STEPHENS

INTERNATIONAL PUBLIC SCHOOL
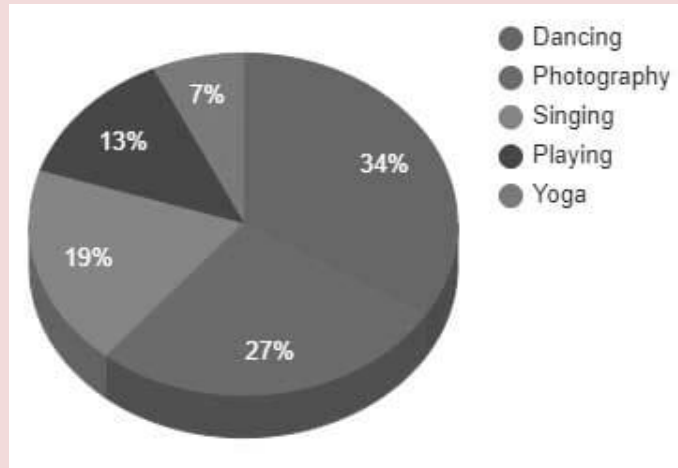

Holidays' Homework

Session – 2022-23

Class : 10th

Subject : English

Task – I (Story Writing)

A. **The given pie chart shows the data on hobbies of students during summer vacations. Write an analytical paragraph in 100-120 words to analyze the data.**

B. **Study the picture given below. Write a short story on what the picture suggests. Your composition may be about the subject of the picture or you may take suggestions from it. However, there must be a clear connection between the picture and your composition.**

Task – II (Modals)

A. **Fill in the blanks with appropriate modals:**
1. We…………………… obey our teachers. (have to, must)
2. She………………………. pass this time. (ought to, has to)
3. He…………………. not buy a car. (has to, need)
4. He works hard lest he…………………… fail, (should, must)
5. Do you…………………… cook your own meal? (should, have to)
6. The villagers………………… use kerosene lamps a few years ago. (must, had to)
7. The old lady…………… take a bath every day before taking meals. (ought to, should)
8. She……………….. finish this work before I go. (has to, must)
9. Ramesh said that they…………….. report for duty on Monday, (should, ought to)
10. We……………………….. prepare our lessons well before the examination. (ought to, must)

Task – III (Tenses)

Fill up the blanks by using the correct tense form of the verbs given in brackets.

(a)   We …………… (go) to Guwahati by Rajdhani Express last month.
(b)   Rajdhani train …………… (be) a fully air-conditioned train.
(c)   It …………… (provide) food, cold drinks, water, and the blankets at night.
(d)   The journey …………… (be) cool. It imparted solace to the soul and mind.
(e)   On the opposite, there …………… (be) a priest.
(f)   He …………… (be) in the church of Patna for the past twenty years.
(g)   I was informed that he …………… (read) a book.
(h)   He did not say when he …………… (come).
(i)   I hope that you …………… (pardon) me soon.
(j)   He taught me that good deeds …………… (be) never lost.

Task – IV (Subject – Verb Concord)

Choose the correct form of the verb that agrees with the subject.

1.   Annie and her brothers (is, are) at school.
2.   Either my mother or my father (is, are) coming to the meeting.
3.   The dog or the cats (is, are) outside.
4.   Either my shoes or your coat (is, are) always on the floor.
5.   George and Tamara (doesn't, don't) want to see that movie.
6.   Benito (doesn't, don't) know the answer.
7.   One of my sisters (is, are) going on a trip to France.
8.   The man with all the birds (live, lives) on my street.
9.   The movie, including all the previews, (take, takes) about two hours to watch.
10.   The players, as well as the captain, (want, wants) to win.
11.   Either answer (is, are) acceptable.
12.   Every one of those books (is, are) fiction.
13.   Nobody (know, knows) the trouble I've seen.
14.   (Is, Are) the news on at five or six?
15.   Mathematics (is, are) John's favourite subject, while Civics (is, are) Andrea's favourite subject.
16.   Eight dollars (is, are) the price of a movie these days.
17.   (Is, Are) the tweezers in this drawer?
18.   Your pants (is, are) at the cleaner's.
19.   There (was, were) fifteen candies in that bag. Now there (is, are) only one left!
20.   The committee (debates, debate) these questions carefully.

Task – V (Literature)

Read the chapter – 'From The Diary Of Anne Frank' and answer the following questions.

1.   From the diary of Anne Frank' throws light on teacher-student relationship, class atmosphere and discipline. Write a paragraph on the values of these aspects of school and how far these values are necessary for learning and life.
2.   Paper has more patience than people'. Explain with reference to "From the Diary of Anne Frank".

Task – VI (Literature)
Read the E-Book Pride and Prejudice and prepare a summary of the same.

विषय – हिन्दी

1. निम्नलिखित विषयों पर लगभग 50 शब्दों में आकर्षक विज्ञापन तैयार कीजिए।

   (क) किसी प्रसिद्ध कंपनी की लक्ज़री कार के लिए विज्ञापन बनाइए।

   (ख) कोचिंग सेंटर के लिए विज्ञापन बनाइए।

2. निम्नलिखित विषयों पर अनुच्छेद लिखें। (**A – 4** शीट पर)

   (क) शिक्षक – हमारे मार्गदर्शक

   (ख) प्रधानमंत्री जन–धन योजना

3. योग्यता विस्तार

   निम्नलिखित विषयों में से किसी एक विषय पर श्रवण एवं वाचन (**ASL**) प्रतियोगिता की तैयारी करें, जिसका समय 2 मिनट से अधिक न हो।

   (क) मेरे सपनों का भारत

   (ख) शहरी जीवन

   (ग) पीएम नरेंद्र मोदी

   (घ) शिक्षा का उद्देश्य

   (ङ) विद्यार्थी और मोबाइल फोन

4. मिड–टर्म के पाठ्यक्रम से

   (क) हरिहर–काका – पाठ

   (ख) तँतारा – वामीरो – पाठ

   अपनी हिंदी पुस्तिका (**Copy**) पर प्रश्न/उत्तर पूर्ण करें।

5. प्री–मिड टर्म के पाठों की दोहराई करें।

Subject : Mathematics

SECTION – A

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

1. Find the roots of the quadratic equation $\sqrt{2}x^2 + 7x + 5\sqrt{2} = 0$.
2. Find the value of k for which the equation $x^2 + k(2x + k - 1) + 2 = 0$ has real and equal roots.
3. If the equation $(1 + m^2)\,x^2 + 2mcx + c^2 - a^2 = 0$ has equal roots then show that $c^2 = a^2\,(1 + m^2)$.
4. Speed of a boat in still water is 15 km/h. It goes 30 km upstream and returns back at the same point in 4 hours 30 minutes. Find the speed of the stream.
5. Find the value of $(x + y)$ from the two equations, $ax + by = a^2 - b^2$, and $bx + ay = 0$.
6. Find if the following linear equations are inconsistent or consistent, $3x + 2y = 8$, $6x - 4y = 9$.
7. Draw the graph of $2x = y + 3$, $2y = 4x - 6$, and check if the equation has a unique solution.
8. Draw the equations on graph paper where the coordinates of the points intersect the lines at the y-axis. $x + 3y = 6$, $2x - 3y = 12$.
9. Solve by elimination method: $3x = y + 5$, $5x - y = 11$.
10. Find the values of x and y: $27x + 31y = 85$; $31x + 27y = 89$
11. Find two numbers that have a sum of 75 and a difference of 15.
12. If α and β are the zeros of the quadratic polynomial $f(x) = x^2 - x - 4$, find $\alpha\beta - (\alpha + \beta)$.
13. $f(x) = x^2 - x - 4$, find the value of $\dfrac{1}{\alpha} + \dfrac{1}{\beta} - \alpha\beta$.
14. If the square of the difference of the zeros of the quadratic polynomial $f(x) = x^2 + px + 45$ is equal to 144, find the value of p.
15. Find the value of 'k' such that the quadratic polynomial $x^2 - (k + 6)x + 2(2k + 1)$ has sum of the zeros is half of their product.
16. If α and β are the zeros of the quadratic polynomial $f(x) = x^2 - p(x + 1) - c$, show that $(\alpha + 1)(\beta + 1) = 1 - c$.
17. If the sum of the zeros of the quadratic polynomial $f(t) = kt^2 + 2t + 3k$ is equal to their product, find the value of k.
18. Find the zeros of the polynomial $p(x) = 4\sqrt{3}x^2 + 5x - 2\sqrt{3}$ and verify the relationship between the zeros and its coefficients.
19. Find the largest number which divides 245 and 1029 leaving remainder 5 in each case.
20. A shopkeeper has 120 litres of petrol, 180 litres of diesel and 240 litres of kerosene. He wants to sell oil by filling the three kinds of oils in tins of equal capacity. What should be the greatest capacity of such a tin?
21. Find the greatest number of 6 digits exactly divisible by 24, 15 and 36.
22. There are 144 cartons of coke can and 90 cartons of Pepsi can to be stacked in a canteen. If each stack is of the same height and is to contain cartoons of the same drink. What would be the greater number of cartons each stack would have?

23. A dealer sells a toy for Rs.24 and gains as much percent as the cost price of the toy. Find the cost price of the toy.

24. The hypotenuse of pole has to be erected at a point on the boundary of a circular park of diameter 13m in such a way that the differences of its distances from two diametrically opposite fixed gates A and B on the boundary in 7m. Is it possible to do so? If the answer is yes at what distances from the two gates should the pole be erected?

SECTION – B

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

1. To draw the graph of quadratic polynomial and observe.
   (i) The shape of the curve when coefficient of x^2 is positive.
   (ii) The shape of curve when coefficient of x^2 is negative.

2. To find the conditions for consistency and inconsistency for system of linear equations in two variables by graphical method.

3. Sum of first n odd natural numbers.

Subject : Science

BIOLOGY

A. Collect photos of different species of human evolution till date and paste them in the form of phylogenetic tree as their relationships with each other.

B. Collect photos of five endangered species each of plants and animals and five extinct species each of plants and animals of J&K. Discuss their role and significance in maintaining natural equilibrium and mention the major steps taken by government for their conservation.

C. With the world dealing with so much of pollution these days and the only cure from this disaster is to plant more and more trees. Write an article on Afforestation by taking into consideration different movements started by humans in past regarding conservation of forests.

D. India is trying to use solar energy in many aspects of life for providing one of the alternative than fossil fuels. Write an article in your **Biology** notebook on solar energy as source of renewable energy and what are the different methods through which we can utilize it as a fuel.

E. Preparing a temporary mount of leaf peel to show stomata. **(This practical should be done on lab manual only)**

CHEMISTRY

A. Describe the activity with aim, materials required, procedure, observation and conclusion. The questions that follow should be written in the **Chemistry** notebook (using colorful sparkle pens, sketch pens). Paste 4-5 pictures of your activity in support of your answers.

Activity Use turmeric (haldi) to check whether a particular substance is acid or base. {Hint: Dissolve washing powder in water. Add a spoonful of turmeric to it...}.

Answer the questions

Q1. Name one naturally occurring substance containing citric acid and one containing tartaric acid?

Q2. Why do we feel a burning sensation in the stomach when we overeat? What is the medicine used against to soothe this sensation called? Give one example?

B. Finding the pH of the following samples by using pH paper/universal indicator.

   (i)   Dilute HCl
   (ii)   Dilute NaOH solution
   (iii) Dilute Ethanoic acid solution
   (iv)   Lemon juice
   (v)   Water
   (vi)   Dilute Hydrogen carbonate solution

   (This practical should be done on lab manual only)

PHYSICS

Describe each of the following topics in at least 100 words in your **Physics** notebooks.

A. Take a pencil and dip it in a transparent glass of water or place a coin in a glass filled with water. Explain the effect of refraction using any one of the above examples and record a video clip.

B. When passed through a prism, white light splits into seven constituent colours. Draw a diagram showing splitting of white light into different constituent colours. Use the same colour for showing different components in which they actually split in.

C. What is an electromagnet? Why it is preferred over an ordinary magnet? Prepare an electromagnet at home using a nail and winding coil. Bring pieces of iron near it and see what happens.

D. Studying the dependence of potential difference (V) across a resistor on the current (I) passing through it and determine its resistance. Also plotting a graph between (V & I) **(This practical should be done on lab manual only)**

Subject : Social Science

A. GENERAL QUESTIONS:

1) Write a Newspaper Report on:
   a) Jallianwalla Bagh Massacre
   b) The Simon Commission

2) List all the different social groups which joined the Non Cooperation movement of 1921. Then choose any three and write about their hopes and struggles to show why they joined the movement.

3) Find out about the participants in the National Movement who were captured and put to death by the British. Paste their pictures in your file.

4) Do People support a political party? Discuss in detail.

5) Prepare a Detailed Report on 'Salt Satyagraha'.

6) Mark and locate the following on the Map of India.
   a) A place where the Congress session was held in 1919.
   b) A place where the Congress session was held in 1920.
   c) A place associated with the Cotton mill workers Satyagraha.
   d) The place where the Non Cooperation movement was called off in 1922.

7) Why do Lenders ask for Collateral while Lending.

8) In India, about 80% of farmers are small farmers, who need credit for cultivation.
   a) Why might Banks be unwilling to lend to small farmers?
   b) What are the other sources from which the small farmers can borrow?
   c) Explain with an example how the terms of credit can be unfavorable for the small farmers.

9) Prepare a short report on:
   Case study on Grameen Bank of Bangladesh.

10) Prepare a Detailed Report on
   SHG's

B. PROJECT:

1) Prepare a Detailed Project Report on any one of the following Topics:
   a) Consumer Awareness
   b) Social issues
   c) Sustainable Development.

Note:
1. Write the answers of General Questions on Separate Notebook.
2. Use a Separate file for Project Work.

Subject : Information Technology – 402

ACTIVITY

Make a presentation (project) on the **following topics** in the field of **Information Technology**.

- ➢ Stress Management   **(From Roll No 1 to 10)**
- ➢ Operating System   **(From Roll No 11 to 20)**
- ➢ Database management System   **(From Roll No 21 to 30)**
- ➢ Software and its Maintenance   **(From Roll No 31 - onwards)**

Note:-

- ➢ Presentation should have 5 to 6 slides.
- ➢ Take print out of all the slides and paste on A4 size loose sheets and compile it in a folder. Design an attractive cover for your file / folder.