

St. Mary's School, Dwarka
Holiday Homework
Class IX
Week 1
Worksheet 1

Subject- English

READING

Q1. Read the following passage carefully:

Antarctica has become increasingly accessible in recent years despite all its remoteness. Flights land regularly at the South Pole, bringing crews and construction material here. Dozens of research stations have been set up all around the coastline. The fleet of cruise ships is bringing over twelve thousand people annually. Antarctica is also becoming an increasingly popular venue for sports like skiing, ice hockey, ice skating and other winter sports.

Forty- three nations of the world have jointly signed an agreement which allows Antarctica to be used only for science and tourism. These activities have become so intensive in the recent years that they may soon pose a threat to the environment. It is also feared that these agreements may not withstand pressures to exploit the continent's mineral resources including gold, platinum and oil. Of equal concern is the possibility of shipping accidents due to the influx of ships into the Southern Ocean which could lead to devastating oil spills. With this in mind, the United Kingdom is leading an effort to introduce a new 'Antarctic Code' for shipping.

Even though Antarctica is the world's most remote and desolate continent, entirely covered by a vast sheet of ice and winds raging with unimaginable ferocity, the damaging effects of human activity have reached this distant and pristine place.

Another grave concern is the threat to Antarctica's wildlife comprising of penguins, petrels, seals and albatrosses due to the pollutants in the atmosphere. Air pollution has triggered the appearance of a vast hole in the protective ozone layer. Without this protection, wildlife may be directly exposed to the harmful radiation from the sun. The plankton in the sea, on which many fish depend, may also be killed.

Global warming could have an even more devastating effect. Average temperature in Antarctica has risen to 2.5°C in the last fifty years, and the ice sheet is melting more rapidly than scientists anticipated. Large chunks of ice are now actually breaking off or 'calving' to create icebergs like those in the Arctic disrupting the breeding grounds of penguins in the process. The huge Larsen B Ice Shelf-a two-hundred-metre-thick sheet of floating ice as big as Jamaica, recently broke up, shocking the scientists as they didn't expect it to happen so soon. Scientists fear that if the West Antarctic ice sheet melts, it could raise sea levels by several metres with devastating results.

On the basis of your reading of the above passage, answer the questions that follow: (1/2 x5=2.5)

(a) Why has Antarctica become more accessible in the recent years?

- i. as it is a remote land
- ii. it is famous for ice sports
- iii. has better transportation facility
- iv. people are very curious about it

(b) Which of the two following statements are true considering the kind of threats that Antarctica is facing due to human activities?

1. excessive pressure to exploit the continent's mineral resources including gold, platinum and oil
2. traffic jams and accidents
3. crowds of people flocking to the continent due to sporting activities
4. possibility of shipping accidents which could lead to devastating oil spills

- i. 1&2
- ii. 3&4
- iii. 1&4
- iv. 2&4

(c) Which one of the following statements is NOT true in context of air pollution in Antarctica?

- i. threat to wildlife comprising of penguins, petrels, seals and albatrosses due to the pollutants in the atmosphere
- ii. has led to congestion and breathing difficulties among people
- iii. appearance of a vast hole in the protective ozone layer
- iv. wildlife may be directly exposed to the harmful radiation from the sun

(d) How has the increase in the average temperature affected Antarctica?

- i. plankton in the sea, on which many fish depend, may also be killed
- ii. could lead to shipping accidents
- iii. cause threat to wild life
- iv. could raise sea levels by several metres with devastating results

(e) Average temperature in Antarctica has risen to 2.5°C in the last fifty years, and the ice sheet is melting more rapidly than scientists anticipated.

Which words means the same as 'anticipated' in the above sentence?

- i. unexpected
- ii. expected
- iii. excited
- iv. embarrassed

Q2. You are Rishi Raj, the School Captain of The Doon School, Dehra Dun. Your school is organizing a News- room Competition for Classes VI to XII. The topic for the competition is 'Natural Disasters'. The students interested in participating should contact their house in-charges for auditions. Draft a notice for the same including the necessary details about the event. Put the notice in a box. (2)

Q3. You have noticed many young children working in your neighbourhood as housemaids or in shops. You are concerned about their education, well-being and safety. Write an article for the newspaper about child labour in 150 to 200 words. Also provide a suitable heading to your article. (3)

Q4. You saw a stray dog beaten to death by a group of boys. Their act infuriated you and you condemn them for their cruel act. You decided to raise awareness about the issue through poster- making activity in school. Design a colourful poster along with a slogan for the same. (3)

Q5. Rewrite the sentences by correctly inserting the words given in the brackets to make a meaningful sentence. (1/2x4=2)

(a) Mr. Sharma died of a heart attack as the family was getting ready to go for the wedding. (suddenly)

(b) My grandfather arrived to avoid the traffic rush.
(early)

(c) The children clapped admiringly at the little girl's extraordinary performance. (admiringly)

(d) The police had several photographs of the suspect.
(fortunately)

**Q6. Join the following sentences using 'unless' or 'if...not'.
The sentences may require necessary changes. (1/2x4=2)**

(a) I would never keep a large dog. I have time to exercise it properly.

(b) Sita would have come first in class. She had not fallen ill.

(c) You must not dive. You have been properly trained.

(d) Medical evidence suggest that people would enjoy better health. They did not consume refined sugar.

Q7. Choose the most appropriate word from the options given below and complete the following passage. (1/2x5=2.5)

26th January is a very special day (i) _____ India. It was on this day, India became a Sovereign Democratic Republic (ii) _____ 1950. Dr. Rajendra Prasad became the first President (iii) _____ the Indian Republic. 26th January is celebrated (iv) _____ great enthusiasm and fervour all over the country. First of all, the Prime Minister visits the Amar Jawan Jyoti at India Gate. There he offers floral tributes (v) _____ the martyrs. Then, begins the colourful parade which starts from Vijay Chowk and ends at the Red Fort.

(i) (a) for (b) of (c) by (d) to

(ii) (a) on (b) in (c) for (d) to

(iii) (a) in (b) above (c) of (d) about

(iv) (a) for (b) with (c) in (d) by

(v) (a) to (b) of (c) by (d) over

Q8. Read the following conversation between Tommy and Margie from the lesson ‘The Fun They Had’ and complete the paragraphs given below: - **(1/2x5=2.5)**

Margie: Where did you find the book?

Tommy: I found it in my house up in the attic.

Margie: What is it about?

Tommy: It is about school that existed centuries ago.

Margie: Can I read the book with you after school?

Margie asked Tommy(a)_____. Tommy replied that(b)_____. Margie further asked(c)_____. Tommy explained that(d)_____. Margie asked Tommy(e)_____.

Q9. Read the stanza given below and answers the questions that follow: **(1x3=3)**

Two roads diverged in yellow wood,
And sorry I could not travel both
And be one traveller, long I stood
And looked down once as far as I could
To where it bent in the undergrowth;

- i. At which point in the woods, had the poet reached?
- ii. What does ‘yellow wood’ stand for?
- iii. Find out any one poetic device used in the above stanza and also give an example.

Q10. Solve this interesting puzzle based on poetic devices from the poem ‘The Road Not Taken’.

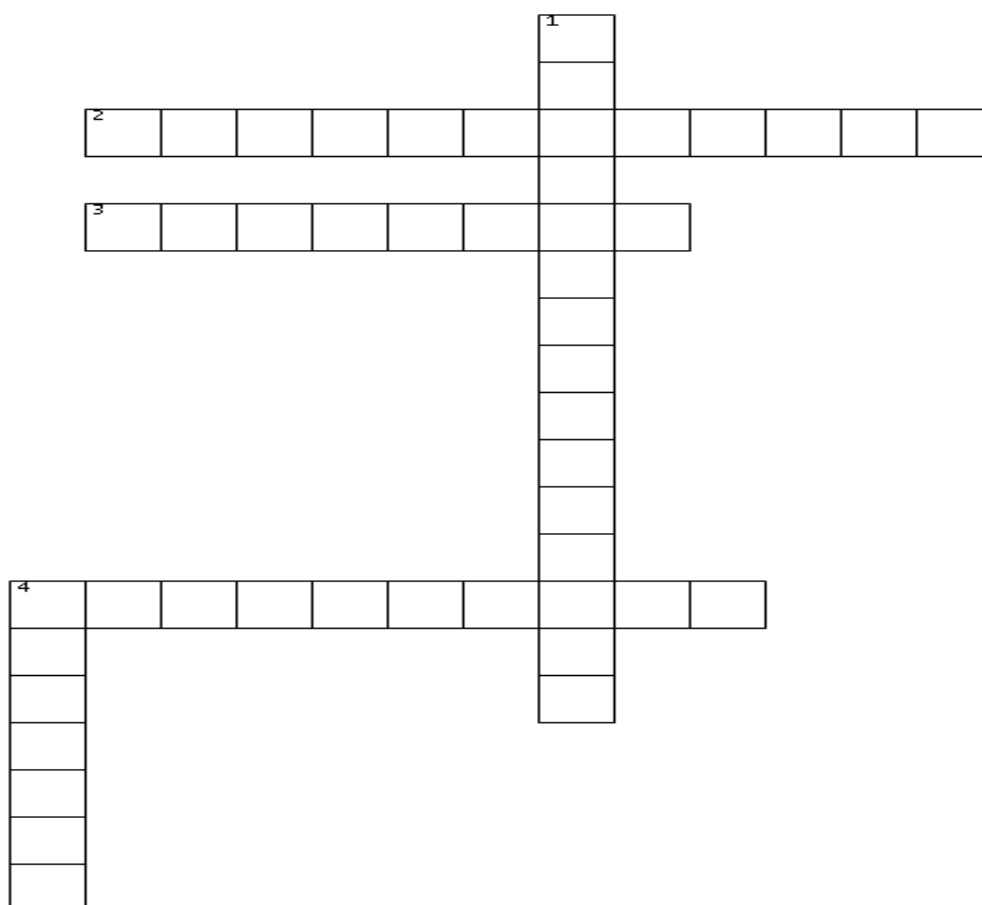
(1/2x5=2.5)

ACROSS

- 2. first for
- 3. roads
- 4. ages and ages

DOWN

- 1. wanted wear
- 4. words-day and way



PROJECT

In the age of online content creation, the dissemination of information is not limited to a few scholars/experts. Students and amateurs can share their opinions with each other on the internet. The space for such active engagement, collaboration and innovation has expanded due to websites. Websites are quick, easy and accessible ways to share your content (which could be in the form of essays, blog posts, art, pictures, videos, etc.) to the world using a simple link. Websites lie at the intersection of discussion and technology, allowing us to bond with different people on the internet over our shared, niche interests. **WordPress is the simplest, most popular way to create your own website or blog. It is free of charge for the basic beginner's versions, easy to understand and allows you to share your work with the world.**

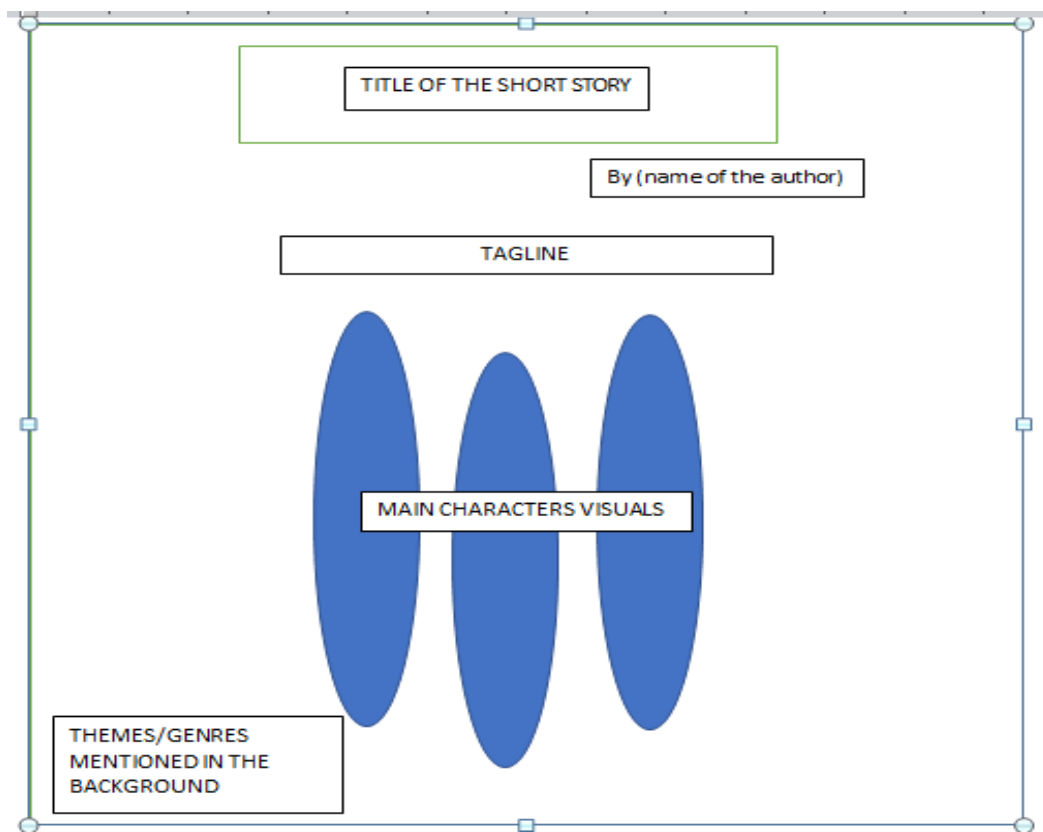
The steps to create a WordPress blog are easy to follow. Open a WordPress account using your Google account. The website will take you through the process, step-by-step. Once the account is created, you will be directed to customize your website according to your style/interests. Once your website is created, you can start uploading your work. After uploading your work to your blog, share the link with your teacher.

Short stories are one of the oldest forms of literature and have existed in the form of legends, mythic tales, folktales, fairy tales, fables and anecdotes in various communities across the world. They have always stood the test of time and have never lost their sheen and relevance in any age. Short stories like Flannery O'Connor's "Good Christian People," Shirley Jackson's "The Lottery," Edgar Allan Poe's "The Fall of the House of Usher," and O. Henry's "The Gift of the Magi" and many others continue to be widely read precisely because of their value as works of art.

You will read several short stories by famous authors like Ruskin Bond, Anton Chekov, Ursula K Le Guin, Rabindranath Tagore, Saki, Ray Bradbury, Neil Gaiman, Ernest Hemingway, Mark Twain, Oscar Wilde, H G Wells, O Henry etc given in your Supplementary Reader 'Moments'.

Read a short story other than the one mentioned in your books by any of the above authors/any author of your choice and present a promotional teaser to encourage others to read the story. **Upload your teaser in the WordPress website created by you. A set of instructions and elements of the teaser are given below to help you.**

1. Creating a Poster: Using Corel Draw/MS Paint/MS Word/ it can also be hand painted, create a theatrical poster/teaser for the short story you read. Make sure that the poster contains all the elements that would encourage more people to read the short story, for example: a catchy tagline, visuals, etc. A blueprint of the poster is given below.



2. Reviews: Reviews are an important part of encouraging people to read stories/books. Collect reviews by people on the internet for the short story you read. Then, upload the reviews on the WordPress blog below the poster. You can also display reviews/ratings by renowned newspapers, websites, etc. such as Times of India, Hindustan Times, Bloomsbury, etc. Examples are given below:-

Anne of Green Gables

Novel by Lucy Maud Montgomery

Book preview
26/114 pages available

[PREVIEW](#)

4.3/5
Goodreads

4/5
Flipkart

Audience rating summary

5

4

3

2

1

4.8

★★★★★

849 ratings

Audience reviews



★★★★★

Anne of Green Gables is a very interesting and fascinating novel and very beautifully described every little detail. If you are meticulous, then you will be able to notice all those little details that are carefully put in each wonderfully-written sentence. This book was ...



★★★★★

A very beautiful novel and very beautifully described every little detail. I'm extremely happy that i read this. A story of a little orphan girl-Anne with an 'e' of course, how a family adopted her, a fully talkative girl, initially so much affected from her past but still never lose hope for ...



★★★★★

This book is one of the most wonderful books I have ever read. This book took me to a place of peace and adventure in a time I needed it most. It is filled with beauty and hope and a perspective which is almost lost in todays society in how you see the world which is so ...

3. Introduction: Write an introduction in 120-150 words to the short story, giving the readers a rough idea about the story but avoid giving away the major plot/climax points. An example given below:-

“This heartwarming story has beckoned generations of readers into the special world of Green Gables, an old-fashioned farm outside a town called Avonlea. Anne Shirley, an eleven-year-old orphan, has arrived in this verdant corner of Prince Edward Island only to discover that the Cuthberts—elderly Matthew and his stern sister, Marilla—want to adopt a boy, not a feisty redheaded girl. But before they can send her back, Anne—who simply must have more scope for her imagination and a real home—wins them over completely. A much-loved classic that explores all the vulnerability, expectations, and dreams of a child growing up, *Anne of Green Gables* is also a wonderful portrait of a time, a place, a family... and, most of all, love.”



Want to Read

Rate this book



Open Preview

more photos (4)

Anne of Green Gables

(Anne of Green Gables #1)

by L.M. Montgomery



4.26



Rating details · 779,087 ratings · 25,345 reviews

This heartwarming story has beckoned generations of readers into the special world of Green Gables, an old-fashioned farm outside a town called Avonlea. Anne Shirley, an eleven-year-old orphan, has arrived in this verdant corner of Prince Edward Island only to discover that the Cuthberts—elderly Matthew and his stern sister, Marilla—want to adopt a boy, not a feisty redheaded girl. But before they can send her back, Anne—who simply must have more scope for her imagination and a real home—wins them over completely. A much-loved classic that explores all the vulnerability, expectations, and dreams of a child growing up, *Anne of Green Gables* is also a wonderful portrait of a time, a place, a family... and, most of all, love.

WITH AN AFTERWORD BY JENNIFER LEE CARELL ([less](#))

Subject : Hindi

निर्देश : 1 दिए गए सभी प्रश्नों के उत्तर हिंदी की उत्तर - पुस्तिका में लिखिए। M.M-25

2 कार्य स्वच्छ, शुद्ध एवं स्पष्ट लेख में कीजिए।

प्रश्न 1 निम्नलिखित अपठित गद्यांश को पढ़कर दिए गए प्रश्नों के उत्तर दीजिए।

(7)

प्रतिभा किसी की मोहताज नहीं होती। इसके आगे सारी समस्याएँ बौनी हैं। लेकिन समस्या एक प्रतिभा को खुद दूसरी प्रतिभा से होती है। बहुमुखी प्रतिभा का होना अपने भीतर एक प्रतिभा के बजाए दूसरी प्रतिभा को खड़ा करना है। इससे हमारा नुकसान होता है। कितना और कैसे ? मन की दुनिया की एक विशेषज्ञ कहती है कि बहुमुखी होना आसान है। एक खास विषय के विशेषज्ञ होने में। बहुमुखी लोग स्पर्धा से घबराते हैं। कई विषयों पर उनकी पकड़ इसलिए होती है कि वे एक में स्पर्धा होने पर दूसरे की ओर भागते हैं। वे आलोचना से भी डरते हैं और अपने काम की प्रशंसा ही प्रशंसा सुनना चाहते हैं। बहुमुखी लोगों में सबसे महान माने जाने वाले माइकल एंजेलो से लेकर अपने यहाँ रवींद्रनाथ टैगोर जैसे कई लोग आते हैं। लेकिन आज ऐसे लोगों की पूछ-परक कम होती है। ऐसे लोग प्रतिभाशाली आज भी माने जाते हैं। लेकिन असफल होने की आशंका उनके लिए अधिक होती है जिनकी पकड़ दो-तीन या इससे ज्यादा क्षेत्रों में हो लेकिन हर क्षेत्र में उनसे ज्यादा उम्मीदवार मौजूद हैं। बहुमुखी प्रतिभा वाले लोगों के भीतर कई कामों को साकार करने की इच्छा बहुत तीव्र होती है। उनकी उत्सुकता उन्हें एक क्षेत्र से दूसरे क्षेत्र में हाथ आजमाने को बाध्य करती है। समस्या तब होती है, जब यह हाथ आजमाना दखल करने जैसा हो जाता है। वे न इधर के रह जाते हैं और न उधर के। प्रबंधन की दुनिया में 'एकै साथ सब सधै, सब साथ सब जाए' का मंत्र ही शुरू से प्रभावी है।

(क) बहुमुखी प्रतिभा किसे कहा जाता है ?

(ख) बहुमुखी प्रतिभा वाले लोग किससे घबराते हैं ?

(ग) ऐसे लोगों के अंदर कैसी इच्छा तीव्र होती है ?

(घ) बहुमुखी प्रतिभा वाले लोगों की उत्सुकता उन्हें क्या करने को बाध्य करती है ?

(ङ) प्रबंधन की दुनिया में कौन - सा मंत्र ही शुरू से प्रभावी है ?

(च) 'प्रतिभा' शब्द का वर्ण-विच्छेद कीजिए।

(छ) 'उत्सुकता' शब्द में से मूल शब्द व प्रत्यय अलग कीजिए।

प्रश्न 2 निम्नलिखित अपठित गद्यांश को पढ़कर दिए गए प्रश्नों के उत्तर दीजिए। (7)

अच्छा नागरिक बनने के लिए भारत के प्राचीन विचारकों ने कुछ नियमों का प्रावधान किया है। इन नियमों में वाणी और व्यवहार की शुद्धि, कर्तव्य और अधिकार का समुचित निर्वाह, शुद्धतम पारस्परिक सद्भाव, सहयोग और सेवा की भावना आदि नियम बहुत महत्त्वपूर्ण माने गए हैं। ये सभी नियम यदि एक व्यक्ति के चारित्रिक गुणों के रूप में भी अनिवार्य माने जाएँ तो उसका अपना जीवन भी सुखी और आनंदमय हो सकता है। इन सभी गुणों का विकास एक बालक में यदि उसकी बाल्यावस्था से ही किया जाए तो वह अपने देश का श्रेष्ठ नागरिक बन सकता है। इन गुणों के कारण वह अपने परिवार, पास-पड़ोस तथा विद्यालय में अपने सहपाठियों एवं अध्यापकों के प्रति यथोचित व्यवहार कर सकेगा। वाणी एवं व्यवहार की मधुरता सभी के लिए सुखदायक होती है। समाज में हार्दिक सद्भाव की वृद्धि करती है किंतु अहंकारहीन व्यक्ति ही स्निग्ध वाणी और शिष्ट व्यवहार का प्रयोग कर सकता है। अहंकारी और दंभी व्यक्ति सदा अशिष्ट वाणी और व्यवहार का अभ्यासी होता है, जिसका परिणाम यह होता है कि ऐसे आदमी के व्यवहार से संसार में शांति और सौहार्द का व्यवहार नहीं बनता और न ही वह व्यक्ति समाज में आदरणीय स्थान प्राप्त कर पाता है। अहंकारी व्यक्ति कभी भी प्रेम और सफलता की ऊँचाइयों को पाने में सफल नहीं होता। अतः जीवन के विभिन्न क्षेत्रों में सफलता प्राप्त करने हेतु व्यक्ति को अहंकारशून्य होना परमावश्यक है। एक अच्छा नागरिक भावी भारत की धरोहर है और इस धरोहर का रख-रखाव और देखभाल करना हमारा कर्तव्य है।

- (क) समाज एवं राष्ट्र के हित के लिए कैसे गुणों की अपेक्षा की जाती है ?
- (ख) किस प्रकार के गुणों से युक्त व्यक्ति श्रेष्ठ नागरिक बन सकेगा ?
- (ग) वाणी और व्यवहार की मधुरता सबके लिए सुखदायक क्यों मानी गई है ?
- (घ) अहंकारी और दंभी व्यक्ति को किन-किन दुष्परिणामों का सामना करना पड़ता है ?
- (ङ) 'क्षेत्र' शब्द का वर्ण - विच्छेद कीजिए।
- (च) 'अपेक्षा' शब्द का विलोम शब्द लिखिए।
- (छ) 'अभ्यासी' शब्द में से मूल शब्द व प्रत्यय अलग कीजिए।

प्रश्न 3 निम्नलिखित काव्यांश को पढ़कर दिए गए प्रश्नों के उत्तर दीजिए।

(6)

अब कैसे छूटै राम नाम रट लागी।

प्रभु जी, तुम चंदन हम पानी, जाकी अंग अंग बास समानी

प्रभु जी, तुम घन बन हम मोरा, जैसे चितवत चंद चकोरा

प्रभु जी, तुम दीपक हम बाती, जाकी जोति बरै दिन राति।

प्रभु जी, तुम मोती हम धागा, जैसे सोनहि मिलत सुहागा।

प्रभु जी, तुम स्वामी हम दासा, ऐसी भक्ति करै रैदासा।

- (क) उपर्युक्त पंक्तियों के कवि व कविता का नाम लिखिए।
- (ख) कवि ने प्रभुजी को कैसा दीपक कहा है
- (ग) कवि ने चंदन की क्या विशेषता बताई है
- (घ) सोने और सुहागे के संबंध जानकारी एकत्रित करके लिखिए।
- (ङ) 'चंद' शब्द के कोई तीन पर्यायवाची शब्द लिखिए।
- (ड़) 'घन बन' शब्द का अर्थ लिखिए।

प्रश्न 4 निम्नलिखित गद्यांश को पढ़कर दिए गए प्रश्नों के उत्तर दीजिए। (5)

मनुष्यों की पोशाकें उन्हें विभिन्न श्रेणियों में बाँट देती है। प्रायः पोशाक ही समाज में मनुष्य का अधिकार और उसका दर्जा निश्चित करती है। वह हमारे लिए अनेक बंद दरवाजे खोल देती है परंतु कभी ऐसी भी परिस्थिति आ जाती है कि हम ज़रा नीचे झुककर समाज की निचली श्रेणियों की अनुभूति को समझना चाहते हैं। उस समय यह पोशाक ही बंधन और अड़चन बन जाती है। जैसे वायु की लहरों कटी हुई पतंग को सहसा भूमि पर नहीं गिर जाने देती उसी तरह खास परिस्थितियों में हमारी पोशाक हमें झुक सकने से रोके रहती है।

- (क) उपर्युक्त पंक्तियों के पाठ व लेखक का नाम लिखिए।
- (ख) पोशाक समाज में क्या निश्चित करती है ?
- (ग) पोशाकें मनुष्य को किन - किन श्रेणियों में बाँट देती है ?
- (घ) पोशाक कब बंधन और अड़चन बन जाती है ?
- (ङ) लेखक किस उदाहरण के माध्यम से मनुष्य की स्थिति का वर्णन करना चाहता है ?

Subject: Mathematics

- Q1. Find five rational numbers between $\frac{3}{5}$ and $\frac{4}{5}$. (2)
- Q2. Locate $\sqrt{3}$ on the number line. (2)
- Q3. Show that $0.33\dots$ can be expressed in the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$. (2)
- Q4. Express $0.437437\dots$ in the form $\frac{m}{n}$. (2)
- Q5. Represent 4.862 on number line (2)
- Q6 Find the decimal expansion of $\sqrt{2}$ up to six decimal places. (2)
- Q7 Find five rational numbers between 1 and 2. (2)
- Q8 Define Rational number. (2)
- Q9 Express $0.5999\dots$ in the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$. (2)
- Q10. Prove that the sum of a rational number and an irrational number is an irrational number. (3)
- Q11. Find three irrational number between 3 and 4. (3)
- Q12 Express $32.12353535\dots$ in the form $\frac{p}{q}$. (3)
- Q13 Simplify a) $^3\sqrt{2} \times ^3\sqrt{32}$ b) $^3\sqrt{18} \times ^3\sqrt{3}$ (3)
- Q14. Which is greater $^3\sqrt{15}$ or $^4\sqrt{20}$? (3)
- Q15. Find \sqrt{x} on number line, where x is any positive real number (3)
- Q16 Find the decimal expansions of $\frac{10}{3}$, $\frac{7}{8}$ and $\frac{1}{7}$. (3)
- Q17 Find three different irrational numbers between the rational numbers $\frac{5}{7}$ and $\frac{9}{11}$. (3)
- Q18. Add $2\sqrt{2} + 5\sqrt{3}$ and $\sqrt{2} - 3\sqrt{3}$. (3)

CASE STUDY

Leela went to a small garment store with her son. She wanted to buy an outfit for him. In the garment store, she found two types of shirts: Formal and Denim. There were 3 choices for formals and 4 choices for denims. There were two types of pants: Jeans and Formal, with 2 choices for each of them.

Question 19 If any shirt can be worn with any pair of pants, the number of ways Leela can select an outfit for her son are

- a) 20
- b) 24

c) 26

d) 28

Question 20) Leela decides to select either a formal shirt with a pair of formal pants (not with jeans) or a denim shirt with a pair of jeans (not with formal pants). The total number of ways she can select the outfit now are :

a) 12

b) 14

c) 16

d) 20

Subject: Science

Objective:

- Ø Revision of concepts
- Ø Application of the concepts to real life situations.
- Ø Skills to carry out research work and develop scientific aptitude

Instructions:

*Neatly write all the answers in your science notebook.

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

*Assignment 'Summer Holiday Homework' will be created on TEAMS. Pdf of handwritten work should be uploaded on it.

Research Project

“One general law, leading to the advancement of all organic beings, namely, multiply, vary, let the strongest live and the weakest die.” - Charles Darwin, On The Origin of Species. Prepare a report on the following:

1. Pandemics in the last century. Organize the information collected under the following sub headings-
 - i) Pathogens responsible
 - ii) Modes of transmission
 - iii) Curative measures
 - iv) Preventive measures
2. Ultrasounds are high frequency waves extensively used for medical purposes to detect the damage in the body during pandemics. Some of the medical tests are:
 - a) Echocardiography
 - b) Sonogram
 - c) LUS (Lung ultrasound)

Collect and organize the information under the following sub headings-

S.No.	Name of the medical test	Basic principle involved	Range of frequency used	Corresponding range of wavelength

3.CBC (Complete blood count) test is performed to determine the extent of infection in human body. Blood is a type of mixtures in which microscopically dispersed insoluble particles of one substance are suspended in

another substance also known as colloids. Collect information on 'Colloids' and prepare a report under the given sub- headings-

- Definition and properties
- Types (in tabular form)
- Examples in daily life
- Separation techniques

Worksheet 1- PHYSICS

Q1. What type of wave is represented by: (2)

(a) density-distance graph?

(b) displacement-distance graph?

Q2. Give reason: To hear the sound of an approaching train even when the train is not visible, it is convenient to put our ear to the track. (2)

Q3. If the velocity of sound in air is 480 m/s, calculate: (2)

- a. Wavelength when frequency is 120Hz
- b. Frequency when wavelength is 0.24m

Q4. A tuning fork having frequency 312Hz emits a wave which has a wavelength of 1.10m. Calculate the speed of sound? (2)

Q5. Audible frequency range of a human ear is 20 hertz to 20000hertz. Express it in terms of time period? (2)

Q6. Name the sound of the following frequencies: (2)

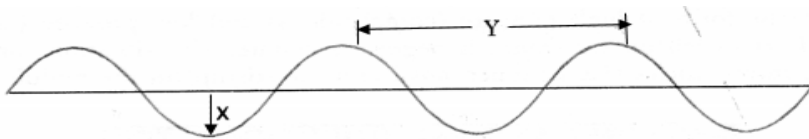
- a) 5Hz b) 50Hz c) 50000Hz d) 50kHz

Q7. A sound wave has frequency 2kHz and wavelength 40cm. How long will it take to travel 1.6 km. (2)

Q8. A sound wave travelling in a medium is represented as shown in figure, (3)

a) Which letter represents the amplitude of the sound wave?

b) Which letter represents the wavelength of the wave?



c) What is the frequency of the source of sound if the vibrating source of sound makes 360 oscillations in 2 minutes?

Q9. Represent graphically by two separate diagrams in each case: (3)

(i) Two sound waves having the same amplitude but different frequencies.

(ii) Two sound waves having the same frequency but different amplitudes.

(iii) Two sound waves having different amplitudes and also different wavelengths.

Q10. (a) Define the terms 'frequency', 'wavelength' and 'velocity' of a sound wave. What is the relation between them?

(b) A body vibrating with a time-period of $1 / 256$ s produces a sound wave which travels in air with a velocity of 350 m/s. Calculate the wavelength. (5)

Worksheet 1- CHEMISTRY

1. Define the term 'matter'. (1)

2. To which physical state of matter do the following statements apply? (1)

(i) Incompressible, no fixed shape (ii) Compressible, no definite volume

3. Why solids cannot be compressed like gases? (1)

4. Give the important properties on the basis of which the three states of matter can be distinguished. (2)

5. What happens when an inflated air balloon is pricked with a pin? Name the property of the gaseous state exhibited by this observation. (2)

6. Write a suitable term for each of the following descriptions- (3)

i. A fragrance of incense stick spreads in the entire space enclosed.

ii. A gas in a larger cylinder can be transferred into a smaller cylinder.

iii. Liquids and gases can spread to larger distances.

7. Give reasons for the following observations- (3)

i. A liquid has a fixed volume but not a fixed shape.

ii. Solids have definite shape and is rigid.

iii. The level of water does not change when some salt or sugar is dissolved in it.

8. What are characteristics of particles of matter (any four)? (4)

9. When a crystal of potassium permanganate is placed in a beaker containing water, its purple colour spreads throughout the water. What do you conclude from this observation about the nature of potassium permanganate and water? (4)

10. Substance 'A' has high compressibility and can be easily liquefied. It can take up the shape of any container. Predict the nature of the substance. Enlist four properties of this state of matter. (4)

Worksheet 1- BIOLOGY

1. Define the term plasmolysis. (1)
2. What is nucleoid? Where is it found? (2)
3. What would happen if there were no cell wall in a plant cell? (2)
4. Explain the role of the nucleus in a cell. (2)
5. What will happen if some unripe mangoes are put in a vessel having concentrated salt solution? (2)
6. 'Every multicellular organism has arisen from a single cell'. Justify the statement. (2)
7. Differentiate between osmosis and diffusion. (3)
8. How does a living cell perform the basic functions? (3)
9. Differentiate between hypotonic, isotonic and hypertonic solutions. (3)
10. What is endocytosis? Why is endocytosis found only in animal cells? Illustrate with the help of a suitable example. (5)

Subject: Social Science

Worksheet 1- Political Science

- Q1. Write two features of democracy. 1
- Q2. Mention any two dirty tricks used by PRI to win elections. 1
- Q3. How many members are elected to the National People's Congress from all over China? 1
- Q4. Which political party always won elections in Mexico until 2000? 1
- Q5. How can we say that people did not have any choice in democratic Mexico? 1
- Q6. Besides Syria, to which country can you relate this picture with and why? 1



- Q7. To what extent elections held in China are free and fair? Explain. 3
- Q8. What does referendum mean? Who all did not accept the referendum of Pervez Musharraf? 3
- Q9. How is the right to vote granted in a democracy? Give any two instances where the right to vote is denied. 3
- Q10. "Although having a democratic system, Pakistan was not practising democracy". Elucidate. 5

Worksheet 1-History

- Q1. What do you understand by the Third Estate? 1
- Q2. Which theory was proposed by Montesquieu? 1
- Q3. On what principle was voting conducted in the Estates General? 1
- Q4. Who were denied entry to the assembly of the Estates General, called by Louis XVI on 5 May, 1789? 1
- Q5. Why were images and symbols used in the eighteenth-century France? 1
- Q6. Look at the cartoon below carefully and tell what you understand by this in the context of French society. 1



- | | |
|--|---|
| Q7. What do you know about the abolition of slavery in France? | 3 |
| Q8. Write a brief note on any revolution revolt or rebel you studied in your previous classes. | 3 |
| Q9. Write some of the main features of the French Constitution of 1791. | 3 |
| Q10. What was subsistence crisis? Mention two factors responsible for this crisis? | 5 |

Worksheet 1- Economics

- | | |
|--|---|
| Q1. What is the aim of production? | 1 |
| Q2. Who is literate? | 1 |
| Q3. Define infant Mortality rate? | 1 |
| Q4. What is Human Capital? | 1 |
| Q5. What are the major determinants of earnings? | 1 |
| Q6. Why the house hold work is not recognised in the National Income? | 1 |
| Q7. Describe the infrastructure development of village Palampur. | 3 |
| Q8. How did the Green Revolution affect the cost of cultivation? | 3 |
| Q9. Analyse the importance of health in human capital formation. | 3 |
| Q10. What is unemployment? Explain the types of unemployment found in India. | 5 |

Worksheet 1- Geography

- | | |
|--|---|
| Q1. What is the longitudinal and latitudinal extension of India? | 1 |
| Q2. Which hills are called the “Easternmost hills”? | 1 |
| Q3. What are Barchans? | 1 |
| Q4. Which is the largest inhabited riverine island in the world? | 1 |
| Q5. Which states of India share boundary with Bangladesh? | 1 |
| Q6. Name the Indian state which has the longest coastline. | 1 |
| Q7. What is meant by the Indian Standard Time? What is its importance? | 3 |
| Q8. “India has a long coastline which is advantageous”. Explain. | 3 |
| Q9. Why is the northern plains densely populated? State three reasons. | 3 |
| Q10. What is the significance of Himalayas? Share your views. | 5 |

1. ACTIVITY

REPORT: 'Elections in Bengal 2021'.

[Hints: Constituencies, political parties, election symbols, election campaign, role of Election Commission, Results of the election]

2. PROJECT

Topic of the project – Earthquakes in India: Preparedness and Management

PROJECT- "Nature is unpredictable and nothing in the world can withstand it's fury. Natural disaster come without warning." Prepare a power point presentation or a report on the recent earthquake that hit India and compare with past earthquakes that has hit the India.

Guidelines for submitting the project

1. The total length of the project report should be 10-15 pages/slides
2. Use simple slide design
3. Use lot of visuals
4. Keep things simple and to the point
5. Include maps, pictures and graphs.
6. Follow the sequence
 - a. Introduction
 - b. Define disaster
 - c. Causes and effects of Earthquake
 - d. Types of Earthquake
 - e. Extent of damage
 - f. Recent Earthquakes in India
 - g. Preparedness to tackle the situation
 - h. Organization working for this disaster
 - i. Do's and don'ts
 - j. Problems in disaster preparedness and management
 - k. Suggestions
 - l. Sources of information
 - m. Presenters name, class and section

Subject: Information Technology

Chapter -Digital Documentation

1. The Libre Office Writer application opens a new document with the temporary name.....
a) Documents b) Book c) Untitled1 d) Book1 1
2. A document created in Writer is saved with an extension
a) .odt b). ott c).dbm d) .ods 1
3. The combination of keys moves the cursor to the beginning of the document.
a) Home b) Page Up c) End d) ctrl+Home 1
4. The vertical blinking line on the document window is called a
a) Cursor b) Pointer c) Line d) Break Line 1
5. Which of the following is not the component of the Libre Office Suite?
a) Writer b) Impress c) Base d) Internet Explorer 1
6. What is a thesaurus? How can we find the synonym of the word in a document? 1+1=2
7. Define alignment. Name and explain the different categories of text alignment. 1+2=3
8. Write the shortcut key to open the Find and Replace dialog box. Explain the following terms 1+2=3
of the Find and Replace dialog box. a) Find All b) Replace c) Match Case
9. What is a table? Explain the use of table in a document by giving any two examples. 1+1+2=4
Differentiate between merging a cell and splitting a cell.

10. PRACTICAL WORK:

Perform the following practical on OpenOffice Writer and mention the steps with screenshots in a MS- Word document.

5

1) Objective: Editing and formatting the document as directed in the callouts

a)

Bold, Comic Sans MS, Center Aligned, Font Size - 26

GENERATIONS OF COMPUTER

Left Aligned, Font Size-22, dark Orange 4

Generation means remarkable change or improvement in the product.

There are five different types on generation.

Right Aligned , Font Size-22, Dark Orange 4

Right Aligned, Font Size-22, Font Color – Dark Red

Line Spacing – 1.15 Apply bulleted list on the text

- ❖ 1st Generation
- ❖ 2nd Generation
- ❖ 3rd Generation
- ❖ 4th Generation
- ❖ 5th Generation

The 1st generation computers used vacuum tubes.

The 2nd generation computers used transistors.

The 3rd generation computers used integrated circuits.

Justify Alignment , Font Size-22,

Font Color – Dark Blue 1, Line Spacing - 2

Center Aligned , Font Size-22,

Font Color – Dark Teal 3, Line Spacing – 1.5

The 4th generation computers used microprocessor.

The 5th generation computers used large scale integrated circuits.

b) Apply superscript and subscript to display the formula. Also apply the highlighter mentioned on the specific formula within the brackets. Also apply numbered list on the formulas written below.

- I. **CH₃OH** (Dark Purple 4, Change Font Color to White)
- II. **C₃H₇COOH** (Light Magenta 1, Font Color to White)
- III. **P.E=1/2 mv²** (Light Lime 2)
- IV. **G=(m₁*m₂)/r²** (Indigo, Change Font Color to White)

c) Apply the border to this document. Go to Format Menu.....choose Paragraph(Line Arrangement - choose set all four borders)...Line Style...Line width(0.75)