STEPHENS

INTERNATIONAL PUBLIC SCHOOL



Holidays' Homework Session – 2022-23 Class: 9th

Subject : English

<u> Task – 1</u>

You visited the World Book Fair organized by National Book Trust at Dogra Hall Museum, Udhampur. Describe the fair in about 100 words.



<u> Task – 2</u>

Read the Chapter, 'A Truly Beautiful Mind' answer the following questions

1. In what ways was Albert Einstein was an unusual child. How? He was different from others in many ways. Do you think that those who think differently succeed in their life like Einstein? Comment.

2. What was Einstein's contribution to the knowledge of science? Which values in his character made him a 'global citizen'?

<u> Task – 3</u>

Complete the following story. It has to be a scary story that terrifies people. Give a suitable title to your story.

I stopped my scooter in front of an old and dilapidated building. A skinny old man with drooping shoulders came towards me. "Don't go in, Sir", he whispered. "It is dangerous..."

<u>Task – 4</u>

(A) Complete the passage with appropriate modals.

I hope you understand fully well how you (a) keep your body healthy. It is not through good diet alone. Even the best of diet (b) not give you good health. A good diet (c) be accompanied by good exercise. Exercise (d), consist of a walk, jogging or skipping. Don't worry, exercise (e) not be taken for hours. You (f) spare a few minutes in the evenings and mornings to undergo the necessary quota of exercise.

B) Fill in the blanks in the following paragraph with the most appropriate form of verbs given in the brackets.

Once there was king. He **(a)** (know) for his benevolence. Every day he **(b)** (feed) the hungry and **(c)** (cloth) the poor before he **(d)** (take) his food. He **(e)** (do) so far many years.

<u> Task – 5</u>

Read the E-Book Around the World in 80 Days and prepare a summary of the same.



- आप इस ग्रीष्मावकाश में जहाँ भी घूमने जाएँ वहाँ का यात्रा वृतांत चित्र सहित लिखें।
 पक्षियों के लिए उचित स्थान पर दाना–पानी रखें। बचे हए नारियल के खोलों या अन्य सामान से उनके लिए घोंसलों का निर्माण करके पेडों पर लगाएँ। इन सभी की फोटो खींचे और प्रोजेक्ट फाइल में लगाएँ।
- साक्षरता अभियान के अंतर्गत अपने घर या पड़ोस में काम करने वाले हमारे सहायक (हेल्पर्स) का साक्षात्कार करें और (A – 4 शीट पर) पर संवाद के रूप में लिखें।
- भारत की कोई पाँच प्रमुख महिला पर्वतारोहियों के बारे में चित्रों सहित जानकारी एकत्रित करें।

(**A – 4** शीट पर)

आपको भेजे गए सभी पाठ्यक्रमों की उत्तर कुंजी को अपनी कार्य–पुस्तिका पर करें।
 कार्य–पुस्तिका पर करने के पश्चात याद भी करें।



Subject : Mathematics

<u>SECTION – A</u>

- This assignment to be written on assignment sheet.
- Make cover page for your file with your name, roll no., class and section.

Q1. Prove that
$$9^{3/2} - 3 \times 5^0 - \left(\frac{1}{81}\right)^{-\frac{1}{2}} = 15$$

Q2. Represent $\sqrt{3}$ on the number line.

Q3. Rationalise the denominator: $\frac{5-\sqrt{6}}{5+\sqrt{6}}$

- Q4. Find P(0), P(1) and P(2) for the polynomial p(x) = (x + 1) (x 1)
- Q5. Factorise: $3x^2 + 7x + 2$

- Q6. Use factor theorem to show that (x 2) is a factor of the polynomial $x^3 x 6$.
- Q7. Expand $(2x + 3y + 2z)^2$ using suitable identity.
- Q8. Without actually calculating the cubes, evaluate $(21)^3 (12)^3 (9)^3$.
- Q9. Prove that sum of three angles of triangle is 180° .
- Q10. The angles of a triangle are in the ratio 3 : 4 : 5. Find the angles.
- Q11. If two lines intersect each other then prove that vertically opposite angles are equal.
- Q12. If two lines are parallel intersected by a transversal then prove that corresponding angles are equal.
- Q13. Plot the points (5, 3), (2, -4), (-4, 4), (-2, -3) and (-1, 0) in the Cartesian plane using graph paper.
- Q14. In which quadrant or axis following points lies (3, 6), (-5, 2), (-7, 3), (-2, -6), (-2, 0).
- Q15. Plot the following points and check whether they are collinear or not (1, 3), (-1, -1), (-2, -3).

- Q16. Find four different solutions for the linear equation 4x 7y = 9.
- Q17. Find the value of k, if (3, -4) is a solution of the equation 5x + ky = 7.
- Q18. Draw the graph of 3x + y = 6. At what point, does the graph intersect the axes?
- Q19. Evaluate (103)³ using suitable identity.
- Q20. Prove that $(a + b)^3 = a^3 + b^3 + 3ab(a + b)$.

<u>SECTION – B</u>

• Students are required to write down following activities in their mathematics lab manual during summer holidays.

- 1. Square roots of natural numbers by spiral method.
- 2. Algebraic identity $a^3 + b^3 = (a + b) (a^2 ab + b^2)$
- 3. Quadratic and Co-ordinates.

Subject : Science

BIOLOGY

- **A.** Collect photos of 10 genetically improved crop varieties grown in India. Also write down their scientific and local names along with its genetic improvement.
- **B.** Paste the pictures of various plants and animals of each phylum of both vertebrates and invertebrates and write don their characteristic features.
- **C.** 5th June is World Environment Day, observed all over the world. The theme of World Environment Day 2021 is "Ecosystem Restoration". Make a poster along with slogan on this theme.
- **D.** 78% of the nitrogen gas is present in atmosphere but still plants and animals are not able to use it. By preparing a chart of nitrogen cycle show how nitrogen fixation is done and how plants and animals utilise the nitrogen.
- E. Preparation of temporary stained mounts of (a) onion peel (b) human cheek cells and to record observation and draw their labelled diagrams. (These practicals should be done on lab manual only)

CHEMISTRY

A. Activity: To know the difference between true solutions, colloids and suspension.

Prepare all the three types of solutions (Name them A, B and C) and after studying the mechanisms involved, write the answers to the following questions in your Chemistry notebooks. Describe the activity (with its aim, materials required, procedure, and conclusion)

- Q1. Were you able to see the particles in the mixture of any (A, B, and C)?
- **Q2**. Have you observed the path of beam of light visible when passed through beaker containing mixture?
- **Q3**. Have you observed any settling of particles of the mixture after sometime or is it stable?
- Q4. Have you observed any residue left on the filter paper after filtration?
- B. Prepration of

- (a) a true solution of common salt, sugar and alum, (b) a suspension of soil, chalk powder and fine sand in water.
- (c) A collodial solution of starch in water and egg albumin / milk in water. (These practicals should be done on lab manual only)

PHYSICS

Explain each of the following two activities in at least 100 words in your Physics notebooks.

- A. Tie an eraser to a string and rotate it along a circular path. Suddenly leave the string at any instant. Record this whole activity in a video clip. What do you observe? What is the direction of velocity of the rubber when the string is left? Is it along the same circular path which the eraser was moving in initially?
- **B**. Stand on the terrace of your house and take two different objects of different masses, say, a tennis ball and a plastic ball. Drop both of them simultaneously towards the ground. Ask your sibling or any other family member to record the time taken by each to reach the ground (use the stop watch in your mobile phone). Is the time same for the two objects or does it depend on their masses?
- C. Verification of laws of reflection of sound. (This practical should be done on lab manual only)

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Subject : Social Science

1. ACTIVITY:

Photo collage making on the chapter - "People as a resource".

2. MAP WORK:

Locate and label the following on the Physical map of India.

• Ganga, Satluj, Damodar, Krishna, Narmada, Tapi, Mahanadi and Brahmaputra.

On the political map of world label and mark the following:

• Allied powers of World War I and Central powers of World War I

3. PROJECT:

Prepare a detailed project report on the given topic:

- Important Rivers of India.
- People who played a vital role in drafting the Indian constitution.

4. **GENERAL QUESTIONS**:

- Q1. What were the social ,economic and political situations in Russia before 1905?
- Q2. "Prime Minister is the head of the government." Justify the statement.
- Q3. What is the difference between economic activities and non economic activities?

NOTE:

- 1. Write the answers of General Questions on Separate Notebook.
- 2. Use a Separate file for Project Work.
- 3. Activity must be done on same Scrap book.

Subject : Computer

<u>ACTIVITY</u>

- Create a MS-Word document on Operating system of appropriate 5 to 6 pages and implement the following:
 - Insert Header: School Name and logo.
 - Insert footer:Page number in the center.
 - Apply page border and shading.
 - Apply page colour.
 - Apply bullets & write 3 to 5 on each category.
 - Format the text properly
 - Insert images selected to the topic
 - o Save the document with name, class section and roll no.
- Revise Pre–Mid Term Syllabus

NOTE:

- > For writing Rs 10/-notebook is to be used.
- > Take printout of the pages and paste it on the same notebook.

