GURUKUL INTERNATIONAL SCHOOL, Haldwani HOME WORK FOR SUMMER BREAK (2025-26)

Class- X

ENGLISH

1 Speaking

Prepare a video of 2 mins on digital security and awareness under given points.

i) What is cyber bullying ?

ii) Why do people become victims?

- iii) Threats from cyber bullying.
- iv) Measures to protect oneself

*Key focus on articulation, intonation, coherence of thoughts and body language

2 Case Study

"The old man was thin and gaunt with deep wrinkles in the back of his neck. He went out fishing alone in a skiff and brought back a great catch. Though he was tired and worn out, he was filled with a sense of accomplishment and pride".

Answer the given questions.

- i) What is the relationship of age with expertise ?
- ii) Why was the old man filled with a sense of accomplishment and pride ?
- iii) Find three more idioms for 'a great catch'.
- iv) Find words which means opposite to thin and gaunt.
- v) Find the meaning of 'skiff'
- vi) Join the sentences using words given in the bracket.
 - a) He woke up late.He managed to reach school in time. (though)
 - b) It was raining heavily outside. Events went ahead as planned. (In spite of)

3 Writing

Write a persuasive debate in favour or against the given topic in 250 words. "Is it possible to achieve sustainable development without compromising nature"?

4 **A World Without Gravity:**

Imagine a world where gravity does not exist.

* How do people live and interact ?

* What challenges or opportunities arise for people in such a world ? Illustrate.

5 Reading

Read the following books and write their highlights in 100 words each.

- i) The Diary of Anne Frank
- ii) The Room on the Roof
- 6 Design a colourful poster for a rally to encourage cleanliness and hygiene amongst people about their surroundings and community.

Write strong slogans and draw colourful pictures to spread awareness.

7 AIL (To be done in Scrap file)

Read the lesson, "Glimpses of India' from First Flight book and prepare a project on Goa, Assam and Coorg under given headings.

- * Geographical location on map
- * Vegetation and climate
- * What are they famous for ?
- * Culture and historical details
- * Paste or draw pictures related to the topics

Listen to the following famous speech and write it in a foolscap paper neatly.

I Have a Dream by Martin Luther King Jr.

Note: All the work except AIL is to be done in a project file systematically.

MATHEMATICS

1 Case study

8

A book store shopkeeper gives books on rent for reading. He has variety of books in his store related to fiction, stories and quizzes, etc. He takes a fixed charge for the first two days and an additional charge for subsequent days. Amruta paid Rs.25 for a book and kept for 6 days; while Radhika paid rs.18 for keeping the book for 4 days.

- a) Represent the situation of amount paid by radhika algebraically.
- b) Represent the situation of amount paid by Amruta algebraically.
- c) What are the fixed charges for a book?
- d) What are the additional charges for each subsequent day for a book ?
- e) What is the total amount paid by both, if both of them have kept the book for 5 more days ?

Activity METHOD OF CONSTRUCTION

Take a pair of linear equations in two variables of the form $a_1x + b_1y + c_1 = 0$ (1) $a_2x + b_2y + c_2 = 0,(2)$

- where a_1 , b_1 , a_2 , b_2 , c_1 and c_2 are all real numbers; a_1 , b_1 , a_2 and b_2 are not simultaneously zero.
- ii) Take three different pair of equations of only one solution, no solution and infinite solution.
- iii) Take a cardboard of a convenient size and paste graph papers on it. Draw two perpendicular lines X'OX and YOY' on the graph paper. Plot the graph of three equations (pairs of equations) which you have taken in point 2.
- 3 The value of λ for which $x^2+4x+\lambda$ is a perfect square, is
 - a) 16 b) 9 c) 1 d) 4
- 4 The sum of numerator and denominator of a fraction is 12. If the denominator is increased by 3, the fraction becomes 1/2. Then the fraction is
 a) 4/7 b) 5/7 c) 6/7 d) 8/7
- a) 4/7 b) 5/7 c) 6/7 d) 5 n^2 -1 is divisible by 8 if n is
- a) An integer b) A natural number c) An odd integer d) An even integer 6 Check whether 12^n can end with the digit 0 for any natural number n.
- 7 Find a quadratic polynomial whose zeroes are $\frac{5+\sqrt{2}}{5-\sqrt{2}}, \frac{5-\sqrt{2}}{5+\sqrt{2}}$

8 Real world based question

A train covered a certain distance at a uniform speed. If the train would have been 10 km/h faster, it would have taken 2 hours less than the schedule time and if the train were slower by 10 km/h it would have taken 3 hours more than the scheduled time. Find distance covered by the train.

- 9 Assertion (A): The polynomial $p(x) = x^3 + x$ has one real zero.
- **Reason (R):** A polynomial of nth degree has at most n zeroes.
- 10 Assertion (A): A two digit number, where tens digit is greater then ones digit is obtained by either multiplying sum of the digits by 8 and adding 1 or by multiplying the difference of digits by 13 and adding 2. The number is 41.
 - **Reason (R):** The linear equations used are 7x.

SCIENCE

2

1 Assertion – Reason Type Questions.

- a) Assertion (A): Burning of natural gas is an endothermic process.
 - **Reason(R):** Methane gas combines with oxygen to produce carbon dioxide and water.
- b) Assertion (A): In electrolysis of water the volume of hydrogen is twice the volume of oxygen formed. Hydrogen and oxygen are in ratio of 1:2.
- 2 A compound 'A' is used in the manufacture of cement .When dissolve in water, it evolves a large amount of heat and forms compound 'B'.
 - i) Identify A and B.
 - ii) Write chemical equations for the reaction of A with water.
 - iii) List two type of reactions in which this reactions may be classified.

3 Name the type of mirror used in following

- a) Headlight of car b) Rear view mirror of vehicle c) Solar Furnace
- 4 One half of convex lens is covered with a black paper. Will this lens produce a complete image of the object? Verify your answer experimentally. Explain your observation.
- 5 A pencil dipped in water in a glass tumbler appear to bend at the interface of air and water .Will the pencil appear to be bend to the same extend, if instead of water we used liquid like kerosene or turpentine etc. Support your answer with reason.
- 6 Create a colorful scrapbook on any one of the famous Scientist (e.g. Gregormandel, Charles Darwin, Schliden, Schwann, Louis Pasteur) and include
 - a) Early life and education
 - b) Major discoveries
 - c) Photos/ drawings
 - d) Inspirations Quotes (if any)
- 7 "Imagine you are a piece of food, like a sandwich. Describe your journey through the human digestive system from the moment you enter the mouth, until the waste is eliminated from the body. Highlight the major organs involved and explain what happens to you in each part.

SOCIAL SCIENCE

1 Write some useful information about industries.

Type of industry	Raw material	Production	Employment
Textile industry			
Iron and steel industry			
Sugar industry			

2 Make a project about 4 pages on wildlife conservation coverering following aspects

- i) Habitat lose
- ii) Human wildlife conflicts
- iii) Poaching and wildlife trade
- iv) Community based conservation
- v) Protected areas
- 3 **Define the following terms**

4

5

8

a) Barter system b) Dominion status c) Smelting d) Partisanship

Draw the image of Bharat Mata by using appropriate colours under following information

- i) Name the artist who drawn the image.
- ii) When was it drawn ?
- iii) What is the significance of the image ?



On the basis of above pie chart find out:

- i) What are the two major sources of formal and Informal sector credit in India?
- ii) Why should the credit activities of the informal sector be discouraged ?
- iii) Why is the formal sector credit mostly not available in rural areas ?

Assertion (A): Caste system can lead to social exclusion and inequality

- **Reason (R):** Caste system often assign occupation and social status based on birth.
- a) Both A and R true, and R is the correct explanation of A.
- b) Both A and R true, and R is not the correct explanation of A.
- c) A is true R is false
- d) R is true A is false
- 6 Assertion (A): The Rowlatt Act sparked widespread protest in India.
 - **Reason** (**R**): The Act allowed British authorities to arrest and individuals without a trial for two years.
 - a) Both A and R true, and R is the correct explanation of A.
 - b) Both A and R true, and R is not the correct explanation of A.
 - c) A is true R is false
 - d) R is true A is false

7 Case based question.

Case : Service Sector Growth

India's service sector has experienced rapid growth in recent years, driven by the IT and ITES industries. This growth has created new job opportunities and contributed significantly to the country's GDP. However, it has also raised concerns about the sector's sustainability and the need for skilled workforce.

- a) What are the primary drivers of growth in India's service sector ?
- b) How has the growth of the service sector impacted the Indian economy ?
- c) What are some potential challenges facing the service sector in India ?
- Differential between- i) coming together Federation and holding together federation

formal and Informal sources of credit

9 Prepare a chart onprocess of converting Iron ore to steel on following process

- i) Mining and extraction
- ii) Blast furnace
- iii) Steel production
- iv) Casting and shaping

10 Investigate water Resources if your region and find out.

ii)

- i) What are the primary source of water in your region ?
- ii) How is water used in your region?
- iii) What measures can be taken to conserve and managing water resources sustainably ?

11 Explain the term disaster management.

- i) Make a disaster preparedness plan for your family and community.
- ii) Identify potential hazards and risks.
- iii) Display emergency contact information and communication plans.

HINDI

गद्यांश के आधार पर प्रश्नों के उत्तर दीजिए।

पर्यावरण संरक्षण हमारे लिए एक महत्वपूर्ण मुद्दा है हमें अपने पर्यावरण जल संचयन, ऊर्जा संचयन और प्रदूषण को कम करने का प्रयास करते रहना चाहिए। हमें अपने दैनिक जीवन में भी पर्यावरण के अनुकुल आदतें अपनानी चाहिए। जैसे प्लास्टिक का उपयोग कम करना और ऊर्जा की बचत करना, पानी की बचत आदि। हर व्यक्ति को इसके लिए प्रयास करना चाहिए तभी हमारी धरती व पर्यावरण सुरक्षित रहेगा।

- क) पर्यावरण संरक्षण क्यों आवश्यक है ?
- ख) पर्यावरण संरक्षण के लिए हम क्या कर सकते हैं ?
- ग) पर्यावरण प्रदूषण के क्या नुकसान हैं ?
- घ) स्वच्छता का क्या महत्व है ?

2 निम्नलिखित मुहावरों के अर्थ लिखकर वाक्य में प्रयोग कीजिए।

आसमान सिर पर उठाना, आवाज उठाना, दबे पाँव आना, गुदड़ी का लाल होना, दाँतों पसीना आना, घड़ों पानी पड़ना

- 3 पदबंध को उदाहरण सहित परिभाषित कीजिए।
- 4 रचना के आधार पर वाक्य के कितने भेद होते हैं प्रत्येक भेद के दो—दो उदाहरण दीजिए।
- 5 'राष्ट्रीय एकता' हमारे देश के लिए बहुत महत्वपूर्ण है हमें विभिन्न धर्मो व संस्कृतियों का सम्मान करना चाहिए। इस विषय को आधार बनाकर अपने विचारों को व्यक्त कीजिए।
- 6 अपने मित्र या परिवार के किसी सदस्य को ई—मेल लिखकर अपनी छुट्टियों के अनुभव साझा कीजिए।
- 7 'डिजिटल भारत के महत्व' और इसके द्वारा हम अपने देश को कैसे आगे बढ़ा सकते हैं। इस विषय पर चित्रों को संग्रहित करके पोस्टर बनाइए।

INFORMATION TECHNOLOGY

1 Case-Based Questions

You are part of a group project in school. One team member is not completing tasks on time, affecting the whole project.

- a) How would you address this issue using effective communication ?
- b) What communication barriers might arise, and how can you overcome them?
- You are preparing for a school event. You must coordinate with students, teachers, and sponsors.
 - a) What type of communication (verbal/non-verbal/written) will you use for each group and why ?
 - b) List two essential soft skills needed in this situation.

3 Critical Thinking Questions

- a) How can active listening improve your relationships in both academic and personal life ?
- b) Why is non-verbal communication sometimes more powerful than words?
- c) What could be the consequences of poor written communication in a professional email?

4 **Practical Questions**

2

- a) Open Open Office Writer and write a formal letter to your school principal requesting permission for an IT exhibition. Use: (write steps and draw a final output on A4)
 - Bold for headings
 - Bullet points for key highlights
 - Footer with your name and class
 - Use style option and insert image .
- b) Create a two-page document on "The Importance of Cyber Hygiene" using the following:
 - (Write steps and draw a final output on A4)
 - Page numbers
 - Header with topic name
 - Justified text alignment

5 Case-Based Question

- Your school has assigned you to design a newsletter using Open Office Writer.
- a) What features of OpenOffice Writer will you use to make the newsletter attractive and well-organized ?
- b) How will you ensure that the content is both informative and visually appealing ?

6 Critical Thinking Question

- a) Why is it important to format a document professionally ?
- b) How can poor formatting affect the readability of a document?