

**O.P. JINDAL SCHOOL, SAVITRI NAGAR**  
**SUMMER VACATION HOLIDAY HOMEWORK**  
**(SESSION -2026-2027)**  
**CLASS X**

S N	Subject	Topic
0 1	English	<p>Do all the tasks (except Workbook exercises) on A4 size sheets and submit in a well-organized manner, avoiding plastic folders.</p> <p><i>Be creative, thoughtful, and sincere. Use this break to reflect, explore, and express!</i></p> <p><u>1. The Word Detective: Vocabulary Mission</u></p> <p>Choose a video (TED Talk, Documentary clip, Speech, etc.) related to growth mindset / innovation / technology / global issues.</p> <ul style="list-style-type: none"> <li>➤ Jot down 10 new words/phrases.</li> </ul> <p>For each word or phrase, write the following:</p> <ul style="list-style-type: none"> <li>➤ Meaning; Two synonyms &amp; one antonym; A sentence of your own; One visual or doodle to represent it</li> </ul> <p>(TED/YouTube link to be mentioned)</p> <p>OR</p> <p>Choose any ONE reading material from the following:</p> <ul style="list-style-type: none"> <li>➤ A feature article from a newspaper or magazine</li> <li>➤ A chapter or section from your English or Science textbook</li> <li>➤ A printed essay, speech, or biography related to innovation or global challenges</li> </ul> <p>Read carefully and pick out 10 new or interesting words/phrases.</p> <p>For each word or phrase, write the following:</p> <ul style="list-style-type: none"> <li>➤ Meaning (Use your dictionary); Two synonyms &amp; One antonym; Use it in a sentence of your own; Draw a simple doodle or symbol that visually represents the word; Mention the title, author (if known), and source of the text you used.</li> </ul> <p>2. Write a Factual Description (100 words) using at least: Use 10 adjectives, 5 adverbs, and 5 figurative expressions (simile, metaphor, personification, etc.)</p> <p>A. Write a factual description, in not more than 100 words, of a working model of 'Save Your Earth' that you have prepared for your school's Earth Day</p>

Exhibition.

### 3. The Power of Persuasion – Formal Letter

Write a formal letter (120 words) to any one of the following:

A. The National Bravery Awards are given to honour those children who have demonstrated selfless courage in the face of all odds. These awards serve as inspiration to other children and motivate them to follow in their footsteps. Similarly, the government should institute National Environment Crusader Awards for children who dedicate themselves to spreading awareness about saving the environment. Write a letter to the editor of a national daily, in 120 words, expressing your views on the above. Use your own ideas along with ideas from the unit Environment, to write the letter.

B. 'Atithi Devo Bhava' has been India's stand since times immemorial. However, you feel, to attract tourists, only tourism promotional drives do not suffice. It is important to sensitize those in the tourism industry to conduct themselves with propriety as hosts, and they must treat the tourists with respect, ensure their safety and support them during their visit. As Herbu R., write a letter to the Tourism Department expressing your concerns. Use your own ideas along with the ideas from the unit: Travel and Tourism, to write the letter in not more than 120 words.

C. Educational institutions play a vital role in shaping the minds of young people. Write a letter in 120 words, to the Education Department of your district, emphasising the need for effective contribution of educational institutions in keeping together the unity of our diverse culture. Do focus on creating mutual respect for all religions, castes, languages and culture. You can take ideas from the unit 'National Integration'. You are Chetna/Dhiraj of D-48, Model City.

D. The 'Early to Rise' principle is good provided a person follows the 'Early to Bed' principle as well. Sleep deficit today is a problem faced by people of all ages leading to both mental and physical challenges. Write a letter in about 120 words to the editor of a national daily highlighting the reasons for the problem especially in the youth today and suggest viable solutions. You are Rakhi/Rakesh, school counsellor residing at R-63, Greater Earth Colony, Khushipur. You may take ideas from the unit 'Health and Medicine, along with

		<p>your own input.</p> <p>E. The digital divide refers to the gap between those who have access to technology, such as the internet and digital devices, and those who do not. This disparity has significantly impacted education, especially for students from marginalised segments, by limiting their ability to access online resources and virtual classes. As Sakshi Tripathi, 120 Kailash Nagar, Batanpur, write a letter to the editor of a national daily highlighting the issue, its effects on students and teachers, and suggesting practical measures to bridge this gap. Use your own ideas along with those from MCB Unit 2: Education, to write this letter.</p> <p>Use correct format. Read Model Answers .</p> <p>4. Workbook Exercises</p> <p>Complete all the exercises of Workbook – Unit 1 &amp; Unit 2, using pencil.</p> <p>5. MCB</p> <p>Read the Units mentioned for letter writing</p>
0 2	<b>Hindi</b>	<p>1 कवि सूरदास और तुलसीदास जी की कविताओं का वाचन करके वीडियो बनाकर मेल कीजिए।</p> <p>2 दिए गए फारमेट में अपना पोर्टफोलियो बनाकर मेल कीजिए।</p> <p>1 अनुक्रमणिका</p> <p>2 छात्र/छात्रा का परिचय</p> <p>3 रुचि/अरुचि</p> <p>4 आत्म जीवन परिचय</p> <p>5 पारिवारिक सदस्य</p> <p>6 मेरा सबसे अच्छा मित्र</p> <p>7 मेरे आदर्श व्यक्ति</p> <p>8 मेरे जीवन का लक्ष्य</p> <p>Email. Kshitijclass10@gmail.com</p>
0 3	<b>Sanskrit</b>	<p>अपठित-अवबोधनम्</p> <p>प्र0 1 अधोलिखितम् अनुच्छेदं पठित्वा प्रश्नानाम् उत्तराणि संस्कृतेन लिखत-</p> <p>(निम्नलिखित अनुच्छेद को ध्यान से पढ़कर निर्देशानुसार प्रश्नों के उत्तर दीजिए)</p> <p>अति प्राचीन कालात् संस्कृत भाषा अस्माकं धर्म-दर्शन-साहित्य-ज्ञान-विज्ञानादीनाम् क्षेत्राणि पुष्पाति। न केवलं भारते अपितु</p>

विदेशेषु अपि अस्याः ग्रन्थानाम् महान् आदरः। ऋग्वेदः संसारस्य प्राचीनतमः ग्रन्थः। भारतीय जीवने रामायणमहाभारतयोः महान् प्रभावः। श्रीमद्भगवद्गीतायाः अनुवादाः प्राप्य सर्वाषु विषयस्य भाषासु सन्ति। जवाहरलाल नेहरू संस्कृत भाषां देशस्य अत्युत्तमां सम्पदम् अमन्यत। अद्यत्वे जर्मन देशे संगणकेषु संस्कृत भाषायै महत्त्वम् दीयते। विचित्रमिदम् यत् स्वदेशाभिमानधून्यः प्रयोगाय भारतीया एवं इमां स्वकीयां संपदं प्रति न दत्तादराः।

**I एकपदेन उत्तरत –**

(1X2=2)

- i भारतीय जीवने कयोः महान् प्रभावः विद्यते ?
- ii संसारस्य प्राचीनतमः ग्रन्थः कः ?

**II पूर्णवाक्येन उत्तरत–**

(2X2=4)

- i संस्कृत भाषाम् कः देशस्य अत्युत्तमां सम्पदम् अमन्यत् ?
- ii संस्कृत भाषा केषाम् क्षेत्राणि पुष्पाति?

**III प्रदत्त विकल्पेभ्यः उचितम् उत्तरम् चित्वा लिखत–**

(1X3=3)

- i 'पुष्पाति' इति क्रियापदस्य कर्तृपदम् किम् ?  
(अ) संस्कृत भाषा (ब) क्षेत्राणि  
(स) साहित्य (द) दर्शन
- ii 'निरादरः' इति पदस्य विपरीतार्थकम् किं ?  
(अ) दत्तादराः (ब) सम्पदम्  
(स) महत्त्वं (द) आदरः
- iii 'ग्रन्थः' इति पदस्य विशेषण पदम् किं ?  
(अ) ऋग्वेदः (ब) प्राचीनतमः  
(स) संसारस्य (द) भारतीय

**IV अस्य अनुच्छेदस्य कृते समुचितं शीर्षकं लिखत। इस अनुच्छेद का उचित शीर्षक लिखिए (1)**

**प्र0 2 अधोलिखितम् अनुच्छेदं पठित्वा प्रश्नानाम् उत्तराणि संस्कृतेन लिखत–**

(निम्नलिखित अनुच्छेद को ध्यान से पढ़कर निर्देशानुसार प्रश्नों के उत्तर दीजिए)

किं त्वम् जानासि ? अन्धकारं कः नाषयति ? कः दिनानाम्, रात्रीणां, मासानाम्, ऋतुनाम्, वर्षाणाम् च कारणम् अस्ति ? को जगतम् शीतात् रक्षति ? इत्यादीनाम् सर्वेषाम् प्रज्ञानाम् एकमेवोत्तरम् अस्ति। भगवान् भास्करः इति। सूर्यः दिनकरः मार्तण्डः इत्यादीनाम् अस्य पर्यायः अस्ति। अस्य जगतः प्रकाशकः भास्करः अस्ति। दीपकानाम् प्रकाशे तु जगतः सर्वव्यवहाराः भवितुम् न शक्नुवन्ति। भास्करस्य अभावे तु सर्वत्र शैत्यमेव भवेत्। पश्याम एवं वयं यत् उत्तर दक्षिणयोः ध्रुव प्रदेशयोः

भास्करस्य दर्शनं दुर्लभं भवति। ऋतूनामपि जनकः भास्करः अस्ति। यदा भास्करः उत्तरायणो भवति तदा तस्य प्रकाशः ऊष्मा च तीव्रौ भवतः। एभिः मेघैरेववर्षाः भवन्ति। वर्षाभिरेव विविधानि अन्नानि, शाकाः पादपाः च भवन्ति।

**I एकपदेन उत्तरत—**

(1X2=2)

- i जगतः प्रकाशकः कः अस्ति ?
- ii कस्य अभावे सर्वत्र शैत्यमेव भवेत् ?

**II पूर्णवाक्येन उत्तरत—**

(2X2=4)

- i सूर्यः केषां कारणम् अस्ति ?
- ii वर्षाभिः कानि भवन्ति?

**III अस्य अनुच्छेदस्य कृते समुचितं शीर्षकं लिखत।**

(1X1=1)

(इस अनुच्छेद का उचित शीर्षकलिखिए)

**IV प्रदत्त विकल्पेभ्यः उचितम् उत्तरम् चित्वा लिखत—**

(1X3=3)

- i 'षक्नुमः' इति क्रियापदस्य कर्तृपदम् किम् ?
- ii 'भास्करस्य' इति पदस्य किं पर्यायपदम् गद्यांशे प्रयुक्तम् ?
- iii 'तयोः' इति सर्वनाम पदस्य विषेषण पदं किम् ?

**प्र0 3** प्राचार्य महोदयाय अनुपस्थिति वषात् क्षमायाचना पत्रम् मंजूषायाः सहायतया पूरयत।(½X10=5)

(अनुपस्थित रहने के कारण प्राचार्य महोदय को एक क्षमायाचना पत्र लिखिए)

श्री प्राचार्य महोदय

संस्कृत विद्यालयः,

रायगढ़ः

मान्यवर !

सेवायाम् इदं निवेदनं यत् (1)----- सप्ताहे पंचम तिथौ (2)-----  
गृहस्य अनिवार्य कार्यवषात् विद्यालयात् अवकाशं अनादाय (3)----- आसम्।  
तेन् अहम् शतद्वयम् शुल्कदण्डेन(4)-----अस्मि। अहं (5)----- अवकाशं विना  
अनुपस्थितो न तिष्ठामि। अयं (6)----- एव अवसरः। तस्मात् कृपया तस्मिन्  
(7)----- मम अनुपस्थितिः (8)----- क्षन्तव्या इति (9)-----।

सधन्यवादं

भवदीयः (10)-----

षिखरः

कदापि, भवता, अनुपस्थितः, प्रथमः, षिष्यः निवेदनम्, गते, अहं, दण्डितः, दिने

**प्र04 भवती भाविका। भवतां विद्यालये गीतायाः श्लोकानां अन्त्याक्षरी आयोज्यते। स्वमित्रं देवांषी प्रति लिखिते अस्मिन् पत्रे मंजूषातः रिक्तस्थानानि पूरयत पत्रं च पुनः लिखत-**

**(½x10=5)**

(आप भाविका हैं। आपके विद्यालय में आयोजित गीता के श्लोकों की अन्त्याक्षरी का विवरण देते हुए मित्र देवांषी को पत्र लिखिए। मंजूषा की सहायता से रिक्त स्थानों को भरते हुए पूरा पत्र लिखिए।)

सर्वोदय छात्रावासः

आदर्ष संस्कृत महाविद्यालयः

(1) \_\_\_\_\_

दिनांक\_\_\_\_\_

प्रिय सखी, (2)\_\_\_\_\_

(3) \_\_\_\_\_

अत्र सर्वम् कुषलम्। अस्माकं विद्यालये संस्कृत दिवसे एका (4)\_\_\_\_\_ आयोज्यते। अस्माकं प्रतियोगिता (5) \_\_\_\_\_ कक्षायाः विद्यार्थिभिः (6)\_\_\_\_\_ भविष्यति। अहं स्व कक्षायाः प्रतिनिधि। भवान् अपि तस्मिन् दिवसे अत्र आगत्य (7)\_\_\_\_\_ पष्यतु इति प्रार्थ्यते।

भवत्यः पितृ चरणयोः (8)\_\_\_\_\_

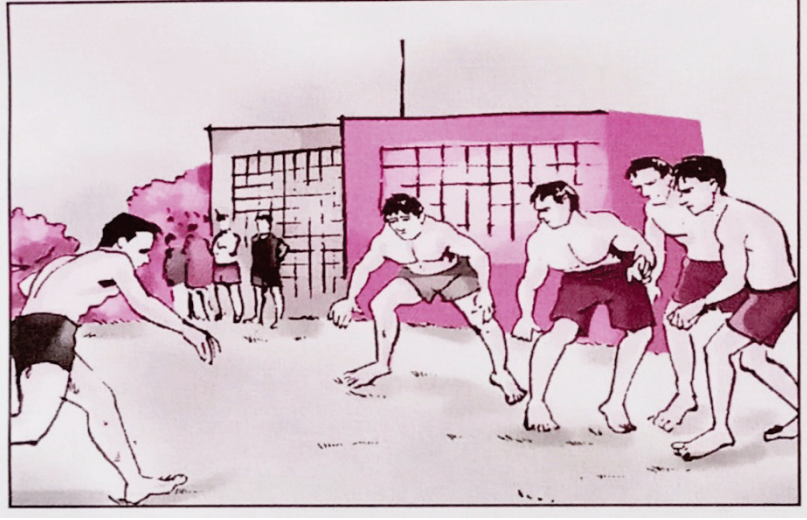
(9) \_\_\_\_\_ अभिन्न मित्रम्

(10)\_\_\_\_\_

सह, कार्यक्रमम्, अन्त्याक्षरीप्रतियोगिता, नमोनमः, प्रणामाः, भाविका, जयपुरतः, देवांषी, भव

**प्र05 मंजूषायां प्रदत्तशब्दानां सहायतया चित्रं दृष्ट्वा पंच वाक्यानि संस्कृतेन लिखत-**  
**(1x5=5)**

(चित्र को देखकर मंजूषा की सहायता से पाँच वाक्यों में संस्कृत में चित्रवर्णन कीजिए)



खेलस्य, क्षेत्रम्, बलिष्ठाः, स्टेडियम, खेलं, विजेतुम्, श्वनं, क्रीडकाः, प्रतिद्वन्द्विनः, व  
दर्षकाः, उत्साहेन, सर्वे, सप्त, एकस्मिन्, दले, अंकेन, अस्माकं, शरतीयाः, एव, पराज

**प्र06 मंजूषायांप्रदत्तशब्दानां सहायतया चित्रं दृष्ट्वा पंचवाक्यानि संस्कृतेन लिखत—  
(1x5=5)**

(चित्र को देखकर मंजूषा की सहायता से पाँच वाक्यों में संस्कृत में चित्रवर्णन  
कीजिए)

इदं, आपणं, षाकानि, जनाः, वृद्धः, कदलीफलानि, क्रीणाति, सर्वे, बालिका, फलानि, गृजनं, कुक्कुरः, वृद्धाः,



प्र0 7 अधोलिखितं संवादं मंजूषायां प्रदत्त समुचितशब्दैः पूरयत—

(1x5=5)

(निम्नलिखित वार्तालाप को मंजूषा से उचित षब्द चुनकर पुनः लिखिए )

दिनेषः — सुप्रभातम्, अधुना (1) ————— किम् करोषि ?

संजयः — (2) ————— स्वपाठः स्मर्यते ।

दिनेषः — अद्यः तु अवकाषः अस्ति किम् श्रमणाय न (3) ————— ?

संजयः — ष्वः मम संस्कृतस्य कक्षा परीक्षा (4) ————— अतएव मया  
रूपाणि स्मर्यते ।

दिनेषः — किम् त्वम् ईष्वरस्य (5) ————— अपि करोषि ?

संजयः — आम् मया ईष्वरस्य शजनम् नित्यम् क्रियते ।

मया, त्वम्, अस्ति, शजनम्, गच्छसि

प्र0 8 अधोलिखितं संवादं मंजूषायां प्रदत्त शब्दैः पूरयत । (1x5=5)

(निम्नलिखित वार्तालाप को मंजूषा से उचित षब्द चुनकर पुनः लिखिए )

विद्या— भो सुमित्रे ! अहं तु सरोजिनीनगरं (1) ————— इच्छामि ।

एषः (2) ————— कुत्र गच्छति ?

सुमित्रा— विद्ये ! किं न (3) ————— यद् अयं मार्गः तु कुत्रा पि न

		<p>गच्छति ।</p> <p>विद्या- अलम् (4) ----- ।</p> <p>सुमित्रा- (हसित्वा) अहं सत्यमेव वदामि । जनाः तु अस्मिन् चलन्ति एषः नैव (5) ----- ।</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>जानासि, उपहासेन, मार्गः, चलति, गन्तुम्</p> </div> <p><b>प्र0 9 अधोलिखितसंवादमंजूषायांप्रदत्तशब्दैः पूरयत ।</b></p> <p><b>(1x5=5)</b></p> <p>(निम्नलिखित वार्तालाप को मंजूषा से उचित षब्द चुनकर पुनः लिखिए )</p> <p><b>शीला-</b> हे संगीते! त्वं किं करोषि ?</p> <p><b>संगीता-</b> आगच्छ, अहं तु (1) ----- पश्यामि ।</p> <p><b>शीला-</b> जानासि अहं तुभ्यं (2) ----- आनयम् ।</p> <p><b>संगीता-</b> शोभनम् (3) ----- पठित्वा अहम् एताम् भ्रातृजायायै सुमित्रायै यच्छामि ।</p> <p><b>शीला-</b> तव भ्राता (4) ----- कुत्र वसति ?</p> <p><b>संगीता-</b> सः तु लाजपतनगरे (5) ----- ।</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>गीताम्, दूरदर्शनम्, संजयः, श्रीमद्भगवद्गीताम्, वसति</p> </div>
<b>04</b>	<b>Mathematics</b>	<p>Every day, solve 5 maths questions from the chapters listed below, using a separate notebook.</p> <p>(i) Real numbers</p> <p>(ii) Polynomial</p> <p>(iii) Pair of linear equations in two variables</p>
<b>05</b>	<b>IT</b>	<p>i. Answer the following (100–150 words each):</p> <ul style="list-style-type: none"> <li>○ Importance of Communication Skills in workplace</li> <li>○ Self-Management &amp; Time Management</li> <li>○ Role of ICT in today’s world</li> </ul> <p>ii. Differentiate between:</p>

		<ul style="list-style-type: none"> <li>○ Verbal vs Non-verbal Communication</li> <li>○ Entrepreneur vs Employee</li> </ul> <p>iii. Write a report (200 words) on:</p> <p><b>Cyber Crimes and Prevention</b></p> <ul style="list-style-type: none"> <li>i. List any 5 cyber safety tips students should follow</li> <li>ii. Practice typing (minimum <b>10 minutes daily</b>)</li> </ul>
<p><b>0</b> <b>6</b></p>	<p><b>Science</b></p>	<p><b><u>Biology</u></b></p> <ol style="list-style-type: none"> <li>1. Differentiate between autotrophic and heterotrophic nutrition.</li> <li>2. What is the role of saliva in digestion?</li> <li>3. Explain the function of the stomach.</li> <li>4. What is the role of bile juice?</li> <li>5. What is assimilation?</li> <li>6. Explain the process of nutrition in humans.</li> <li>7. Describe the human digestive system with a labelled diagram.</li> <li>8. Explain the process of digestion in the stomach and small intestine.</li> <li>9. Describe different types of nutrition with examples.</li> <li>10. Draw and label the human digestive system and label the parts: mouth, oesophagus, stomach, liver, pancreas, small intestine, large intestine.</li> <li>11. Why do we need digestion when we eat food?</li> <li>12. What will happen if bile juice is not secreted?</li> <li>13. Why should we chew food properly?</li> <li>14. Why is small intestine the main site of digestion and absorption?</li> <li>15. How does a balanced diet help in proper nutrition?</li> <li>16. Why do herbivores have longer intestines than carnivores?</li> </ol>

17. What will happen if the digestive enzymes stop working?

18. How is digestion linked to overall health?

19. Why is water important in digestion?

20. What is ingestion ?

### **Physics**

Instruction-All the questions written below is to be done in physics copy.

**Q1**A concave lens of focal length 15 cm forms an image 10 cm from the lens.

Calculate

- (i) The distance of the object from the lens.
- (ii) The magnification for the image formed.
- (iii) The nature of the image formed.

**Q2** Explain the following terms related to spherical lenses:

- (i) Optical centre
- (ii) Centres of curvature
- (iii) Principal axis
- (iv) Aperture
- (v) Principal focus
- (vi) Focal length

**Q3.** It is desired to obtain an erect image of an object, using concave mirror of focal length of 12 cm.

- (i) What should be the range of distance of an object placed in front of the mirror?
- (ii) Will the image be smaller or larger than the object? Draw ray diagram to show the formation of image in this case.

**Q4.** Draw a ray diagram in each of the following cases to show the formation of image, when the object is placed:

i) Between optical centre and principal focus of a convex lens.

(ii) Anywhere in front of a concave lens.

(iii) At 2F of a convex lens.

State the signs and values of magnifications in The above mentioned cases (i) and (ii).

**Q5** An object 4.0 cm in size, is placed 25.0 cm in front of a concave mirror of focal length 15.0 cm.

(i) At what distance from the mirror should a screen be placed in order to obtain a sharp image?

(ii) Find the size of the image.

(iii) Draw a ray diagram to show the formation of image in this case.

**Q6** What is meant by power of a lens? Define its SI unit. You have two lenses A and B of focal lengths +10 cm and -10 cm, respectively. State the nature and power of each lens. Which of the two lenses will form a virtual and magnified image of an object placed 8 cm from the lens? Draw a ray diagram to justify your answer.

**Q7.** Refractive indices of glass, water and carbon disulphide are 1.5, 1.33 and 1.62 respectively. If a ray of light is incident in these media at the same angle (say  $\theta$ ), then write the increasing order of the angle of refraction in these media.

**Q8)** The speed of light in glass is  $2 \times 10^8$  m/s and in water is  $2.25 \times 10^8$  m / s

(a) Which one of the two is optically denser and why?

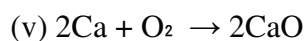
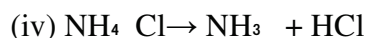
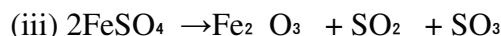
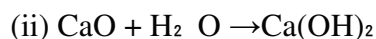
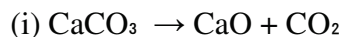
**Q9)** A ray of light is incident normally at the water-glass interface when it enters a thick glass container filled with water. What will happen to the

path of the ray after entering the glass? Give reason.

**Q10)** complete ncert exercise questions

### **Chemistry**

1. What type of reactions are represented by:



2. What type of reactions occur when:

(a) Magnesium burns in air

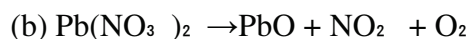
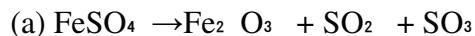
(b) Limestone is heated

(c) Silver bromide exposed to sunlight

(d) Electricity passed through water

(e) Ammonia and hydrogen chloride mix

3. Balance:



4.  $\text{PbS} + 4\text{H}_2\text{O}_2 \rightarrow \text{PbSO}_4 + 4\text{H}_2\text{O}$

(a) Reduced substance?

(b) Oxidised substance?

5. When a green iron salt is heated strongly, its colour finally changes to brown and odour of burning sulphur is given out.

(a) Name the iron salt.

(b) Name the type of reaction that takes place during the heating of iron salt.

(c) Write a chemical equation for the reaction involved.

6. A strip of metal X is dipped in a blue coloured salt solution  $\text{YSO}_4$ . After some time, a layer of metal Y is formed on the strip of metal X. Metal X is used in galvanisation whereas metal Y is used in making electric wires.

Metal X and metal Y together form an alloy Z.

- (a) What could metal X be?
- (b) What could metal Y be?
- (c) Name the metal salt  $YSO_4$ .
- (d) What type of chemical reaction takes place when metal X reacts with salt solution  $YSO_4$ ? Write the equation of the chemical reaction involved.
- (e) Name the alloy Z.

7. A metal compound  $XO$  is heated with a colourless gas  $Y_2$ , then metal X and another compound  $Y_2O$  are formed. Metal X is red-brown in colour which does not react with dilute acids at all. Gas  $Y_2$  can be prepared by the action of dilute acid on any active metal. The compound  $Y_2O$  is a liquid at room temperature which can turn anhydrous copper sulphate powder blue.

- (a) What do you think is metal X?
- (b) What could be gas  $Y_2$ ?
- (c) What is compound  $XO$ ?
- (d) What is compound  $Y_2O$ ?
- (e) Write the chemical equation of the reaction which takes place on heating  $XO$  with  $Y_2$ .
- (f) What type of chemical reaction is this?

8. Two metals X and Y form salts  $XSO_4$  and  $Y_2SO_4$ , respectively. The solution of salt  $XSO_4$  is blue in colour whereas that of  $Y_2SO_4$  is colourless. When barium chloride solution is added to  $XSO_4$  solution, then a white precipitate Z is formed along with a salt which turns the solution green. When barium chloride solution is added to  $Y_2SO_4$  solution, then the same white precipitate Z is formed along with colourless common salt solution.

- (a) What could the metals X and Y be?
- (b) Write the name and formula of salt  $XSO_4$ .
- (c) Write the name and formula of salt  $Y_2SO_4$ .
- (d) What is the name and formula of white precipitate Z?
- (e) Write the name and formula of the salt which turns the solution green in the first case.

9. A metal salt  $MX$  when exposed to light splits up to form metal M and a gas

		<p><math>X\square</math>. Metal M is used in making ornaments whereas <math>X\square</math> is used in making bleaching powder. The salt MX is itself used in black and white photography.</p> <p>(a) What do you think metal M is?</p> <p>(b) What could be gas <math>X\square</math>?</p> <p>(c) Name the metal salt MX.</p> <p>(d) Name any two salt solutions which on mixing together can produce a precipitate of salt MX.</p> <p>(e) What type of chemical reaction takes place when salt MX is exposed to light? Write the equation of the reaction.</p> <p>10. When a strip of red-brown metal X is placed in a colourless salt solution <math>YNO\square</math>, then metal Y is set free and a blue coloured salt solution <math>X(NO\square)\square</math> is formed. The liberated metal Y forms a shining white deposit on the strip of metal X.</p> <p>(a) What do you think metal X is?</p> <p>(b) Name the salt <math>YNO\square</math>.</p> <p>(c) What could be metal Y?</p> <p>(d) Name the salt <math>X(NO\square)\square</math>.</p> <p>(e) What type of chemical reaction takes place between metal X and salt solution <math>YNO\square</math>?</p> <p><b>NOTE- Please solve all the NCERT Questions (In-text as well as Back chapter Questions)</b></p>
0 7	<b>Social Science</b>	<p>Project Work on Consumer Rights OR Social Issues OR Sustainable Development (any one of its students will select)(Interdisciplinary)</p> <p>Steps to follow</p> <p>Choose a topic.</p> <p>Pick something simple and relevant, such as consumer awareness, social issues, or sustainable development.</p> <p>Research the topic.</p> <p>Use NCERT books, trusted websites, and news sources to gather facts, examples, and data.</p> <p>Make an outline.</p>

1) Write the main content.

Include an introduction, causes or background, effects, solutions or government measures, and a conclusion.

2) Add supporting material.

Use pictures, charts, maps, or graphs if needed to make the project more presentable and data-based.

3) Prepare the front and back pages.

Add a cover page, acknowledgement, index, bibliography etc.

4) Keep it neat.

Write clearly, maintain proper page numbering, and make sure the presentation looks clean and original.

5) Simple format

1. Title page.

2. Acknowledgement.

3. Index.

4. Introduction.

5. Main content.

6. Data/images/graphs.

7. Conclusion.

8. Bibliography.

Useful tip

A good project is not just long; it is organized, neat, and easy to understand.

**Economics:-**

1. Development (Real-life Application)

A village has clean water, schools, and hospitals but very few job opportunities.

Do you think this village is developed? Justify your answer.

2. Two families earn ₹ 25,000 per month.

Family A has access to government hospitals and free education.

Family B spends a large amount on private services.

Who is better off? Why?

3. Your friend says, "Higher income always means better development."

Do you agree? Give two reasons with examples.

	<p>4. A region shows high per capita income but also high pollution and poor health. Is it truly developed? Explain.</p> <p>5. Identify the sector: A teacher working in a school A farmer growing wheat A worker in a car factory</p> <p>6. During lockdown, many factory workers lost jobs while IT professionals worked from home. Which sectors were most affected? Why?</p> <p>7. A government builds roads in rural areas. Which sector does this activity belong to? How does it help other sectors?</p> <p>8. Why is disguised unemployment mostly found in agriculture?</p> <p>9. Why does India still have a large workforce in agriculture despite low GDP contribution?</p> <p>10. “Tertiary sector is becoming more important.” Justify with examples.</p> <p>11. How can development be made sustainable?</p> <p>12. Compare organized and unorganized sectors in terms of worker security. Explain how more employment opportunities can be created in rural areas with suitable examples.</p> <p>13. Why is MGNREGA considered a “Right to Work”? Give reasons.</p> <p>14. Differentiate between the three sectors of the economy: Primary Sector, Secondary Sector Tertiary Sector Support your answer with examples.</p> <p>15. What does the history of developed countries indicate about the shift of activities among different sectors?</p> <p>16. State the reasons for the shift of employment from one sector to another.</p> <p>17. Explain why the tertiary sector is becoming increasingly important in production.</p> <p>18. How can better irrigation and improved marketing facilities increase income and employment in rural areas?</p> <p>19. Suggest ways to increase employment opportunities in urban areas.</p> <p>20. Differentiate between the organised sector and the unorganised sector.</p> <p>21. III. It only focuses on increasing the Per Capita Income.</p>
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Options:

- A. Only I
- B. I and II
- C. II and III
- D. I, II, and III

Question and answer

1. Read the following statements about the Tertiary Sector:

- I. It does not produce a good by itself.
- II. It is also known as the Service Sector.
- III. Activities like banking, transport, and communication fall under this sector.

Which of the statements given above are correct?

- A. I and II
- B. II and III
- C. I and III
- D. I, II, and III

2. Consider the following statements regarding the Organized Sector:

- I. Workers enjoy security of employment.
- II. It is not registered by the government.
- III. People have to work for fixed hours; if they work more, they get overtime pay.

Select the correct statements:

- A. I and II
- B. II and III
- C. I and III
- D. Only I

3. Identify the correct statement(s) regarding NREGA 2005 (MGNREGA):

- I. It guarantees 100 days of employment in a year by the government.
- II. If the government fails to provide work, it provides unemployment allowances.
- III. It aims to implement the "Right to Work" in 625 districts of India.

Options:

- A. I and II
- B. II and III

C. I and III

D. All of the above

**Political science:- 1.Federalism chart:**

Task students with building a chart that lists levels of government alongside their primary definitions, representative imagery, and real-world examples of how they affect.

Students write letters analyzing the strengths and weaknesses of different government levels from a citizen's perspective.

Constitutional scavenger hunt: Have students navigate the constitution to identify specific articles and amendments that define the separation and sharing of powers, turning the document into a roadmap for understanding

**History:-**

Creative connections Cultural heritage collage: To illustrate how "culture played an important role in creating the idea of the nation," have students create a collage of their own local folk songs, traditions, and language, and write a paragraph on how these elements create a sense of belonging in their own community