



DELHI PUBLIC SCHOOL VISAKHAPATNAM ASSIGNMENT

April – May 2026



Class: XI Science

Date of Submission: on or before 15.06.2026

Subject: ENGLISH

1. Gap Filling (Tenses & Clauses)

1. She _____ (prepare) for her exams when the lights went out.
2. If you _____ (work) hard, you will succeed.
3. The boy _____ (who/which) is playing is my brother.
4. I _____ (not finish) my homework yet.
5. They _____ (live) here since 2010.
6. If she _____ (study) regularly, she _____ (score) good marks.
7. By the time we reached the station, the train _____ already _____ (leave).
8. I will call you when I _____ (reach) home.
9. He _____ (not complete) his homework because he _____ (be) ill.
10. If they _____ (practice) more, they _____ (win) the match.

2. Re-ordering of Sentences

1. always / she / on time / is / arrives
2. playing / children / the / are / park / in / the
3. has / finished / he / already / work / his

3. Transformation of Sentences

1. She is very tired. She cannot walk. (Combine using “so...that”)
2. He said, “I am happy.” (Change into indirect speech)
3. Although he was poor, he was honest. (Rewrite using “but”)

PRACTICE (NOTE MAKING) :

Make notes on the text "DISCOVERING TUT : THE SAGA CONTINUES" – “ He was a teenager till cases of food and wine”. Using appropriate headings, subheadings, and points. Also provide a suitable title and include abbreviations/symbols wherever possible.”

SAMPLE SPEECH

“Is Technology Making Us Less Human?”

Good morning respected teachers and my dear friends,

Today I stand before you to speak on a question that affects all of us—*Is technology making us less human?*

Technology has made our lives easier. We can connect with people instantly, access information quickly, and learn new things every day. However, it has also reduced face-to-face communication. We spend more time on screens than with family and friends. Emotions are now expressed through emojis rather than real conversations.

While technology is a powerful tool, overdependence can make us isolated and less empathetic. It is important to strike a balance between the digital world and real-life relationships.

In conclusion, technology should serve us, not control us. Let us use it wisely while staying connected to our human values.

Thank you.

PRACTICE :

1. “If success required you to fail many times, would you still chase it with the same passion? Why or why not?” (120-150 WORDS)
2. “Do you think people are judged more by their actions or their intentions? Which one matters more in real life?” (120-150 WORDS)

SAMPLE DEBATE

Topic: “Examinations are the True Test of Knowledge” (For the Motion)

Respected judges, teachers and my dear friends,

Today, I stand before you to speak in favour of the motion that examinations are the true test of knowledge. Examinations help in evaluating a student's understanding, discipline, and time management skills. They provide a structured way to assess learning and ensure that students stay focused on their academic goals.

Moreover, exams prepare students for real-life challenges where performance under pressure matters. Without examinations, it would be difficult to measure progress objectively.

In conclusion, while exams may not be perfect, they remain an essential tool to assess knowledge and readiness.

Thank you.

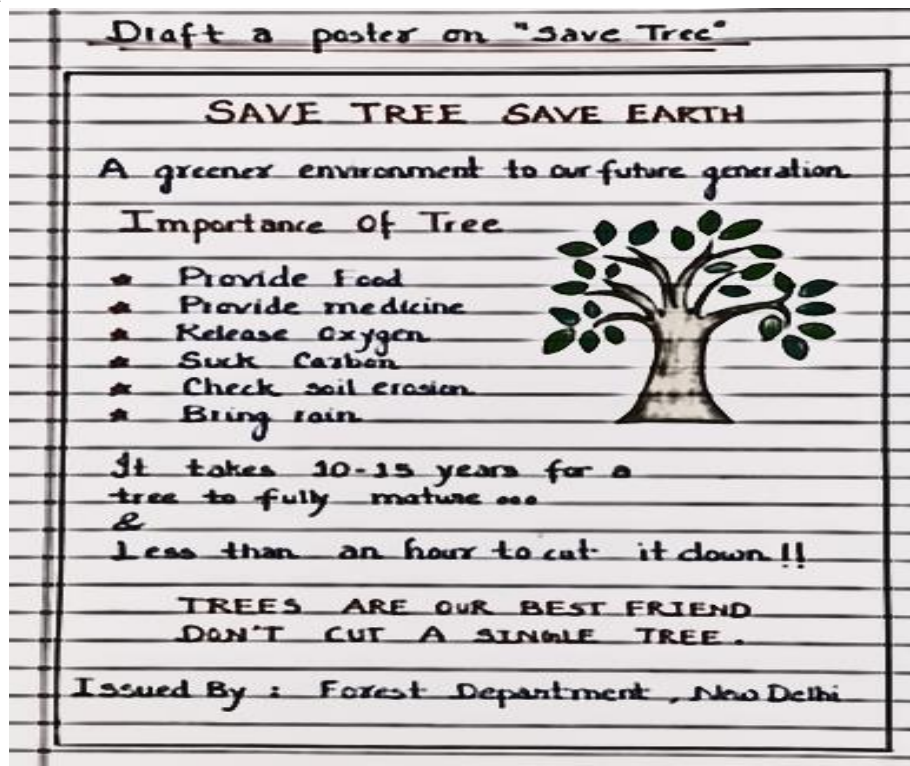
PRACTICE:

1. Is peer pressure always harmful? (120-150 words)
2. Are dreams more important than reality? (120- 150 words)

PRACTICE (CLASSIFIED ADVERTISEMENT):

1. For Sale - You want to sell your old laptop in good condition. Draft a classified advertisement giving necessary details. (50 words)
2. Lost & Found -You have lost your school bag containing important documents. Write an advertisement giving details and contact information.(50 words)

SAMPLE POSTER



PRACTICE :

1. Make a poster on "Honesty is the Best Policy." (50 WORDS)
2. Design a poster on "Dream Big, Work Hard." (50 WORDS)

PROJECT WORK : Select any one author from your English textbooks. Research and read a different story, novel, or literary work written by the same author (the work should not be from your syllabus). Write a review of the selected work in about 200 words, highlighting the main plot, characters, and theme.

Subject: PHYSICS

1. Differentiate $y = 3x^3 + 2x^2 - 5$ with respect to x
2. Find ds/dt , where $S = 5t^3 - 3t^2 + 7t - 10$.
3. Find dx/dy where $x = y^4 - 2y^3 + 5y^2 - 2y + 7$
4. Find dx/dt where $x = a \sin^2 t + 3 \cos t - 3$
5. Find du/dt , where $u = 2t^2 + \tan t - 3 \cos t$
6. Integrate $dy = 5x^4 - 4x^3 + 3x^2 + 10x - 6$ with respect to dx

- c) Why are viruses not included in the five-kingdom classification? (2 marks)
- d) Name one disease caused by viruses. (1 mark)
8. How are ascocarps different from basidiocarps?
9. Name the two components of lichens?

Subject: MATHEMATICS

- 1-Using properties of set, show that : $A \cup (A \cap B) = A$
- 2-If $A = \{a, b, c, d, e\}$, $B = \{a, c, e, g\}$ and $C = \{b, e, f, g\}$, verify that: $B \cup C = C \cup B$
- 3-Let $A = \{r : r = 6n, n \in \mathbb{N}\}$ and $B = \{x : r = 9n, n \in \mathbb{N}\}$, find $A \cap B$.
- 4-Let A and B be two sets. If $A \cap X = B \cap X = \phi$ and $A \cup X = B \cup X$ for some set X, prove that $A = B$.
- 5-List all the element of the sets: $H = \{x : x \in \mathbb{Z}, |x| \leq 2\}$
- 6-Let $A = \{2, 4, 6, 8, 10\}$, $B = \{4, 8, 12, 16\}$ and $C = \{6, 12, 18, 24\}$. Using Venn diagrams, verify that : $(A \cup B) \cup C = A \cup (B \cup C)$
- 7-If A and B be two sets such that $n(A) = 3$, $n(B) = 4$ and $n(A \cap B) = 2$ then find:
1. $n(A \times B)$
 2. $n(B \times A)$
 3. $n\{(A \times B) \cap (B \times A)\}$
- 8-Let $A = \{0, 1, 2, 3, 4, 5, 6, 7, 8\}$ and let $R = \{(0, b) : a, b \in A \text{ and } 2a + 3b = 12\}$. Express R as a set of ordered pairs. Show that R is a binary relation on A. Find its domain and range.
- 9-Find the domain and the range of the real function: $f(x) = \frac{3x-2}{x+2}$
- 10-If $f(x) = 3x^4 - 5x^2 + 9$ find $f(x - 1)$.

- 11-Show that the Signum Function $f : \mathbb{R} \rightarrow \mathbb{R}$, given by $f(x) = \begin{cases} 1, & \text{if } x > 0 \\ 0, & \text{if } x = 0 \\ -1, & \text{if } x < 0 \end{cases}$ is neither one - one nor onto.

- 12-Let $A = \{1, 2, 3, 4\}$, $B = \{1, 4, 9, 16, 25\}$ and R be a relation defined from A to B as, $R = \{(x, y) : x \in A, y \in B \text{ and } y = x^2\}$
1. Depict this relation using arrow diagram.
 2. Find domain of R.
 3. Find range of R.
 4. Write co - domain of R.

Subject: Artificial Intelligence

1. A hospital implemented an AI system to assist doctors in diagnosing diseases based on medical images such as X-rays and MRI scans. However, some patients expressed concerns about the accuracy and reliability of the AI diagnoses. How can the hospital address these concerns? [CBSE]
2. Explain the role of Data Science in Artificial Intelligence, particularly in the context of e-commerce platforms like Amazon and Flipkart. How do these platforms use structured and unstructured data to provide personalised product recommendations?
3. A self-driving car uses reinforcement learning to navigate through traffic. It receives positive rewards for actions like maintaining speed and negative rewards for violating traffic rules. What is the role of feedback in reinforcement learning, and how does it improve the car's navigation over time?
4. A city is struggling with traffic congestion and road safety issues. The municipal authorities plan to use AI algorithms to monitor traffic patterns, optimise signal timings, and predict accident-prone areas based on historical data and live traffic feeds. Examine how AI can be applied to address the city's traffic challenges. Discuss the potential benefits and challenges of implementing AI-driven traffic management system.