SSC ACADEMY SR. SEC. SCHOOL, BHORA KALAN
WINTER HOLIDAY HOMEWORK
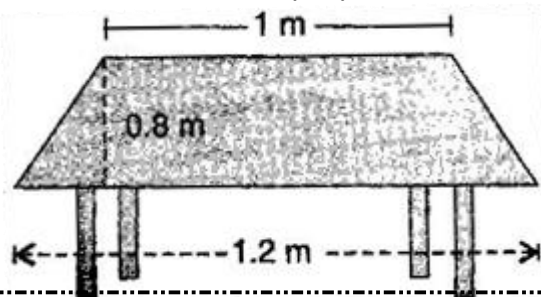## Class – VIII

Instructions:

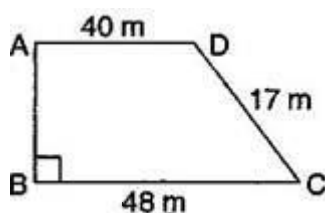- **Revise PA-4 Syllabus of all the subjects.**
- **Do complete syllabus in a separate notebook.**
- **Prepare 1 Chapter of each subject and you've to explain the chapter in front of the class like Teacher.**
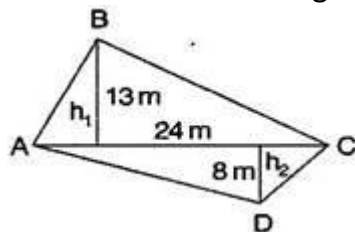
Subject- Maths (Sunflower)

1. If $\left(a + \frac{1}{a}\right) = -3$, then find the value of $\left(a^2 + \frac{1}{a^2}\right)$.
2. Multiply $(-3x^2 + 9x - 3)(7 - 4x)$.
3. Find the value of (i) (10.2×9.8) (ii) $\frac{(469+174)^2 - (469-174)^2}{469 \times 174}$
4. Subtract $6x^2 + 7x - 55$ from the sum of $-3x^2 + 5x - 42$ and $5x^2 - 9x + 18$.
5. Find the product: $(y + 2)(y - 2)(y^2 + 4)(y^4 - 16)$.
6. Factories: (a) $x^2 + 5\sqrt{3}x + 12$
   (b) $y^{16} - y^8 - 132$.
7. Factories: (a) $a^2 - (b - c)^2$
   (b) $c^{16} - 256$ (c) $x^3 - 25x$
8. Factories: $9a^4 - 24a^2b^2 + 16b^4 - 256$
9. Factories: (a) $a^{45} \div a^{44}$ (b) $a^3b - ab^3$
10. A car takes 2 hours to reach a destination by travelling at the speed of 60 km/hr. How long will it take when the car travels at the speed of 80 km/hr?
11. Two persons could fit new windows in a house in 3 days.
    (i) One of the persons fell ill before the work started. How long would the job take now?
    (ii) How many persons would be needed to fit the windows in one day?
12. A school has 8 periods a day, each of 45 minutes duration. How long would each period be, if the school has 9 periods a day, assuming the number of school hours to be the same?
13. A farmer has enough food to feed 20 animals in his cattle for 6 days. How long would the food last if there were 10 more animals in his cattle?
14. A factory requires 42 machines to produce a given number of articles in 63 days. How many machines would be required to produce the same number of articles in 54 days?
15. A machine in a soft drink factory fills 840 bottles in six hours. How many bottles will it fill in five hours?
16. The shape of the top surface of a table is a trapezium. Find its area if its parallel sides are 1 m and 1.2 m and perpendicular distance between them is 0.8 m.

17. Length of the fence of a trapezium shaped field ABCD is 120 m. If BC = 48 m, CD = 17 m and AD = 40 m, find the area of this field. Side AB is perpendicular to the parallel sides AD and BC.

18. The diagonal of a quadrilateral shaped field is 24 m and the perpendiculars dropped on it from the remaining opposite vertices are 8 m and 13 m. Find the area of the field.

19. A square and a rectangular field with measurements as given in the figure have the same perimeter. Which field has a larger area?

20. The floor of a building consists of 3000 tiles which are rhombus shaped and each of its diagonals are 45 cm and 30 cm in length. Find the total cost of polishing the floor, if the cost per m² is ₹ 4.

Subject- Mathematics (NON SUN)

Choose the correct option:

1. In which of the following the diagonals are equal?

a. Parallelogram b. Rhombus c. Rectangle d. trapezium

2. In a parallelogram ABCD, if∠DAB = 75° and ∠DBC = 60°, then ∠BDC is −

a. 75° b. 60° c. 45° d. 55°

Fill in the blanks.

3. A quadrilateral will be a parallelogram if and only if its diagonals _____ each other.

4. The angles of a quadrilateral are 75°, 90° and 75°. Then fourth angle is _____ .

Answer the following

5 Two consecutive angles of parallelogram are in the ratio 2:3. Find the smaller angle.

6. If ABCD is rectangle with ∠BAC = 32° , find the measure of ∠DBC.

Short Answer Type Question –

7. The diagonal of a rectangle ABCD intersect at the point O . If ∠BOC = 50°, then

Find ∠OAD.

Short Answer Type Question

8   E and F are points on diagonal AC of a parallelogram ABCD such that AE =CF.

Show that BFDE is a parallelogram.

9. Show that the line segment joining the mid-points of the opposite sides of a quadrilateral bisect each other.

Long Answer Type Question

10. ABC is a triangle right angled at C . A line through the mid-point M of

Hypotenuse AB and parallel to BC intersect AC at D. Show that CM=MA=1/2AB.

Subject: English

1. Here are some of the English Idioms related to colours. Find out the meanings of these Idioms.

   i. Black mood
   ii. Black and white
   iii. Golden handshake
   iv. Green fingers
   v. Gray matter
   vi. Catch someone red handed
   vii. Out of the blue

Assignment 1

1. **Change the following into indirect speech.**

   i. Seema said, "I don't have a laptop."
   ii. My mother said, "May God bless you!"
   iii. Kanika said, "I don't go to the gym very often."
   iv. I said to him, "Please explain the passage."
   v. I said to Prerana, "How do you travel to office everyday?"
   vi. The judge said to the accused, "Hold your tongue."
   vii. Shivam said to his mother, "Where does the rain come from?"
   viii. He said, "I was watching a movie at 8 pm last night."
   ix. Jane asked, "Have you read that book?"
   x. The Doctor said, "Health is your wealth."
   xi. Commander said to militarians, "Practice well."
   xii. Shilpa said, "Alas! I am undone."
   xiii. Dhoni said, "Can you help me with the luggage?"
   xiv. The manager said, "All the rooms have been allocated according to your choices."
   xv. Kohli said, "Hurrah! We won the match."

Assignment 2

1. **Identify whether the underlined verb is Finite or Non-Finite.**

   i. Riya <u>sings</u> beautifully.
   ii. I like <u>to read</u> storybooks.
   iii. He was <u>running</u> fast.
   iv. <u>Swimming</u> is a good exercise.
   v. The boy <u>opened</u> the door quietly.
   vi. I <u>saw</u> her crying in the garden.
   vii. They <u>work</u> hard every day.
   viii. She <u>wants</u> to become a doctor.

2. **Fill in the blanks with the correct form of the verb given in brackets.**

   i. He _____ (go) to school every morning.
   ii. She loves _____ (dance).
   iii. The children _____ (play) in the park yesterday.
   iv. _____ (Study) regularly helps you succeed.
   v. I wish _____ (meet) you soon.

3. **Rewrite the sentences using a Non-Finite verb form.**

   i. He worked hard so that he could pass the exam.
      ☞ _____.

   ii. She went to the market because she wanted to buy fruits.
      ☞ _____.

   iii. He opened the door and entered the room.
      ☞ _____.

Creative Task :- Write five original sentences using Finite Verbs and five using Non-Finite Verbs. Use colourful pens and underline the verbs.

Assignment 3

1. Read the passage given below carefully.

I. The three major effects of viewing TV violence are: children may become less sensitive to the pain and suffering of others, they may be more fearful of the world around them and they may be more likely to behave in aggressive or harmful ways towards others. Parents can limit the effects of violence by viewing TV together with the child and discussing the violence with the child, talk about why the violence happened and how painful it is. They may ask the child how conflicts can be 'solved without violence and explain to the child how violence on an entertainment programme is actually 'fake'. Parents must restrict violent videos. Encourage your child to watch programmes with characters that cooperate, help and care for one another. These programmes have been shown to have a positive influence on children.

II. Television programming currently is all about showing reality without censorship, meaning that children are inundated with shows depicting physical and sexual violence, as well as the use of illegal substances and harsh language. According to the American Academy of Pediatrics, "Extensive research evidence indicates that media violence can contribute to aggressive behaviour, desensitisation to violence. Nightmares and fear of being harmed." Statistics say that some cartoons average twenty acts of violence in one hour and that by the age of eighteen children will have seen 16,000 simulated murders and 200,000 acts of violence on television. Young people are especially in jeopardy of the negative effects of television violence because "many younger children cannot discriminate between what they see and what is real".

III. Read to your child rather than watch television. Children's stories, written by thoughtful authors, portray conflict in a more realistic and constructive manner. The best TV teachers are entertaining as well as informative and they are also child-centred, so that they expand the horizons of the young minds.

IV. Watching these programmes provides children with the right stimulus to acquire knowledge through an Indirect play-way methodology. Absorption of such knowledge and the love for learning are stirred and the child begins to understand the explorative thrills of the knowledge track, where he becomes the racing car driver speeding the knowledge vehicle through his own speedometer of knowledge acquisition.

Answer the following questions on the basis of the passage you have read.

i. Choose the option that best captures the central idea of the passage.
   a) TV is not the only source of entertainment.
   b) TV affects the young children.
   c) Effects of violence by viewing TV.
   d) Sensitive approach towards television programmes.

ii. State drawbacks of viewing TV violence.

iii. Complete the following with a phrase from Paragraph IV.

Opinion: _____.

Reason: To provide right stimulus to acquire knowledge.

iv. The passage includes some words that are opposites. Identify the antonyms.
   a) aggressive – violent   c) expand-limit   e) speeding – aquisition
   b) reality – videos   d) conflict-cooperate

v. Complete the sentence appropriately.

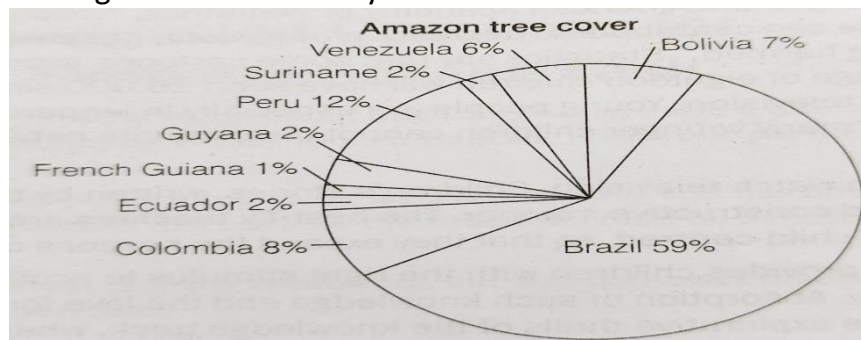The methodology suggested by the author for effective learning is_____.

vi. Suggest an appropriate title for the passage. Give reason for your answer.

vii. Which among the following will help to have a positive influence on children?
   a) Watch programmes which encourage positivity.
   b) Watch programmes which are showing reality with harsh language.
   c) Watch programmes with characters that cooperate, help and care for each other.
   d) Watch programmes which boost up your morale.
viii. How can parents limit the effects of violence on their children?

2. Read the passage given below carefully.

I. The Amazon River Basin is home to the largest rainforest on Earth. The basin-roughly the size of the forty-eight contiguous United States-covers some 40 percent of the South American continent and includes parts of eight South American countries: Brazil, Bolivia, Peru, Ecuador, Colombia, Venezuela, Guyana, and Suriname, as well as French Guiana, a department of France.

II. Reflecting environmental conditions as well as past human influence, the Amazon is made up of a mosaic of ecosystems and vegetation types including rainforests, seasonal forests, deciduous forests, flooded forests, and savannas.

III. The basin is drained by the Amazon River, the world's largest river in terms of discharge, and the second longest river in the world after the Nile. The river is made up of over 1,100 tributaries, 17 of which are longer than 1000 miles and two of which are larger, in terms of volume, than the Congo river. The river system is the lifeline of the forest.

Amazon tree cover
Venezuela 6%
Suriname 2%
Peru 12%
Guyana 2%
French Guiana 1%
Ecuador 2%
Colombia 8%
Bolivia 7%
Brazil 59%

IV. The extent of the Amazon depends on the definition. The biogeographic Amazon ranges from 7.76-8.24 million sq km (3-3.2 million sq mi), of which just over 80 percent is forested. Today the Amazon River is the most voluminous river on Earth, carrying more than five times the volume of the Congo or twelve times that of the Mississippi, draining an area nearly the size of the forty-eight contiguous United States.

V. He Amazon has a long history of human settlement, but in recent decades the pace of change has accelerated due to an increase in human population, the introduction of mechanised agriculture and integration of the Amazon region into the global economy. Vast quantities of commodities produced in the Amazon-cattle beef and leather, timber, soy, oil and gas and minerals, to name a few- are exported today to China, Europe. The U.S. Russia, and other countries. This shift has had substantial negative impacts on the Amazon.

Answer the following questions on the basis of the passage you have read.

i. Complete the following sentence.
To show the vastness of the Amazonian river basin, the writer compares it to_____.

ii. Based on your understanding of the passage, choose the option that lists the types of vegetation not found in the Amazon rainforests.

1. Seasonal forests   2. Deciduous forests   3. Flooded forests
4. Savannas   5. Mangrove forests   6. Tropical evergreen forests

(a) 1 and 2   (b) 3 and 4   (c) 5 and 6   (d) 2 and 6

iii. What had lead to changes in the Amazon?

iv. What are the features of the Amazon?

v. Which region contains the largest forest cover of the Amazon?

vi. Which of the following is true about the tributaries of Amazon river?

(a) There are over 1100 tributaries.

(b) Most of them are larger than river Congo.

(c) They are the lifeline of the rainforests.

(d) They provide sustenance to the indigenous tribes.

vii. What can the vastness of the Amazonian land be credited to? What is the development of the Amazon rainforests dependent on?

viii. Select the correct option to complete the following sentence. About _____ of the land covering the Amazon is forested.

(a) 90%   (b) 80%   (c) 85%   (d) 95%

Subject- Science

1. Some mushrooms are edible fungi. Perform this activity on mushrooms and prepare a project using A-4 size sheets (not more than 6 sheets) and handmade folder with the following parameters:

-Scientific name

-Structure

-Nutritional value

-5 health benefits of mushroom

Cultivation of mushroom on large scale in India

Activity

1. Take a large sized mushroom.

2. Cut off its stalk.

3. Place it gently, face down on square card board piece covered with paper.

4. Do not exert pressure on the mushroom and cover it with a glass bowl. Leave it for 3-4 days.

5. Thereafter, remove the glass cover on the mushroom and click a picture of the pattern of spores obtained from the card board. (Take pictures of the entire activity and paste them on a paper)

2. **GOGGLES for BLIND**-Anang Tadar, a class of XI student from Arunachal Pardesh has invented a new technology for helping the blinds. His innovation is based on echo location (based on reflection of sound) and will surely help blind people.

Prepare a file on his innovative work describing the technology and its application.

3. **Mini Home experiment**

Perform a experiment (with adult supervision)

Aim-Make a Lemon battery

-Use lemon, copper coin, iron nail and LED

-Draw the setup and explain why the current flows.

Subject- GK Current affairs assignment

Q1: Who served as the 22nd Defence Minister of India from 1998–2004?

Ans: George Mathew Fernandes.

Q2: 'Sudarshan Lake' was repaired for the second time under the reign of whom?

Ans: Skandgupta.

Q3: Where is the 'Atal Ekta Park' of India?

Ans: Jhansi.

Q4: Defence Research and Development Organization (DRDO) belongs to which country in Asia?

Ans: India.

Q5: Donald Trump was the ___ president of the United States of America?

Ans: 45th (and 47th, as he is the current President in 2025).

Q6: Aviva India is an Indian company that deals in which sector?

Ans: Insurance Sector.

Q7: Multinational corporation and technology company 'Intel Corporation' belongs to which country?

Ans: United States.

Q8: Bengaluru is the fastest-growing technology center. It is the city of which state in India? Ans:

Ans:Karnataka.

Q9: First session of the Constituent Assembly was held in which city?

Ans: New Delhi.

Q10: Which pole is known as Antarctica on Earth?

Ans: South Pole.

Subject- Computer

1. Learn Chapter - 9 List in Python and Chapter- 10 AI domains

2. Activity Work: Make a Chart According to Roll Number

Roll no. 1 to 10 - Types of Networks   Roll no. 21 to 30 - Devices required for a Network

Roll no. 11 to 20 - Types of Topology   Roll no. 31 onwards - Trending Technologies

Tips for Holiday Homework

✓ Write neat and clean content with proper headings.

✓ Use colored pens and drawings where required.

✓ Submit homework on time with your name and class written properly.

Subject- Hindi

(1) 'अकबरी लोटा' तथा 'सूर के पद' पाठ याद करो तथा अभ्यास- पुस्तिका में लिखकर देखो।

(2) सूरदास का संपूर्ण जीवन परिचय A3 साईज शीट पर लिखो।

(3) भारत की खोज का पाठ-8 (तनाव) पढ़ो तथा 10 प्रश्न स्वयं बनाएं और उत्तर लिखें।

(4) आपका छोटा भाई पढ़ाई पर ध्यान न देकर सारा समय फोन पर लगा रहता है। भाई को समझाते हुए पत्र लिखो।

(5) श्रुतिसम भिन्नार्थक शब्द याद करो तथा अभ्यास-पुस्तिका में लिखकर देखो।

(6) 'जल है तो कल है' तथा 'बेटी बचाओ बेटी पढ़ाओ' पर लगभग 40से 50 शब्दों में एक सुंदर-सा विज्ञापन तैयार कीजिए।

(7) हिन्दी व्याकरण प्रश्न पत्र एक तथा प्रश्न पत्र दो अपनी अभ्यास-पुस्तिका में करें।

(8) हिन्दी व्याकरण किताब में से सफल प्रश्न पत्र के सभी प्रश्नों के उत्तर अपनी अभ्यास-पुस्तिका में करें।

नोट:-

दिए गए पाठ का भलीभांति अभ्यास करें तथा व्याख्या करें।

SUBJECT - SST

1. Poster Making

Make a colourful poster on the topic:

🎨 **"Ways to Stop Marginalisation in Society"**

Use drawings, slogans, and creative ideas.

Make it neat and attractive.

2. Case Study

Prepare a short case study on any one marginalised group:

(Tribals / Dalits / Women)

Include the following points:

I. Problems faced

II. How education can help them

3. Creative Writing

Write a poem or short story on the topic:

📖 **"Education as a Tool of Change"**

Subject- Sanskrit

प्र.1 धातुरूपाणि- लङ् लोट् विधिलिङ्ग लकार: चिह्नानि योजयित्वा (खाद्, भू(भव), तिष्ठ् (स्था) धातु लिखत स्मरत च।

प्र.2 शब्दरूपाणि- अकारान्त पुल्लिङ्ग, आकारान्त स्त्रीलिङ्ग शब्दरूपाणि चिह्नानि योजयित्वा (राम,देव,लता,रमा) लिखत स्मरत च।

प्र.3 पाठ-10,11 उत्तरपुस्तिकायाम पूर्ण कुरुत स्मरत च।

प्र.4 संख्यावाचक शब्दा: (50-100) लिखत स्मरत च।

प्र.5 भारतीयवर्षानुसारं मासानाम् नामानि लिखत स्मरत च।

प्र.6 पञ्च श्लोकानि कण्ठस्थ (स्मरत) कुरुत।