
7. Content elaboration (topic - Consumer Awareness)
8. For this topic refer chapter "consumer rights" from Economics.
Sub- topics are-
 - a. Who is a consumer?
 - b. Who is a responsible consumer?
 - c. Consumer exploitation
 - d. Malpractices in the market place
 - e. Need of consumer awareness or need for protecting the consumers
 - f. Consumer protection measures
-consumer forums
-consumer protection Act 1986 (COPRA)
-three tier system etc.
 - g. consumer movements and problem with consumer movements
 - h. consumer rights and duties
 - i. consumer awareness in INDIA (JAGO grahak JAGO)
 - j. learning to become well informed consumer.
9. Suggestion and conclusion
10. Submission date- The first week of July 2023.
11. Page limitation-between 15 to 20
12. Use colour page and pen if possible for making your project more attractive. It should be handwritten only.
13. Decorate your project as well.
14. Paste / draw relevant pictures for the subtopics.

OR

SOCIAL ISSUES

Sub-topics are

1. Inflation
2. Poverty
3. Unemployment
4. Child labour
5. Green revolution
6. Corruption

7. Environmental pollution
8. Dowry problem
9. Social discrimination
10. Population explosion
11. Global warming

In each topic you need to explain

- meaning
- types
- causes
- effects
- Measures to reduce/control

OR

Sustainable development

- What is sustainable development?
- why is sustainable development required?
- importance of sustainable development?
- History of sustainable development.
- examples- wind energy, solar energy and other natural resources
- Rio de Janeiro earth summit
- Agenda 21
- What can we do?
- Goals of Sustainable development?
- How can we make it happen?
- any other relevant topic
- conclusion

Important Note- Integrate with art wherever possible.

3. Art Integrated Project

Dear students

Please be noted that as per CBSE guidelines Art Integrated Project is a part of your internal assessment which carries marks.

Go through the important points to be followed regarding the project:

How to proceed for the project:

1. Cover Page

Title of the project: Art Integrated Project

Topic - Punjab and Odisha Forest, Wildlife and Water Resources comparison

Class and section

Roll no.

Subject Social science

School name

Session 2026-27

****Decorate with traditional art

2. Certificate

3. Acknowledgement

4. Index
5. Introduction
- 6 Main body of the project (minimum 4 to 5 pages)
 - about Odisha
 - about Punjab
7. comparison of resources in both the states.
8. Art forms (main section)
9. Conclusion
10. Bibliography

Points to be noted:

- * The project is to be decorated with art forms of Odisha and Punjab
For example: making border of the page and drawing pictures/diagrams using crayons, water colour pencil shading, etc.
- * Project should be hand written.
- * Submit your project in project file.

Note: 1. For your project you can refer to chapters 2 - Forest and Wildlife Resources and Chapter 3 -Water Resources.

2. You need to compare and correlate both the states about status of forest, wildlife sanctuaries and water resources.
3. This project should be totally done through art forms of Punjab and Odisha. Ex -warli art, pattachitra borders etc.
Topic- Forest, wildlife and water resources of Punjab and Odisha (comparative study)

4. Inter Disciplinary Project

Dear students

This is to inform you all that as per CBSE guidelines **Inter disciplinary project** is a part of your Internal assessment which carries some marks. Inter Disciplinary project involves the combination of two or more discipline into one activity more current and integrated.

Go through the following important points to be followed regarding the project

1. Title of the project - "**Global world Through Globalisation**"
2. Topics of the project - the making of global world Globalization (History) and Globalisation and the Indian economy (Economics) and lifelines of national economy(Geography)
3. Date of starting and submitting the project to be mentioned in the beginning.
4. This project has to be done in group of maximum 10 members or minimum 5 members from the same sections only.
5. Learning objectives to be mentioned properly in the beginning of the project.
6. Need to make slide presentation in PowerPoint software and include various videos, pictures, any art etc in your presentation along with prepare your team for the physical presentation.
7. The following format to be followed for the project guided by CBSE-

ANNEXURE V

Presentation Template by the students - Class IX & X

Name of the Student:		
Members of Team:		
Class :	Section:	Date of Submission:
Topics of IDP:		
Title of the Project:		
Objectives:		
Multiple Assessment: Ex. Surveys / Interviews / Research work/ Observation/ Story based Presentation/ Art integration/ Quiz/ Debate/ role play/ viva/group discussion/visual expression/ interactive bulletin boards/ gallery walks/ exit cards/ concept maps/ peer assessment/ art integration /Self-assessment/integration of technology etc.		
Evidences: Photos, Excerpts from Interviews, observations, Videos, Research References, etc.		
Overall presentation: Link of PPT, shared documents, can be digital/handwritten, as per the convenience of the school.		
Acknowledgement:		
References (websites, books, newspaper etc)		
Reflections:		

Page 58 of 60 Social Science Syllabus Class IX & X 2023-24

8. There should be a Team leader and the proper distribution of work should be there. in the group
9. Refer the following plan for the project (suggestive plan plan may be changed)
 - a. Introduction to IDP and setting the context
 - b. The Great Depression
 - c. India and the great depression
 - d. Rebuilding the World economy and the interlinking production across the countries
 - e. The early post war years- the role of roadways, Railways and Airways in building the national economy
 - f. Post war settlement and Bretton Woods institution
 - g. The colonization and Independence- the role of WTO
 - h. End of Bretton woods and the beginning of globalisation
 - i. Impact of globalisation in India and the role of railways
 - j. Final presentation

For all these above mentioned points refer NCERT History chapter 3, Geography chapter 7 and Economics chapter 4.

For detailed information you can refer annexure IV and 5 6 of CBSE syllabus sum art form also can be used in the people project.

Sequence of the project-

1. cover page
2. Acknowledgement
3. Learning objectives
4. Index or content page
5. Introduction
6. Body of the project (refer to the concerned chapters only that is from history, geography and Economics)
7. Conclusion
8. Bibliography

D. Industrial development

6. Who was the first emperor of a unified Germany?
A. Napoleon B. Kaiser Wilhelm I C. Bismarck D. Metternich
7. Who played a leading role in unifying Germany?
A. Giuseppe Mazzini B. Otto von Bismarck C. Garibaldi D. Napoleon
8. Which event is known as the beginning of nationalism in Europe?
A. Russian Revolution B. French Revolution
C. World War I D. Industrial Revolution
9. What was the Frankfurt Parliament?
A. Military alliance B. Revolutionary army
C. Assembly for German unification D. Trade organization
10. Who was known as the 'Sword of Italy'?
A. Mazzini B. Giuseppe Garibaldi C. Cavour D. Napoleon

-
11. Which type of resource is found in a particular region?
A. Renewable B. National C. Localized D. Biotic
12. Black soil is also known as:
A. Alluvial soil B. Red soil C. Regur soil D. Laterite soil
13. Which soil is ideal for cotton cultivation?
A. Red soil B. Alluvial soil C. Black soil D. Desert soil
14. Resource planning is essential because:
A. Resources are unlimited B. Resources are unevenly distributed
C. Population is low D. Industries are few
15. Which is a biotic resource?
A. Rocks B. Water C. Plants D. Minerals
16. Which country is an example of good power sharing?
A. Sri Lanka B. Pakistan C. Belgium D. China
17. Which system divides power among different levels of government?
A. Unitary system B. Federal system C. Monarchy D. Dictatorship
18. Why is power sharing important in democracy?
A. Reduces conflict B. Increases conflict
C. Helps dictatorship D. Reduces elections
19. Which type of power sharing involves different organs of government?
A. Horizontal distribution B. Vertical distribution
C. Social distribution D. Political distribution
20. Which community demanded separate state in Sri Lanka?
A. Sinhalese B. Tamils C. Muslims D. Christians

Assertion Reason Type Questions

21. Assertion (A): Per capita income is considered an important indicator of development.

Reason (R): It shows the average income of a person in a country.

22. Assertion (A): Sustainable development is necessary.

Reason (R): Resources are unlimited in nature.

23. Assertion (A): Different people can have different developmental goals.

Reason (R): Development depends on income only.

24. Assertion (A): Literacy rate is an important indicator of development.

Reason (R): It reflects the educational level of people.

25. Assertion (A): The French Revolution promoted nationalism in Europe.

Reason (R): It introduced ideas of liberty, equality, and fraternity.

26. Assertion (A): Otto von Bismarck was the architect of German unification.

Reason (R): He followed a policy of "Blood and Iron".

27. Assertion (A): Giuseppe Mazzini supported monarchy.

Reason (R): He wanted a democratic republic.

28. Assertion (A): The Frankfurt Parliament failed in its objectives.

Reason (R): It lacked support from the military and monarchy.

29. Assertion (A): Resource planning is essential in India.

Reason (R): Resources are unevenly distributed.

30. Assertion (A): Black soil is ideal for cotton cultivation.

Reason (R): It retains moisture for a long time.

31. Assertion (A): Overuse of resources leads to environmental problems.

Reason (R): Resources are inexhaustible.

32. Assertion (A): Soil erosion decreases soil fertility.

Reason (R): It removes the top fertile layer of soil.

33. Assertion (A): Power sharing is essential in a democracy.

Reason (R): It helps reduce conflicts among different groups.

34. Assertion (A): Belgium is an example of accommodation in power sharing.

Reason (R): It ignored the demands of minority communities.

35. Assertion (A): Horizontal distribution of power involves different organs of government.

Reason (R): It ensures checks and balances.

36. Assertion (A): In Sri Lanka, majoritarianism created tensions.

Reason (R): The government favored only the majority community.

37. Assertion (A): Globalisation has a long history.

Reason (R): Trade and migration existed even in ancient times.

38. Assertion (A): The Silk Routes connected different parts of the world.

Reason (R): They were only used for the trade of silk.

39. Assertion (A): The discovery of America led to global changes.

Reason (R): It increased trade and cultural exchange.

40. Assertion (A): Food travels changed people's lives.

Reason (R): Crops like potatoes and maize were introduced to new regions.

41. Case based questions-

Income is often used as an important indicator of development. Countries with higher income are generally considered more developed. The World Bank classifies countries based on per capita income, which is the average income per person. However, income alone cannot capture the complete picture of development. For example, a country may have high income levels but poor healthcare, lack of education, and unequal distribution of wealth. Therefore, other indicators such as literacy rate, life expectancy, and access to basic facilities must also be considered to understand true development.

Questions:

1. What is per capita income and why is it used?
2. Why is income alone not a sufficient indicator of development?
3. Explain the role of health and education in development.
4. How can inequality affect the development of a country?

42. Development should not only focus on the present but also consider the future.

Sustainable development means using resources in such a way that they are not exhausted for future generations. Natural resources like water, forests, and minerals are limited and can be depleted due to overuse. Environmental degradation such as pollution, deforestation, and climate change are major concerns. Therefore, careful planning and conservation are necessary to ensure that development is long-lasting and does not harm the environment.

Questions:

1. Define sustainable development in your own words.
2. What are the consequences of overusing natural resources?
3. Suggest measures to achieve sustainable development.
4. Why is environmental protection important for future generations?

43. Land is one of the most important natural resources as it supports natural vegetation, wildlife, human life, economic activities, transport, and communication systems. However, land is under constant pressure due to increasing population and competing uses. Land use refers to the way land is utilised for different purposes such as agriculture, forestry, mining, and settlement. Improper use of land can lead to land degradation, which reduces its productivity and quality.

Questions:

1. Why is land considered an important resource?
2. What is meant by land use?
3. What are the causes of land degradation?
4. Suggest measures to prevent land degradation.

44. India has a diverse range of resources, but their distribution is uneven across regions. Some areas are rich in minerals and forests, while others lack basic resources. This uneven distribution makes resource planning essential. Resource planning involves identification, mapping, and proper utilisation of resources. It also requires the development of appropriate technology, skilled human resources, and institutional support. Proper planning ensures balanced regional development and prevents wastage of resources.

Questions:

1. Why is resource planning necessary in India?
2. What are the steps involved in resource planning?
3. How does resource planning help in balanced development?
4. What problems arise due to uneven distribution of resources?

45. Culture played an important role in creating a sense of nationalism. Art, poetry, music, and folklore helped express national feelings. Romantic artists and poets emphasised emotions, traditions, and shared heritage. Language also became an important tool in developing national identity. For example, collecting folk songs and stories helped preserve cultural traditions and unite people. These cultural expressions strengthened the feeling of belonging to a nation.

Questions:

1. How did culture contribute to nationalism?
2. What role did language play in developing national identity?
3. Why were folk traditions important?
4. Explain the contribution of art and literature in promoting nationalism.

46. By the late 19th century, nationalism had turned into a narrow and aggressive form. Strong nations began to dominate weaker ones in the name of imperialism. This led to competition among European powers for colonies and resources. The spirit of nationalism contributed to conflicts and rivalries, which ultimately led to major wars. Thus, nationalism, which once united people, also became a cause of division and conflict.

Questions:

1. How did nationalism change in the late 19th century?
2. What is meant by imperialism?
3. How did nationalism lead to conflicts?
4. Explain the link between nationalism and wars.

2 marks questions

47. Mention any two indicators of development other than income.

48. What are public facilities? Give two examples.

49. What are the two aspects of development?

50. Why is literacy rate important for development?

51. Mention any two ideas promoted by the French Revolution.

52. Name any two leaders of Italian unification.

53. What was the role of language in nationalism?

54. What were the impacts of July revolution?

55. What were the ideas of revolutionaries?

56. Discuss the importance of silk route.

57. Why is power sharing important in democracy?

58. How did food travel impact the world?

59. Why did tensions arise in Sri Lanka?

60. What is resource planning? Who does it?

3 marks questions

61. Explain the concept of sustainable development with examples.

62. Why do different people have different development goals? Explain with examples.

63. Explain the importance of public facilities in development.

64. Describe any three features of a nation-state.

65. Describe three features of Frederic Sorrieu's first print.

66. Why did the Frankfurt Parliament fail? Explain any three reasons.

67. Suggest three measures to conserve soil.

68. Explain the importance of land resources.

69. Explain any three forms of power sharing.

70. Why is power sharing desirable? Explain any three reasons.

71. Describe the power-sharing arrangement in Belgium.

72. Explain the policy of majoritarianism in Sri Lanka.

5 marks questions

73. Describe the Human Development Index and its importance in measuring development.

74. Describe the process of unification of Germany under Otto von Bismarck.

75. Explain the causes and consequences of land degradation.

76. How did nationalism lead to the rise of imperialism and conflicts in Europe?

77. Write a short note on Rio De Janeiro Earth summit.

78. "Globalisation has history". Prove it with examples.

79. Why is power sharing desirable? Explain with arguments.

80. Discuss about Belgium model of accommodation.

HOLIDAY HOMEWORK
SUBJECT: ARTIFICIAL INTELLIGENCE

SECTION – A
PYTHON PROGRAMMING

1. Write a Python program that accepts the length of the three sides of a triangle. Then checks whether the triangle is equilateral, isosceles or scalene.

2. Write a Python program that accepts the total purchase amount of an item and calculates the discount as follows:

- If the amount is above ₹5000, give a 20% discount
- If the amount is between ₹3000 and ₹5000, give a 10% discount
- If the amount is below ₹3000, no discount

Display the discount amount and the final payable amount.

3. Write a Python program to print the sum of the first n natural numbers using a while loop.

4. Write a Python program to print even numbers between 1 and 50 using a while loop.

5. Write a Python program to reverse a given number using a while loop.

6. Write a Python program to find the sum of all elements in a list using a for loop.

7. WAP that prints each character of an input string in reverse order.

8. WAP that prints squares of all numbers present in a list. Assume the given list is [1, 2, 4, 6, 11, 20].

SECTION – B

AI PROJECT

1. Scenario: AI in Market Analysis and Decision-Making

Context:

An entrepreneur plans to launch a new product but is unsure about customer preferences, pricing, and market demand.

Question:

Illustrate how each stage of the AI Project Cycle—Problem Scoping, Data Acquisition, Data Exploration, Modelling, and Evaluation—supports informed decision-making and helps reduce business risks.

2. Scenario: Ethical Dimensions of Industrial Waste Management

Context:

In a corporate setting, a multinational company is facing scrutiny over its environmental practices, particularly regarding the disposal of industrial waste. The company has historically prioritised profit maximisation and cost-cutting, leading to practices that cause environmental harm and negatively impact local communities. As public awareness and concern about environmental sustainability grow, stakeholders, including investors, customers, and advocacy groups, are calling on the company to adopt more responsible, sustainable business practices.

Question:

Drawing from the case presented, analyse the ethical considerations surrounding the company’s environmental practices through the lens of **value-based ethical frameworks**.

Note: You can refer to the sample AI project idea for Q. No. 1 mentioned below. Think creatively and explore a new project idea of your own, then present it systematically.

SAMPLE PROJECT IDEA

Scenario: AI in Customer Engagement

Context:

A small business owner wants to improve customer satisfaction and respond quickly to customer queries without hiring additional staff.

AI Project Question:

How can an AI-based chatbot help entrepreneurs improve customer engagement, handle customer queries efficiently, and enhance overall customer experience?

Question:

Illustrate how each stage of the AI Project Cycle—Problem Scoping, Data Acquisition, Data Exploration, Modelling, and Evaluation—helps a small entrepreneur respond effectively to customer queries and increase customer satisfaction.

Answer:

- **Problem Scoping:** Identify common customer queries faced by small businesses.
 - **Data Acquisition:** Collect sample customer questions and responses.
 - **Data Exploration:** Categorise queries (pricing, delivery, product details).
 - **Modelling:** Use a rule-based or simple NLP chatbot.
 - **Evaluation:** Check response accuracy and customer satisfaction level.
-