



**St. Mary's School, Dwarka**

**Holiday Homework**

**Class: VIII**

**Worksheet 3**

**Subject: English**

**General Instructions:**

- 1) The work should be done neatly and systematically.**
- 2) The given questions are to be done in the English notebook.**
- 3) Attempt all questions.**

No. of questions: 10

M.M. 25

**Q1. Read the following passage.**

Space exploration has progressed rapidly in recent decades, turning science fiction into reality. What began with simple satellite launches has now expanded to international space stations, robotic missions to Mars, and plans for human settlements on the Moon. Countries like the United States, China, India, and members of the European Union are investing heavily in space research, both competing and collaborating to explore the vast unknown.

One major reason for this growing interest is technological advancement. Discoveries made during space missions have led to improvements in many areas of everyday life. Communication systems, weather forecasting, disaster management, navigation, and even medical equipment have all benefited from technologies first developed for space. Satellites play a vital role in monitoring climate change, predicting natural disasters, and supporting global communication networks.

Another powerful motivation is the search for resources. As Earth's natural resources continue to decline, scientists and engineers are exploring the possibility of mining asteroids and other celestial bodies for valuable metals, water, and even fuel. These resources could one day support human colonies on other planets or power further space missions. There is also growing interest in space tourism, which could become a thriving industry soon, making space travel accessible to ordinary people.

However, space exploration presents serious challenges. It is extremely expensive, requiring massive funding and long-term planning. It also involves significant technological and physical risks, especially for human missions. Another growing concern is space debris. Thousands of

unused satellites, broken equipment, and rocket parts orbit the Earth, posing a threat to current and future missions.

In addition, there are ethical and legal questions about who owns space and how its benefits should be shared. As more nations and private companies join the space race, international cooperation and fair regulations become increasingly important.

Despite the risks, space exploration continues to inspire wonder and ambition. It pushes the boundaries of what humanity can achieve, offering hope for a future where humans may live beyond Earth, not as an escape, but as an extension of our curiosity, innovation, and responsibility.

**Based on your understanding of the passage, answer the questions given below. (1x5=5)**

**i. Why are many countries showing interest in space exploration? (1)**

**Many countries are showing interest in space exploration to \_\_\_\_\_.**

- a. launch low-cost projects for development
- b. compete in international space shows
- c. explore new worlds and find resources
- d. escape the pollution found on Earth

**ii. According to the passage, what is one of the major concerns linked with space exploration? (1)**

- a. lack of interest from the private sector
- b. poor weather conditions beyond Earth
- c. the rise of unsafe space tourism plans
- d. the presence of harmful space debris

**iii. According to the passage, which of the following statements is NOT true? (1)**

- a. Space missions improve medical devices.
- b. Satellites help monitor weather events.
- c. No country mines asteroids for metals.
- d. Space programs require large funding.

**iv. What impact could global investment in space tourism have? (1)**

- a. International conflicts may increase soon.
- b. Space travel may reach common people.
- c. Science education may be discouraged.
- d. Technology growth could slow down.

**v. “It pushes the boundaries of what humanity can achieve...”**

**Which phrase from the passage is closest in meaning to ‘pushes the boundaries’?** (1)

- a. needs large funds and long planning
- b. may increase sea levels on Earth
- c. broadens human potential and goals
- d. encourages global teamwork always

**Q2. Discipline is the bridge between goals and accomplishment. Write a paragraph in about 100–120 words on why discipline is necessary to succeed in life. Include how discipline helps in building good habits, staying focused, and overcoming challenges on the path to success.**

(3)

**Q3. Fill in the blanks with the appropriate word.**

(1/2 x 4=2)

Anita (i) \_\_\_\_\_ to learn the guitar for years. Last winter, she finally (ii) \_\_\_\_\_ the courage to join a local music school. At first, she (iii) \_\_\_\_\_ nervous in front of others, but with time, she (iv) \_\_\_\_\_ more confident and even performed at a school concert.

- |      |            |               |                 |                  |
|------|------------|---------------|-----------------|------------------|
| i.   | a. travels | b. has wanted | c. had wanted   | d. wanted        |
| ii.  | a. gathers | b. gathered   | c. had gathered | d. was gathering |
| iii. | a. feels   | b. felt       | c. had felt     | d. was feeling   |
| iv.  | a. becomes | b. became     | c. had become   | d. is becoming   |

**Q4. Combine the two sentences into a single sentence.**

(2)

- i. He studied hard. He passed the exam with flying colours.
- ii. She was very hungry. She made a sandwich.

**Q5. Read the given extract to attempt the questions that follow.**

(2)

After the walking had gone on for perhaps three minutes, I tiptoed to Herman's room.

"Psst!" I hissed, in the dark, shaking him. "Awp," he said, in the low, hopeless tone of a despondent beagle— he always half suspected that something would 'get him' in the night.

**i. What does the comparison to a ‘despondent beagle’ suggest about Herman’s mood?**

**Herman was \_\_\_\_\_.**

(1)

- a) angry and aggressive
- b) sad and frightened
- c) alert and ready
- d) confused and curious

ii. What does the narrator's action of tiptoeing to Herman's room suggest? (1)

The narrator's action of tiptoeing to Herman's room suggests that he \_\_\_\_\_.

- a) wanted to scare Herman
- b) was trying not to wake others
- c) was avoiding stepping on something
- d) was too sleepy to walk normally

Q6. How does the narrator create a spooky situation in his narration of the dining area in the lesson 'The Night the Ghost Got In'? (Answer in 30-40 words) (2)

Q7. According to the poet, what kind of a place is Innisfree? (Answer in 30-40 words) (2)

Q8. Why did Amma allow Patil to take away the cyclostyling machine? Why did Mohan oppose it? (Answer in 30-40 words) (2)

Q9. What are the difficulties faced by the Yup'ik people, both emotionally and physically, after their migration? (Answer in 40-60 words) (3)

Activity:

Q10. Create a 4-panel comic strip on an A3-sized sheet that illustrates the impact of global warming on a Yup'ik village in Alaska. The comic should depict specific events such as:

- i. Melting permafrost is damaging homes
- ii. Declining fish populations affecting the food supply
- iii. Increased coastal erosion
- iv. The eventual relocation of the village

Below is a sample of a comic strip for your reference.

(2)



**Subject: Hindi**

No. of questions: 10

M.M. 25

**निर्देश — 1** दिए गए सभी प्रश्नों के उत्तर हिन्दी की उत्तर पुस्तिका में लिखिए।**2** कार्य स्वच्छ शुद्ध एवं स्पष्ट लेख में कीजिए।**प्रश्न 1** निम्नलिखित अपठित गद्यांश को पढ़कर इसके आधार पर सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए — (1×5=5)**प्रश्न 1** निम्नलिखित अपठित गद्यांश को पढ़कर इसके आधार पर सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए — (1×5=5)

भारत की संस्कृति सदैव से ही त्याग और तपस्या की महान परंपरा के लिए विख्यात रही है। यह भूमि ऋषि-मुनियों की तपोभूमि है, जिन्होंने अपने जीवन को संयम और कठोर परिश्रम से समृद्ध किया। इन ऋषि-मुनियों के त्याग और तपस्या से प्रेरित होकर, लोगों ने भी उनके आदर्शों का अनुसरण करना शुरू किया। धीरे-धीरे, ये आदर्श हमारी संस्कृति के अभिन्न अंग बन गए। भोग-विलास की जगह त्याग को महत्त्व दिया जाने लगा, जिसके परिणामस्वरूप जीवन में सादगी और सच्चाई का समावेश हुआ। आज, जब पूरी दुनिया “खाओ, पियो और मौज करो” की नीति पर अमल कर रही है, जिसके कारण प्रदूषण और विनाश बढ़ रहा है, वहीं भारत त्याग, बचत और कल्याण के मार्ग पर अग्रसर है। इसी त्याग और तपस्या की भावना ने महात्मा गाँधी जैसे महान नेताओं को जन्म दिया। उन्होंने अहिंसा और त्याग के बल पर अंग्रेजों को भारत से बाहर निकाल दिया और देश को स्वतंत्रता दिलाई। भारत की संस्कृति त्याग और तपस्या की अमूल्य धरोहर है। यह हमें सिखाती है कि भौतिक सुखों की प्राप्ति ही जीवन का लक्ष्य नहीं है, बल्कि त्याग और कर्म के माध्यम से समाज और राष्ट्र के कल्याण में योगदान देना ही जीवन का सच्चा उद्देश्य है।

(i) भारत की संस्कृति किस कारण प्रसिद्ध है?

- (क) त्याग और तपस्या के कारण
- (ख) अपने आचार-विचार के कारण
- (ग) यहाँ के खानपान के कारण
- (घ) आपस में लड़ने-झगड़ने के कारण

(ii) आज पूरी दुनिया किस बात पर अमल कर रही है?

- (क) जियो और जीने दो
- (ख) खाओ, पियो और मौज करो
- (ग) हँसो और हँसाओ
- (घ) सबको परेशान करो

(iii) निम्नलिखित कथन (A) तथा कारण (R) को ध्यानपूर्वक पढ़कर उचित विकल्प का चयन कीजिए।

कथन (A) यह भूमि ऋषि-मुनियों की तपोभूमि है।

कारण (R) इसलिए तपस्या को ही जीवन का आधार नहीं मानते हैं।

(क) कथन (A) तथा कारण (R) दोनों गलत हैं।

(ख) कथन (A) गलत है तथा कारण (R) सही है।

(ग) कथन (A) सही है लेकिन कारण (R) गलत है।

(घ) कथन (A) तथा कारण (R) दोनों सही हैं। तथा कारण (R) कथन (A) की सही व्याख्या करता है।

(iv) त्याग और तपस्या की भावना ने किसे जन्म दिया?

(v) जीवन का सच्चा उद्देश्य क्या है?

**निम्नलिखित प्रश्नों के उत्तर दीजिए—**

**(1×5=5)**

**प्रश्न 2** गुणवाचक विशेषण को स्पष्ट करते हुए उसका उदाहरण दीजिए।

**प्रश्न 3** आकाश और कमल शब्द के दो पर्यायवाची शब्द लिखिए।

**प्रश्न 4** 'आराम' शब्द का अनेकार्थी शब्द क्या होगा? ?

**प्रश्न 5** आज़ादी के लिए सभी ने मिलकर कार्य किया क्योंकि.....  
सकता। रिक्त स्थान में उपयुक्त लोकोक्ति क्या होगी ?

**प्रश्न 6** 'खोज खबर लेना' मुहावरे का अर्थ लिखकर वाक्य में प्रयोग कीजिए।

**प्रश्न-7 निम्नलिखित प्रश्नों के उत्तर दीजिए—**

**(1½×2=3)**

(क) लेखक ने ऐसा क्यों कहा गया है कि 'बदलू का व्यक्तित्व काँच की चूड़ियों जैसा न था कि आसानी से टूट जाए।'

(ख) कवि की मंज़िल निश्चित क्यों नहीं है? कविता 'दीवानों की हस्ती' के संदर्भ में स्पष्ट कीजिए।

**प्रश्न 8 निम्नलिखित प्रश्नों के उत्तर दीजिए—**

**(1×2=2)**

(क) उद्यान भ्रमण के समय सिद्धार्थ को कौन-कौन दिखे?

(ख) राजा शुद्धोदन राजकुमार सिद्धार्थ को राजमहल से बाहर क्यों नहीं जाने देते थे?

**प्रश्न 9** दिए गए संकेतों के आधार पर 70 से 80 शब्दों में एक कहानी लिखिए।

(5×1=5)

भोजन की तलाश में सियार ..... धोबी के नील के ड्रम में गिरना ..... नीले  
रंग का लाभ उठाने की सोचना ..... जंगल का नया राजा बन जाना .....  
सभी जानवरों का उसकी आज्ञा मानना, सेवा करना ..... सियार को घमंड होना  
..... एक दिन सियारों का हुओं-हुओं करना ..... रँगै सियार का भी आवाज़  
मिलाना ..... पोल-पट्टी खुल जाना ..... शेर के हाथों उसका मारा जाना।

शिक्षा— .....।

**प्रश्न-10** महात्मा बुद्ध का चित्र बनाकर एक फ़िज मैगनेट बनाइए।

(5×1=5)

Subject- Sanskrit

- निर्देश- 1 प्रदत्त प्रश्नानाम् उत्तरम् संस्कृत पुस्तिकायाम् एव लिखत ।  
 2 प्रश्नानाम् उत्तरम् पूर्णवाक्येन लिखित्वा रिक्तस्थानानि रेखांकित करणीय ।  
 3 कार्यम् स्वच्छं ,शुद्धं एवं स्पष्टं लेखम् एव लेखनीय ।

No. of questions: 10

M.M. 25

प्रश्न 1 अधोलिखितं गद्यांशं पठित्वा बहुविकल्पकान् प्रश्नान् उत्तरत - (1×5= 5)

अस्माकं देशे प्राकृतिक शोभा अतीव मनोहारी रमणीया च भवति। एकस्मिन् वर्षे द्वादश मासाः भवन्ति। वर्षस्य द्वादश मासे कमशः षड् ऋतवः आयन्ति। एते ऋतवः समयानुसारेण आगच्छन्ति। वर्षस्य द्वादश मासेषु वैशाख मासे पृथ्वीः तप्ता भवति। उष्णवायोः प्रवाहेन सर्वे जनाः पशवः पक्षिणः च संतप्ताः भवन्ति। सरिताः जलाशयाः च शुष्यन्ति। सर्वे प्राणिनः व्याकुलाः भवन्ति। जलं वाष्पीभूय आकाशं प्रति गच्छति। आषाढ मास आरम्भे सागरात् मेघाः प्रादुर्भवन्ति तदा आगच्छति वर्षाकालः। वर्षा काले सर्वतः मेघाः आकाशम् आच्छादयन्ति। गगने एकत्रीभूताः जलदाः गर्जनं कुर्वन्ति, वारं- वारं पतन्ति। बालाः वृद्धाः च सर्वे जनाः प्रसीदन्ति। वर्षा अनन्तरं वृक्षाः रूपाः इव दृश्यते। शुष्काः सरोवराः जलपूरिताः भवन्ति। वर्षाकाले चतुर्दिक्षु हरीतिमा वर्तते। तडागानाम् नदीनाम् वा तटेषु उपविष्टाः बकाः, सारसाः, हंसाः च जलक्रीडां कुर्वन्ति। गगनमण्डले मेघानाम् समूहं दृष्ट्वा मयूराः नृत्यन्ति। मेघानाम् मध्ये इन्द्रधनुषस्य शोभा अतीव रमणीया भवति। शीतलः सुखदः च समीरः प्रवहति। वर्षया भूमिः कोमला कृषियोग्या च भवति। कृषकाः क्षेत्रेषु धान्यानां बीजानि वपन्ति। वर्षा कृषकाणाम् अतिप्रिया भवति। परन्तु महती वर्षा हानिकरा भवति।

1 अस्माकम् देशे प्राकृतिक शोभा कीदृशा भवति ?

- (क) सुन्दरा सरला च
- (ख) हरियाली रमणीया च
- (ग) मनोहारी रमणीया च
- (घ) मनोहारी शुष्काः च

2 एकस्मिन् वर्षे कति मासाः भवन्ति?

- (क) द्वादश
- (ख) त्रयोदश
- (ग) पञ्चदश
- (घ) षोडश



3 पृथ्वी कदा तप्ता भवति ?

- (क) कार्तिक मासे
- (ख) आश्विन मासे
- (ग) वैशाख मासे
- (घ) चैत्र मासे

4 जलम् वाष्पीभूयः कम् प्रति गच्छति?

- (क) नदीम्
- (ख) सागरम्
- (ग) पृथ्वीम्
- (घ) आकाशम्

5 'आगच्छन्ति' इति पदस्य धातुः लकारः च किम् अस्ति ?

- (क) आ +गम् धातुः लृटलकारः च ।
- (ख) आ +गम् धातुः लटलकारः च ।
- (ग) आ +गम् धातुः लोटलकारः च ।
- (घ) आ +गम् धातुः लंगलकारः च ।

प्रश्न 2 चित्रम् दृष्ट्वा दत्तपदानां सहायतया रिक्तस्थानानि पूरयत —

( $\frac{1}{2} \times 4 = 2$ )

मञ्जूषा = अध्यापिका , छात्राः , कक्षा , पुस्तकम् , ।



1 अस्मिन् चित्रे एका ..... अस्ति ।

2 कक्षायाम् ..... सन्ति ।

3 तत्र ..... पाठयति ।

4 अध्यापिकायाः हस्ते एकम् ..... अस्ति ।

प्रश्न 3 अधोलिखिते संवादे मञ्जूषायाः उचितपदानि चित्वा रिक्तस्थानानि पूरयन्तु  $-(\frac{1}{2} \times 4 = 2)$

मञ्जूषा - गृहकार्यम् , करोषि , मम , सुलेखम्

माता - पुत्र! त्वम् किम् [1]----- ?

पुत्रः - अहम् [2]----- लिखामि ।

माता - किम् तव [3]----- पूर्णम् अस्ति ?

पुत्रः - न ! [4]----- गणितकार्यम् अपूर्णम् अस्ति ।

प्रश्न 4 मञ्जूषायाः उचित पदानि गृहीत्वा पत्रं पूरयत —

$(\frac{1}{2} \times 6 = 3)$

मञ्जूषा- तत्रास्तु , अनेकानि , भ्रमितुम् , आगच्छ , ग्रीष्मावकाशे , नमोनमः

नवदिल्लीतः

तिथिः 20.06.2025

प्रिय मित्र सुरेशः

[1]——

अत्र कुशलम् [2]—— आगामिनि [3]—— त्वम् दिल्ली नगरम् [4]—— । अत्र [5]—— पर्यटन -स्थानानि सन्ति । यथा कुतुबमीनारः , इण्डियागेटः , रक्तदुर्गः , मुगलउद्यानम् च सन्ति । आवाम् मिलित्वा [6]—— गमिष्यावः । त्वम् अत्र अवश्यम् आनन्दम् अनुभविष्यसि । तव पित्रोः चरणयोः मम प्रणामः ।

तव मित्रम्

विनीतः

प्रश्न 5 मञ्जूषायां प्रदत्तैः उचित अव्ययपदैः रिक्तस्थानानि पूरयत-

$(\frac{1}{2} \times 4 = 2)$

मञ्जूषा - नूनम् , सायम् , किम् , कुत्र

(1) सः ----- एव सत्यम् वदति ।

(2) शीतकालीन अवकाशे त्वम् ----- अगच्छत् ?

(3) ----- काले सूर्यः अस्तः भवति ।

(4) तव हस्ते ----- अस्ति ?

प्रश्न 6 कोष्ठके प्रदत्तैः उचित संख्या पदैः रिक्तस्थानानि पूरयत -  $(\frac{1}{2} \times 4 = 2)$

- (1) राधिकायाः समीपे ----- आम्नाणि सन्ति । ( 16 )
- (2) मुखे ----- दन्ताः भवन्ति । ( 32 )
- (3) ----- जनाः रेलयानेन मुंबई नगरे गच्छन्ति । ( 50 )
- (4) धावनप्रतियोगितायाम् ----- धावकाः धावन्ति । ( 15 )

प्रश्न 7 रेखांकित पदम् आधृत्य प्रश्नं निर्मीयताम् —  $(\frac{1}{2} \times 4 = 2)$

- (1) मम समीपे पञ्च कलमानि सन्ति ।
- (2) रविः पाठम् पठति ।
- (3) बालिकाः पठन्ति ।
- (4) राकेशः मित्रैः सह क्रीडति ।

प्रश्न 8 शब्दानाम् अर्थैः लिखत -  $(\frac{1}{2} \times 4 = 2)$

कर्गदस्त्य , चिकित्सालयः ,  
विषाणहीनः , दैवम्

प्रश्न 9 विशेषण विशेष्य पदानां मेलनम् कुरुत —  $(\frac{1}{2} \times 4 = 2)$

- |                  |         |
|------------------|---------|
| (1) मौखिकम्      | सामग्री |
| (2) मनोगताः      | विनिमयः |
| (3) मुद्राविहीनः | भावाः   |
| (4) टंकिता       | ज्ञानम् |

प्रश्न 10 कपड़े के थैले(बैग) पर अपना पसंदीदा एक श्लोक या संस्कृत सूक्ति लिखकर उससे संबंधित सुंदर चित्र बनाइए ।

**Subject: Mathematics**

No. of questions: 10

M.M. 25

Q1. State whether the following statements are True/False : (0.5 x 4 =2)

- a) A linear equation can have a rational number as its solution.
- b) The term linear equation and linear expression are exactly same.
- c) The algebraic equation is said to be linear, if the highest power of the variable is 1.
- d) The solution of the equation,  $8x - 16 = 24$  is 6.

Q2. Choose the correct option: (1x2 = 2)

i) A quadrilateral which has 2 pairs of equal adjacent sides, but unequal opposite sides is called a \_\_\_\_\_.

- (a) parallelogram      (b) rhombus      (c) kite      (d) square

ii) How many diagonals does a decagon has?

- (a) 8      (b) 20      (c) 40      (d) 27

Q3. Form the equation and also find the value of equation: (2)

- a) five times of a number added to 4 is 29.
- b) 7 subtracted from three times of a number is 23.

Q4. Find the measure of an interior angle of a regular polygon of 8 sides. (2)

Q5. Draw four sided convex and concave polygon and mention one specific property of each of them. (2)

Q6. Using only 2,5,10,25 and 50 paise coins, what will be the minimum number of coins required to pay exactly 78 paise and 69 paise to two different persons? (2)

Q7 If we represent the distance towards North with positive rational number and the distance towards South as negative rational number. If speed of 'A' is  $\frac{5}{2}$  m per second. Draw figure and find the distance from the origin when : (3)

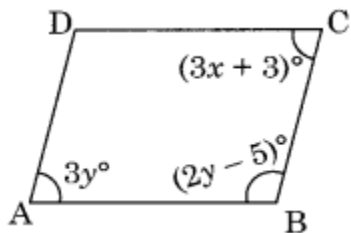
- a) 'A' travels towards South for 20 seconds.
- b) 'A' travels towards North for 16 seconds.

Q8. Construct the following angles using protractor: (3)

- a)  $67^\circ$       b)  $125^\circ$       c)  $210^\circ$

Class 8 Worksheet 3

Q9. In the given parallelogram ABCD, find the value of x and y. (3)



**Activity:**

Make a G.O. on A3 size sheet showing the classification of quadrilaterals and depicting their properties. (4)

**Subject: Science****General Instructions**

\* Neatly write the answers in a separate thin notebook.

\* Attempt the questions keeping in mind the weightage of each question.

No. of questions: 10

M.M. 25

Q1. Which fundamental force keeps objects bound to the Earth's surface?

(1)

- A. Magnetic force
- B. Electrostatic force
- C. Gravitational force
- D. Muscular force

Q2. The table given below lists petroleum products. Identify the petroleum products that are used as fuel. (1)

Petroleum Products		
1. Petrol	2. Diesel	3. LPG
4. Lubricating Oil	5. Paraffin wax	6. Bitumen

- A. 1, 2, 4
- B. 2, 5, 6
- C. 3, 5, 6
- D. 1, 2, 3

Q3. **Assertion (A):** If you stand on one foot, the pressure exerted on the ground by that foot is the same as when you stand on both feet.

**Reason (R):** Pressure depends only on the total force and not the area of contact. (1)

- (A) Both assertion and reason are true, and reason is the correct explanation of the assertion.
- (B) Both assertion and reason are true, but the reason is not the correct explanation of the assertion.
- (C) The Assertion is true, but the reason is false.
- (D) The Assertion is false, but the reason is true.

### Class 8 Worksheet 3

Q4. A farmer used traditional irrigation in his field and noticed a lot of water wastage and uneven watering. His neighbor suggested using a modern method that mimics rainfall.

- A. Identify the irrigation method suggested. (1)
- B. Draw a labeled diagram of this irrigation system. (1)

Q5. Differentiate between a contact force and a non-contact force, providing one example for each. (2)

Q6. Jatin goes with his father to a car showroom. His father is confused about whether to buy a CNG model or a Petrol model. (1+2=3)

- A. What suggestion would you give him?
- B. Mention any two advantages of choosing a CNG model.

Q7. The following pots labelled as A, B, and C are germinated by using different cultivation methods. (3)



Pot A- Manure is added

Pot B- Fertilizer is added

Pot C- Neither manure nor fertilizer is added

- a. Which one shows the least growth and why?
- b. We should use the product of which pot and why?
- c. What will happen if we grow legume plants and enrich the soil with rhizobium bacteria?

Q8. A force of 100 N is applied on a wooden plank of area  $0.1 \text{ m}^2$ . The same force is then applied on another wooden plank of area  $500 \text{ cm}^2$ . (1+1+1)

Calculate:

- A. The pressure exerted on the first wooden plank.
- B. The pressure exerted on the second wooden plank.

C. Comparing the pressure on the first wooden plank (area  $0.1 \text{ m}^2$ ) and the second wooden plank (area  $500 \text{ cm}^2$ ) when the same  $100 \text{ N}$  force is applied, on which plank is the pressure higher?

Q9. A group of students is getting ready for school. They notice that some students carry bags with wide straps, while others have bags with thin straps. Some bags feel heavier than others, even if they appear to hold a similar number of books. This leads to a discussion about why some bag straps feel more comfortable on their shoulders than others. (4)

A. When a student carries a school bag on their shoulders, what is the primary type of force exerted by the bag on their shoulders?

B. Why do wide bag straps generally feel more comfortable on the shoulders compared to thin straps, even if the weight of the bag (the force) is the same? Explain

C. If two students carry bags of the same weight, but one bag has a smaller contact area with the student's shoulders (due to thin straps), which student will experience greater pressure on their shoulders? Explain

D. A student's school bag weighs  $10 \text{ N}$ . The bag strap has a contact area of  $0.02 \text{ m}^2$  with the student's shoulder. Calculate the pressure exerted by the bag strap on the student's shoulder.

### Activity

Q10. Visit to a Petrol Pump and CNG Filling Station (5)

**Objective:** To observe types of fuels, filling process, safety rules, and ways to save fuel.

**Instructions:** Visit a petrol pump and a CNG station. Observe and record the following:

### Points to Observe and Record:

A. List the types of fuels available at the petrol pump.

B. Note the types of vehicles using CNG and describe how the filling process is different from petrol/diesel vehicles.

C. Find out why is CNG becoming more popular in cities nowadays?

D. Mention two safety rules that are followed at petrol pumps.

E. Suggest two ways your family can reduce fuel consumption at home or while travelling.



**Subject: Social Science**

No. of questions: 10

M.M. 25

**General Instructions:**

- Ø The work should be done neatly and in a systematic way.
- Ø The given assignments are to be done in the History and Geography notebook.
- Ø Mention the number of worksheets while doing the work.
- Ø Write all the questions along with the answers.

- |   |   |
|---|---|
| Q1. Who was George Everest?   | 1 |
| Q2. Mention two principles of sustainable development.  | 1 |
| Q3. Which period is referred to as the colonial period in India.  | 1 |
| Q4. Mention the role played by the newspapers during British rule.                                      | 2 |
| Q5. Write any two importance of law.  | 2 |
| Q6. Human beings are an important entity. Why?  | 2 |
| Q7. Why do you think the use of resources should be sustainable?  | 2 |
| Q8. Make a G.O. of the different developments that took place in the modern period and explain any two? | 3 |
| Q9. Make a flow chart of the main features of the Indian Constitution.                                  | 3 |
| Q10. How do we classify natural resources on the basis of their stock?                                  | 3 |

**Project based Activity: Civics**

**The Constitution**

5

1. **Create a Scrapbook (handmade):**  
Use a notebook, or chart paper
2. **Sections to Include:**
  - 1. Cover Page:**
    - Title: "My Constitution Scrapbook"
    - Name, Class, Roll Number
    - Creative artwork (draw or paste pictures of the Preamble, Parliament, National symbols, etc.)

**2. Preamble Activity:**

- Write the Preamble in your own handwriting.
- Highlight or decorate the key values (Justice, Liberty, Equality, Fraternity).
- Explain what these values mean to you in simple words.

**3. Fun Facts Corner:**

- List **5 interesting facts** about the Constitution (e.g., longest written constitution, Dr. B.R. Ambedkar as chief architect, etc.).

**4. Role Play Snapshot:**

- Imagine you are a member of the Constituent Assembly.
- Write a short paragraph: *What law or right would you like to suggest and why?*

**5. Art Integration:**

- Draw or paste pictures of key national symbols (Ashoka Chakra, Parliament, National Flag).



**6. Your Own Mini Constitution:**

- Write 5 classroom rules that protect everyone's rights and encourage fairness—just like the real Constitution.

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**Learning Outcomes:**

- Understand the purpose and values of the Indian Constitution.
- Develop creativity, critical thinking, and civic awareness.
- Practice integration of art with social science.

**Subject: Computer Science**

No. of questions: 10

M.M. 25

**Answer the following questions:**

- |   |   |
|---|---|
| 1. How did Barr and Feigenbaum define AI?                                   | 2 |
| 2. Expand the following. a) NLP      b) CV                                  | 2 |
| 3. Give two examples of NLP.  | 2 |
| 4. Write short notes on computer vision.                                    | 2 |
| 5. Mention any two real life examples of data science.                      | 2 |
| 6. Give any three examples of computer vision.                              | 3 |
| 7. What is the role of A.I. Duet application.                               | 3 |
| 8. List any three differences between data science and computer vision.     | 3 |
| 9. How is a voice assistant different from chatbots?                        | 3 |
| 10. What is the significance of deep learning in advancing computer vision? | 3 |

**Activity:**

**Note:** Open the MS-Word file and write down all the practical questions.

Take the snip of the programming workspace and game simulator.

Then paste it under each practical.

Save the file as a pdf and upload under the ASSIGNMENT created in MS-Teams

**Design a block code programming for functions using MakeCode Arcade for the following questions.**

Practical 1: Write a function to add two numbers.

Practical 2: Write a function to calculate the area of triangle. ( $a=0.5*b*h$ )

Practical 3: Write a function to calculate the simple interest. ( $si=(P*R*T)/100$ )

**Subject: Elementary Mathematics**

No. of questions: 10

M.M. 25

Q1 Choose the correct option:

(1×4=4)

(i) Four thousand multiplied by two hundred = -----

- a) 80,000                      b) 8,000                      c) 8,00,000                      d) None

(ii) The remainder in  $367 \div 6 =$  -----

- a) 1                      b) 10                      c) 11                      d) 0

(iii)  $99,999 \times 0 =$  -----

- a) 99,999                      b) 0                      c) 100000                      d) None

(iv) The quotient in  $63 \div 7 =$  -----

- a) 7                      b) 60                      c) 8                      d) 9

Q2 Multiply the following numbers:

(1×3=3)

- I.  $6619 \times 25$   
II.  $20032 \times 16$   
III.  $3058 \times 45$

Q3 Divide the following:

(1×3=3)

- I. 198 by 4  
II. 252 by 8  
III. 858 by 6

Q4 Find the product of 999 and 99.

(2)

Q5 A farmer plants 635 rice plants in one row. How many plants are there in the field if there are 503 rows?

(2)

Q6 144 mangoes are packed in a carton. How many cartons are required to pack 34992 mangoes?

(2)

Q7 Rs. 4386 was given to each of the 807 workers as their wages. How much total money was given to the workers?

(2)

Q8 How many drums of capacity 105 litre can be filled with 35070 litre water?

(2)

Q9 Find the product of  $2891 \times 15 \times 39$ .

(2)

**Activity:**

Q10 Collect contact numbers of your 8 family members and rewrite the numbers in Indian system.

(3)