

ARMY PUBLIC SCHOOL JAMMU CANTT

HOLIDAY HOMEWORK (2017-2018)

CLASS IX

ENGLISH

1- **NOVEL**- Read Book 1- Voyage to Lilliput – Make 5 important questions of your choice and answer within 200 words each.

2- **GRAMMAR:**

a) **Fill in the blank with 'has' or 'have' :**

Krishnamurthy is an excellent singer. He _____ been singing since his childhood. He _____ won many laurels. He _____ been invited to various places to give stage shows. The organizers _____ offered him to perform many shows in the same city but he _____ rejected them. Although these shows _____ brought him name and fame but he _____ always been very selective about his choice of shows. He _____ travelled abroad to give many stage performances.

b) **The following passage has not been edited. There is an error in each line. Write the incorrect word and the correction in the space provided.**

A fox fell into a deep well and could not found 1) _____
a way to go out. A thirsty goat came to the same well to drink 2) _____
"Friend Fox", the goat say in surprise, 3) _____
" What are you do there?" The fox 4) _____
think it best to conceal his unhappy plight. 5) _____

विषय : हिन्दी

प्रश्न 1 किसी भी घर के मुखिया से मिलकर उनकी पारिवारिक तथा कार्यक्षेत्र संबंधी समस्याओं के बारे में जानकारी एकत्रित कर उसके निवारण के उपाय लिखिए।

प्रश्न 2 किसी ऐसी घटना का वर्णन करो , जब आपने किसी जरूरतमंद की निःस्वार्थ भाव से मदद की हो।

प्रश्न 3 'निर्धनता अभिशाप नहीं' विषय पर लेख लिखो।

प्रश्न 4 कबीर व रहीमदास जी पाँच-पाँच दोहे कंठस्थ करो ।

प्रश्न 5 व्याकरण पुस्तक से व्याकरण पुस्तिका में क्रमशः निम्न शब्द लिखकर कंठस्थ करें।

पठित पाठाधारित – मुहावरे

पठित पाठाधारित – पर्यायवाची

पठित पाठाधारित – विलोम शब्द

प्रश्न 6 प्रतिदिन एक पृष्ठ सुलेख लिखो ।

SUB: MATHEMATICS

- Write $\frac{3}{13}$ in decimal form and say what kind of decimal expansion it has?
- Express $2.\overline{93}$ in the form p/q , where p and q are integers and $q \neq 0$.
- If both $x - 2$ and $x - \frac{1}{2}$ are the factors of polynomial $px^2 + 5x + r$. Show that $p/r = 1$.
- Simplify the following by rationalizing the denominator. $\frac{7\sqrt{3} - 5\sqrt{2}}{\sqrt{48} + \sqrt{18}}$
- If $a = \frac{3 - \sqrt{5}}{3 + \sqrt{5}}$ and $b = \frac{3 + \sqrt{5}}{3 - \sqrt{5}}$, find $a^2 - b^2$.
- If $a = \frac{3 + \sqrt{7}}{2}$, then find the value of $a^2 + \frac{1}{a^2}$.
- If $\frac{5 + \sqrt{3}}{5 - \sqrt{3}} = a + b\sqrt{6}$, find the values of a and b .
- If $a = 1 - \sqrt{2}$, find $\left(a - \frac{1}{a}\right)^3$.
- If $a + b + c = 9$, $a^2 + b^2 + c^2 = 35$, find the value of $a^3 + b^3 + c^3 - 3abc$
- Name the quadrants and axis in which the following points lie: (0, -4), (2, -4), (-7, 6) and (2, 0).
- State Euclid's axioms and postulates. Also, state playfairs axiom.
- Three vertices of a square are P(1,0), Q(4, 0) S(1,3). Plot the points. Also, find the coordinates of the missing vertex R and area of figure PQRS.
- In the given figure, $\angle Q > \angle R$ M is a point on QR such that PM is the bisector of $\angle QPR$. If the perpendicular from P on QR meets QR at N, prove that $\angle NPM = \frac{1}{2}(\angle Q - \angle R)$.
- The bisectors of interior angles ABC and ACB intersect each other at point O. Prove that $\angle BOC = 90^\circ + \frac{1}{2}\angle A$
- AOB is a line, OP bisects $\angle BOC$ and OQ bisects $\angle AOC$. show that $\angle POQ$ is a right angle. What value of x would make AOB a line, if $\angle AOC = 4x$ and $\angle BOC = 6x + 30^\circ$.
- Solve graphically: $4x - 5y - 20 = 0$, $3x + 5y - 15 = 0$. Determine the vertices of the triangle formed by the lines, representing the above equations, and the y-axis.
- Draw the graph of the line $x - 2y = 3$. From the graph, find coordinates of the point when
(i) $x = 5$, (ii) $y = 0$
- Find the value of p , if $(x + 1)$ is a factor of polynomial $2x^3 - 2x^2 + x + p$.
- Find the values of p and q so that $(x + 2)$ and $(x - 1)$ are factors of the polynomial $x^2 + 10x + px + q$
- Factorise : (a) $1 - 2ab - a^2 - b^2$ (b) $x^3 - 27y^3 + 8z^3 + 18xyz$ (c) $x^3 - 8x^2 + 17x - 10$
(d) $x^6 - y^6$ (e) $2x^2 + 3\sqrt{3}x + 3$

SCIENCE

- Calculate the average speed travelled by the bus if the bus travels 120 km in 5 hours
- A car starts from rest and acquires a velocity of 54 km h^{-1} in 2 minutes. Find (i) the acceleration (ii) distance travelled by the car during this time, assuming the motion of car is uniform.

- 3) A bus starting from rest accelerates in a straight line in a constant rate of 3ms^{-2} for 8 seconds . Calculate the distance travelled by the bus during this time interval.
- 4) An athlete completes one round of a circular track of diameter 200 m in 40 seconds. What will be the distance covered and displacement at the end of two minutes and 20 seconds.?
- 5) A child drops a ball from a height of 10m. Assuming that the velocity increases uniformly at the rate of 10ms^{-2} . Find i) the velocity with which the ball strikes the ground (ii) time taken by the ball to reach the ground
- 6) An artificial satellite is moving in a circular orbit of radius 36000 km. If it takes 24 hours to complete one orbit around the earth find its linear speed.
- 7) A motor boat starting from rest on a lake accelerates in a straight line at a constant rate of 30ms^{-2} for 80 seconds. How far does the boat travel during this time.
- 8) A driver applies the brakes and slows down the velocity of bus from 80km h^{-1} . to 60km h^{-1} in 5 seconds. Calculate the acceleration of the bus.
- 9) The driver of a train A travelling at a speed of 54km h^{-1} applies brakes and retards the train uniformly. The train stops in 5 seconds. Another train B is travelling on parallel track with speed of 36km h^{-1} . He applies break and train retards uniformly. The train B stops in 10 seconds . Plot speed – time graph for both trains on same graph. Also calculate the distance travelled by each train after brakes are applied.
- 10) A stone is dropped down a deep well from rest. The well is 50 m deep. How long will it take to reach the bottom of the well.?
- 11) Draw a neat labelled diagram of a plant cell
- 12) Differentiate between eukaryotic and prokaryotic cell
- 13) Define membrane biogenesis and plasmolysis
- 14) What are the functions of mitochondria, ER and vacoules
- 15) Draw and explain classification of states of matter
- 16) Differentiate between the three states of matter on the basis of following
 - (i) Shape and volume
 - (ii) Compressibility
 - (iii) Rigidity
 - (iv) Fluidity
 - (v) Density
 - (vi) Filling a container

Sub:Ssc

1. What were the causes of French revolution.
2. Who were Jacobins.Who was their leader?
3. Write two implications of latitudinal and longitudinal extent of India?
4. Mention four merits and four demerits of democracy.
5. Write short note on democracy expansion.
6. Write four features about the each physical division of India.
7. Define the following :
 - Babbar

- Barchans
- Subcontinent
- Martial law
- Veto power
- Global democracy

8. Enrichment Activity

Do map skill activity of chapter1 and chapter2 of geography text book on separate file.

COMPUTER

Design Web pages for:

1. Lab Activity 1 and 2. (Pg 78 & 79)
2. Project Time 1 and 2 . (Pg 79)

Print out of the HTML code along with output of the above given web pages to be submitted in a file.

NOTE : Revise the syllabus of UT-1 for all the subjects.