



DELHI PUBLIC SCHOOL VISAKHAPATNAM REVISION ASSIGNMENT

2025-26

Class: X

Date of Submission: on or before 18.12.2025



Subject: ENGLISH

1. Here are some important details about ISRO's 2024 INSAT-3DS Launch vs NASA's 2023 SWOT Mission. Study the information and write an analytical paragraph in about 80 words.

Aspect	INSAT-3DS (ISRO, 2024)	SWOT Mission (NASA, 2023)
Leadership	ISRO	NASA & CNES
Purpose	Weather forecasting & disaster alerts	Global water mapping
Technology	Advanced imaging sensors	Ka-band radar
Public Impact	Better cyclone warnings	Better flood prediction
Media Coverage	High in India	High internationally
Common Feature	Innovation, precision	Innovation, precision

Fill in the right word in the blanks:

India's INSAT-3DS launch marked a major scientific achievement, similar to NASA's 2023 SWOT mission.

(a) _____ (Transition linker), while NASA focused on global water mapping, INSAT-3DS aimed at

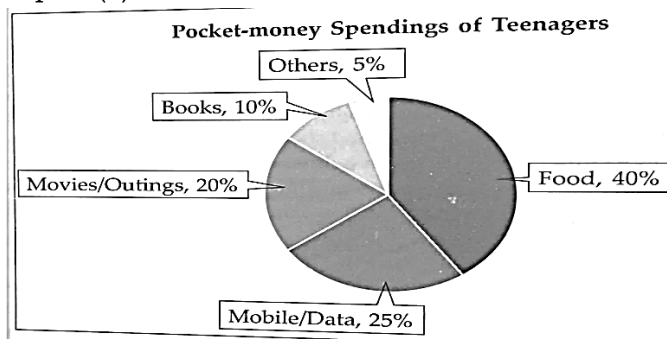
(b) _____ (comparison term) regional monitoring.

Both missions displayed scientific (c) _____ and (d) _____.

In contrast, ISRO's mission emphasized disaster alerts despite (e) _____.

Therefore, both space missions have (f) _____ scientific progress worldwide.

2. Here is a pie chart about pocket-money spendings of teenagers. Study the information and write an analytical paragraph in about 80 words.



Fill in the right word in the blanks:

The given pie chart shows how teenagers spend their pocket money on different items. To begin with, food receives the maximum attention, as teenagers spend a ____ share of their money on it. In comparison, mobile/data comes next, showing that staying connected is also a major priority for them. Furthermore, movies and outings form another ____ category, highlighting their interest in entertainment. On the other hand, books receive much ____ focus, suggesting that reading is not their primary preference. Lastly, the "others" category is relatively ____, indicating that teenagers rarely spend their money on miscellaneous items. Overall, the chart clearly shows that teenagers give more ____ to food and technology, whereas books and other items are given far ____ attention.

3. GRAMMAR – Complete all the following tasks as directed :

SET -1 :

1. She _____ (try) to complete the assignment since last night.
2. He is a MLA from our area. Identify the error and correct it.

3. Meera said to her brother, "Don't talk loudly."

Meera told her brother _____ loudly.

4. There are only _____ chairs available in the hall. (few/a few/little)

5. You _____ take an umbrella. It might rain. (should/may)

6. The children _____ (play) in the garden when their coach arrived.

7. She had already _____ her hair before the guests arrived. (tied / tying)

8. Do you have _____ information about the meeting? (any/some)

9. The policeman said to the driver, "Drive carefully."

The policeman advised the driver _____ .

10. She _____ submit the form today. It is compulsory. (must/should)

11. The movie was _____ in several states due to violent scenes. (banned / banning)

12. _____ of the students submitted their assignments on time.

A. Each B. Every C. Most D. Little

SET : 2

1. By the time we reach the venue, the programme _____ (start).

2. I have much friends in my class. Choose the correct option :

Error: **much**, Correction: **many**

Error: **friends**, Correction: **friend**

Error: **my**, Correction: **mine**

Error: **class**, Correction: **classes**

3. Father said to me, "Finish your work on time."

Father instructed me _____ my work on time.

4. _____ students in the class failed the test. (Few/A few/Little)

5. You _____ leave early if you feel uncomfortable. (may/must)

6. He hurt his _____ during the match. (heel/heal)

7. Rita: "I am finishing the assignment today."

Aman: "Then I'll submit it along with yours."

Rita told Aman that she _____ the assignment that day and Aman replied that he _____ it along with hers.

8. Rohan _____ (not/complete) his project yet.

9. Fill in the blank by choosing the correct option.

The teacher asked the students to submit the assignment _____ delay.

A. late B. lately C. latest D. later

10. She doesn't have _____ money left. (much/many)

11. The teacher said to the class, "Keep quiet."

The teacher _____

12. You _____ arrive on time for the assembly, but it is strongly advised.

(should / must / might)

Subject: MATHEMATICS

1. If the sum of the zeroes of the quadratic polynomial $p(x) = kx^2 + 2x + 3k$ is equal to the product of its zeroes, find the value of k .

2. Find a quadratic polynomial whose zeroes are -3 and -4 .

3. Prove that $(5 + 3\sqrt{2})$ is an irrational number, given that $\sqrt{2}$ is an irrational number.

4. For what value of k will the following pair of linear equations have no solution:

$$5x + 2y - 7 = 0 \text{ and } 2x + ky + 1 = 0 ?$$

5. Find the walking speeds of two people who are 16 km apart and meet in 2 hours when walking towards each other, and 8 hours when walking in the same direction.

6. Find k for which $x^2 + px(1 + 3k) + 7(3 + 2k) = 0$ has equal roots, given that -4 is a root of $x^2 + 2x + 4p = 0$

7. Find the sides of two squares if the sum of their areas is 468m^2 and their perimeters differ by 24 m.

8. Given the ratio of the 11th term to the 18th term of an A.P. is $2 : 3$, find the ratio of the 5th term to the 21st term.

9. Calculate the sum of the first 10 terms of the A.P. 2, 4, 6, 8,

10. For a circle with centre O , if tangent AP and chord PQ have $\angle PAQ = 60^\circ$, find $m\angle POQ$.
11. Find the coordinates of the point that internally divides the line segment joining $(4, -3)$ and $(8, 5)$ in the ratio $3 : 1$.
12. Prove $(\sin\theta - \cos\theta)(\tan\theta + \cot\theta) = \sec\theta - \operatorname{cosec}\theta$.
13. Given the mean and median of data are 21 and 23, find the mode.
14. What is the probability of drawing a black card from a deck of 52 playing cards?
15. Find the probability of getting at least two heads when tossing three coins together.
16. Find the canvas area needed for a tent shaped as a cylinder (height 2.1 m, diameter 4 m) surmounted by a cone (slant height 2.8 m).
17. Find the area of a sector of a circle with radius 21 cm cut off by an arc of length 22 cm.
18. Find the distance from the base of a 50 m tall tower to a point on the ground where the angle of elevation to the top is 30° .

Subject: PHYSICS

1. A person suffering from presbyopia needs bifocal lens. If he needs two lens of power -4.0 dioptre and $+2.0$ dioptre, which one of this two lenses is for the correction of distant vision and what is its focal length?
2. Two wires A and B of same material, having same lengths and diameters 0.2mm and 0.3 mm respectively, are connected one by one in a circuit. Which of these two wires will offer more resistance to the flow of current in the circuit? Justify your answer.
3. State two laws of refraction of light.
4. Define the term absolute refractive index of a medium. A ray of light enters from vacuum to glass of absolute refractive index 1.5. Find the speed of light in glass. The speed of light in vacuum is 3×10^8 m/s.
5. Upper half of a convex lens is covered with a black paper. Draw a ray diagram to show the formation of image of an object placed at a distance of $2F$ from such a lens. Mention the position and nature of the image formed. State the observable difference in the image obtained if the lens is uncovered. Give reason to justify your answer.
6. An object is placed at a distance of 30 cm from the optical centre of a concave lens of focal length 15 cm. Use lens formula to determine the distance of the image from the optical centre of the lens.
7. An object 2 cm in size is placed 30 cm in front of a concave mirror of focal length 15 cm. At what distance from the mirror should a screen be placed in order to obtain a sharp image? What will be the nature and the size of the image formed? Draw a ray diagram to show the formation of the image in this case.
8. Name the type of the mirrors used in design of solar furnaces. Explain how high temperature is achieved by this device.
9. A person cannot see the object distinctly, when placed beyond 2 m.
 - (a) Identify the eye defect.
 - (b) Give two causes for this defect
 - (c) Calculate the power and nature of the lens he should be using to see the distant objects clearly.
 - (d) Draw the ray diagrams for the defective and the corrected eye.
10. A student dipped a bar magnet in a heap of iron fillings and pulled it out. He found that iron fillings got stuck to the magnet.
 - (a) Which regions of the magnet have more iron fillings sticking to it? What are these regions called?
 - (b) What conclusion would you like to draw from the amount of iron fillings clinging to these regions?

Subject: CHEMISTRY

1. Write the electron dot structure of methane and ethane
2. A carboxylic acid $C_2H_4O_2$ reacts with an alcohol in the presence of sulphuric acid to form a compound 'X'. The alcohol on oxidation with alkaline $KMnO_4$ followed by acidification gives the same carboxylic acid $C_2H_4O_2$. Write the name and structure of (a) carboxylic acid (b) alcohol (c) the compound 'X'.

3. What is oxidation reaction? Give an example of oxidation reaction. Is oxidation an exothermic or an endothermic reaction?
4. When the powder of a reddish brown coloured metal is heated in an open china dish, its colour turns black. However, when hydrogen is passed over the hot black substance so formed, it regains its original colour. Based on the above information answer the following questions:
 - (i) What type of chemical reaction takes place in each of the two given steps?
 - (ii) Name the metal initially taken in the powdered form. Write balanced chemical equations for both reactions.
5. A metal nitrate 'A' on heating gives yellowish brown coloured metal oxide along with brown gas 'B' and a colourless gas 'C'. Aqueous solution of 'A' on reaction with potassium iodide forms a yellow precipitate of compound 'D'. Identify A, B, C, D. Also identify both types of reactions.
6. 1 gram of solid sodium chloride was taken in a clean and dry test tube and concentrated sulphuric acid was added to it.
 - (a) Name the gas evolved in the reaction.
 - (b) What will be observed when this gas is tested with (i) dry, and (ii) wet blue litmus paper? Write your conclusion about the nature (acidic/basic) of this gas.
7. Distinguish between a saturated solution and an unsaturated hydrocarbon by flame test. List the products of combustion reaction of a saturated hydrocarbon.
8. Write the common name and the chemical name of the compound $\text{CaSO}_4 \cdot \frac{1}{2} \text{H}_2\text{O}$. Write the method of its preparation. Give chemical equation for the reaction, when water reacts with $\text{CaSO}_4 \cdot \frac{1}{2} \text{H}_2\text{O}$.
9. Why is the conversion of ethanol to ethanoic acid an oxidation reaction? Name the oxidising agent used in this conversion. Write chemical equation for this oxidation reaction. How is this reaction different from the reaction in which ethanol burns in the presence of oxygen?
10. The type of reactions in which (i) calcium oxide is formed, and (ii) calcium hydroxide is formed are opposite reactions to each other. Justify this statement with the help of chemical equations.

Subject: BIOLOGY

1. Which statement shows interaction of a biotic component with an abiotic component in an ecosystem?
 - a) A grasshopper feeding on a leaf.
 - b) Rainwater running down into a lake
 - c) An earthworm making a burrow in the soil.
 - d) A mouse fighting with another mouse for food.
2. What is Placenta? State its function in human female.
3. In organisms, some changes pertain to body cells and are not inherited, whereas some changes pertain to germ cells are inheritable.
 - i. Name the two types of variations respectively.
 - ii. Explain two ways by which individuals with a particular trait may increase in a population.
6. The pancreas and gonads perform the dual function. Justify the statement.
7. State the changes that take place in the uterus when:
 - (a) Implantation of the embryo has occurred.
 - (b) Female gamete/egg is not fertilised.
8. Why did Mendel carry out an experiment to study inheritance of two traits in garden pea? (b) What were his findings with respect to inheritance of traits in F_1 and F_2 generation? (c) State the ratio obtained in the F_2 generation in the above mentioned experiment.
9. i) Draw the longitudinal section of a flower and label the following:
 - a) The part that protects the flower in bud
 - b) The part that attracts insects
 - c) Male reproductive part
 - d) Female reproductive part
 - e) The part containing ovules.
 ii) What will happen when part e is removed from flower?
10. Assertion: Amphibians can tolerate mixing of oxygenated and deoxygenated blood.
Reasoning: Amphibians are animals with two chambered heart.

Subject: SOCIAL SCIENCE

1. What steps did the French Revolutionaries taken to create a sense of collective identity among the French people?
2. Describe the process of the Formation of Great Britain.
3. Discuss about Unification of Italy?

4. Why did Gandhi found Salt as an effective tool against colonialism and an powerful weapon to unite the nation? Discuss.
5. Give two examples of different types of global exchanges which took place before the 17th century, choosing an example of one from Asia and one from Americas.
6. What was the effects of the spread of print culture for poor people in 19th century India?
7. State how Caste is still dominated in Indian Politics.
8. Define political party? What are the main challenges to political parties? Explain. How can political parties be reformed?
9. How does Democracy accommodate to social diversity?
10. How does democracy reduce of inequality and poverty in the society?
11. What do you mean by coalition government? Explain.
12. Discuss about Non – Conventional Source of Energy.
13. Why do we need the renewable source of energy?
14. What is the status of Jute Mills in India? What are the Factors for the concentration of Jute mill in Hugli basin?
15. Describe how Communities have conserved and protect forests and wildlife in India?
16. What is Land degradation? What are causes of land degradation and measures are taken to check?
17. Why do we need the expansion of formal sector of credit in India?
18. Differentiate between formal sector and informal sector of credit.
19. Compare the economic activities of public sector and private sector.
20. Discuss about Liberalisation.? Discuss about the foreign trade and investment policy in India,
21. Why is the issue of sustainability? Why is important for development?

Subject: हिंदी (द्वितीय भाषा)

- 1) निम्नलिखित विषयों पर अनुच्छेद लिखिए।
 क) हवाई जाहज के बिना दुनिया
 ख) परीक्षा तनाव और उसे रोकने के उपाय
 ग) लोकतंत्र में मिडिया की भूमिका
- 2) अपने क्षेत्र में सार्वजनिक पुस्तकालय खुलवाने की आवश्यकता समझने हेतु दिल्ली के शिक्षा मंत्री के नाम एक पत्र लिखिए।
- 3) आप जी० डी० गोयनका इंटरनेशनल स्कूल, वेसू सूरत में हिंदी साहित्य समिति के सचिव हैं। आपके विद्यालय में आयोजित दोहा गायन प्रतियोगिता के लिए विद्यार्थियों को आमंत्रित करते हुए एक सूचना पत्र लिखें।
- 4) हिंदी की पुस्तकों की प्रदर्शनी में आधे मूल्य पर बिक रही महत्वपूर्ण पुस्तकों को खरीदकर लाभ उठाने के लिए लगभग 25-30 शब्दों में एक विज्ञापन लिखिए।
- 5) आप राजन/रजनी हैं। अपने बैंक खाते में नेट बैंकिंग की सुविधा प्राप्त करने के लिए संबंधित शाखा प्रबंधक को लगभग 80 शब्दों में एक ई-मेल लिखिए।
- 6) यदि मैं समाचार पत्र होता” विषय पर लगभग 100 से 120 शब्दों में एक लघुकथा लिखिए।

Subject: తెలుగు (ద్వితీయ భాష)

1. ఈ కింది పద్యాలకు ప్రతిపదార్థం రాయండి.
 అ) నీతిం దాన తలంచి చేయ..... ఆ) ఎరుగన్ నగున్ స్వశక్తి.....
 2. క్రింది వ్యాసరూప ప్రశ్నలకు సమాధానం రాయండి.
 అ) యుద్ధాలను నివారించడానికి, శాంతి నెలకొల్పడానికి ఏం చేయాలి?
 ఆ) కన్యాశుల్కం పౌరభాగం ద్వారా కవి చెప్పదలుచుకున్న అభిప్రాయం ఏమిటో రాయండి.
- అర్థ సందర్భాలు: 1. పుస్తకం చేతబడితే వేళ్ళకు అంటుకుపోవాలి.

2. పచ్చటి నేలకు నెత్తుటి తిలకం దిద్దవలసి వచ్చింది.

సంధులు : కింది ఉదాహరణలకు సూత్రం రాసి , సంధి పేరు రాయండి.

1. అతడు చక్రపాణి..2. సంపన్నురాలు 3.. గజము పడియే

Subject: సంస్కృతమ్ (ద్వితీయ భాషా)

1.ఎకం ఘటనాక్రమం లిఖత (విచిత్ర: సాక్షి) |

2.పంచ ప్రత్యయ ప్రశ్నాన్ లిఖత | (టాప్, క్, కవతు, అనీయర్, తవ్యత్)

3.పంచ సమాస వాక్యాని లిఖత |

4.పంచఅవ్యయ ప్రశ్నాన్ లిఖత |

5.పంచ సమయ వాక్యాని లిఖత |