

ARMY PUBLIC SCHOOL JAMMU CANTT
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HOLIDAYS HOMEWORK FOR SUMMER BREAK
CLASS X (2022-23)

ENGLISH

Instructions-

- a. *Holidays homework is to be done on a separate notebook.*
- b. *Homework should be done in orderly manner in neat and clean handwriting.*

1. WRITING SECTION

1. You are Rohit/Reena, a resident of 481/D, Trikuta Nagar, Jammu. Write a letter to the Superintendent of police showing your concern for the rise in the rate of violent incidents, robberies in your city . Also request him to take immediate steps to restore the confidence of common people in the effectiveness of policing.
2. You are Mayank/Mayuri. Write an article on “Make the most of what you have.” (Word limit: 100--150 words).
3. You are the In-charge of the Medical Section of Gyanodaya Public School, Nehru Vihar, Alwar. Your stock of medicines is about to finish. Write a letter to the Director of Jammu Medicare, Delhi, ordering medical items like glucose, crocin, bandages, tincture, pain-healers, ointments etc. Ask for discount on bulk order .Invent other necessary details. (100-120 words) .

2.CREATIVE/THINKING SECTION

1. Would you agree that the “depths of oppression” create “heights of character”? How does Mandela illustrate this? Can you add your own examples to this argument ?
2. Do you think there are also parents like Mrs Pumphrey? Explain with example.(Ch-1 A Triumph of Surgery)

3.DICTIONARY WORK

Refer the dictionary and write the new words and their meanings from Supplementary Reader of Chapter 1 A Triumph of Surgery and Ch-2 The Thief’s Story.

4. GRAMMAR /UNDERSTANDING SECTION :

- 1.Do two Gap Filling Exercises.(Integrated grammar-modals, subject verb agreement and tenses)
- 2.Do two Omission Exercises.(Integrated grammar-modals, subject verb agreement and tenses)
- 3.Do two Editing Exercises.(Integrated grammar-modals, subject verb agreement and tenses)

5. LITERATURE SECTION:

Revise the syllabus done in the class & prepare yourself for the assessment to be held in July.

ART INTEGRATION PROJECT

Compare and contrast cultures, languages, dishes and costumes of Jammu and Kashmir with Tamil Nadu. Paste pictures with a nice and brief write up. Do it on a separate project file.

हिन्दी

पाठ्यपुस्तक स्पर्श—

- 1) पाठ ' बड़े भाई साहब 'से बीस अतिरिक्त प्रश्नोत्तर (25– 30)शब्दों में लिखो ।
- 2) मीरा बाई के पद का मूल भाव विस्तारपूर्ण ढंग से लिखो ।
- 3) कबीर की साखी पर आधारित अतिरिक्त दस प्रश्नों को छाँटकर उनके उत्तर (25–30) शब्दों में लिखो ।

पूरक पुस्तक —संचयन

- 4) पाठ हरिहर काका पढ़कर उसके प्रश्नोत्तर कॉपी पर लिखो ।

व्याकरण —

- 5) व्याकरण —पदबंध के हर भेद पर आधारित दस-दस उदाहरण कॉपी पर लिखो और अभ्यास करो ।
- 6) मुहावरे — पाठ 'बड़े भाई साहब 'से संबंधित मुहावरे याद करो ।

लेखन भाग—

1) विद्यालय की प्रयोगशाला में प्रयोग करते हुए आपसे कुछ सामान टूट गया है, जिसके कारण विज्ञान शिक्षिका ने आप पर एक हजार रुपये का जुर्माना कर दिया है। इसे माफ़ कराने का निवेदन करते हुए प्रार्थना पत्र लिखिए।

2) बस में यात्रा करते हुए आपका एक बैग छूट गया था जिसमें जरूरी कागज और रुपये थे। उसे बस कंडक्टर ने आपके घर आकर लौटा दिया। उसकी प्रशंसा करते हुए परिवहन निगम के अध्यक्ष को पत्र लिखिए।

3) किसी प्रतिष्ठित दैनिक समाचार –पत्र के संपादक को सड़क दुर्घटनाओं को रोकने के लिए सुझाव देते हुए पत्र लिखो।

नोट— संपूर्ण गृहकार्य सही कम से एक अलग कॉपी पर करना है।

कला एकीकृत परियोजना (ART INTEGRATION PROJECT)

तामिलनाडू की कला एवं संस्कृति का तुलनात्मक अध्ययन जम्मू कश्मीर से करते हुए चित्र एवं उदाहरण द्वारा उसका वर्णन करो।

नोट—: इकाई परीक्षा एक का संपूर्ण पाठ्यक्रम को याद करके अभ्यास करो ।

MATHEMATICS

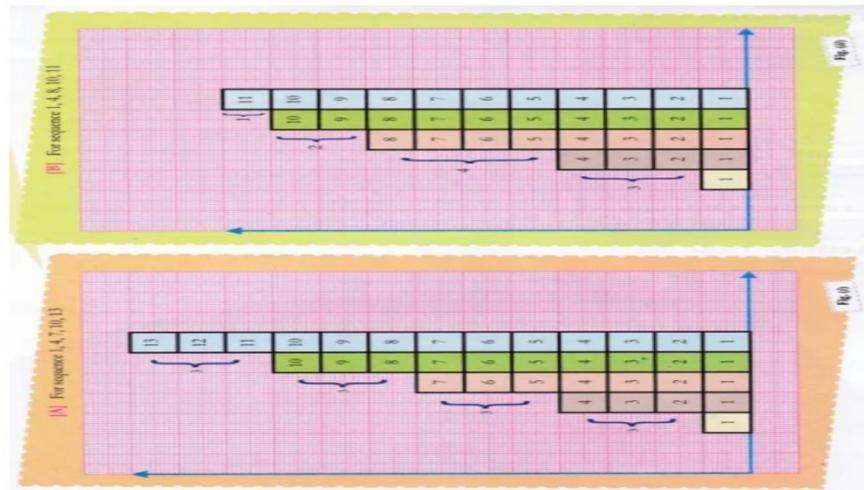
1. Find whether decimal expansion of $11/64$ is a terminating or non-terminating decimal. If it terminates, find the number of decimal places its decimal expansion has.
2. Prove that the product of any three consecutive positive integers is divisible by 6.
3. Show that $(\sqrt{3}+\sqrt{5})^2$ is an irrational number.
4. Show that 9^n can not end with digit 0 for any natural number n.
5. Find the zeroes of the quadratic polynomial $3x^2 - 2$ and verify the relationship between the zeroes and the coefficients.
6. An NGO decided to distribute books and pencils to the students of a school running by some other NGO. For this they collected some amount from different people. The total amount collected is represented by $4x^4 + 2x^3 - 8x^2 + 3x - 7$. From this fund each student received an equal amount. The number of students, who received the amount, is

represented by $x - 2 + 2x^2$. After distribution, $5x - 11$, amount is left with the NGO which they donated to school for their infrastructure. Find the amount received by each student from the NGO. What value has been depicted here?

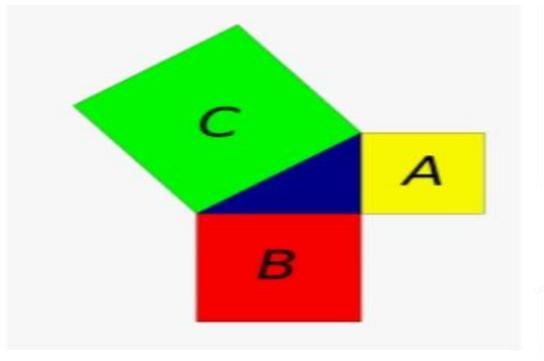
7. Obtain all other zeroes of the polynomial $x^4 - 17x^2 - 36x - 20$, if two of its zeroes are $+ 5$ and $- 2$.
8. If one zero of the quadratic polynomial $f(x) = 4x^2 - 8kx + 8x - 9$ is negative of the other, then find the zeroes of $kx^2 + 3kx + 2$.
9. (a) Find the point on x-axis, which is equidistant from points $(7, 6)$ and $(9, 4)$.
(b) Find the point on y-axis, which is equidistant from points $(5, 2)$ and $(-4, 3)$
10. Determine graphically whether the following pair of linear equations
 $2x - 3y = 5$; $3x + 4y = - 1$ has
(i) a unique solution
(ii) infinitely many solutions or
(iii) no solution
11. In a two digit number, the digit in the unit place is twice of the digit in the tenth place. If the digits are reversed, the new number is 27 more than the given number. Find the number.
12. The owner of a taxi company decides to run all the taxi on CNG fuels instead of petrol/diesel. The taxi charges in city comprises of fixed charges together with the charge for the distance covered.
For a journey of 13 km, the charge paid is ₹ 129 and for journey of 22 km, the charge paid is ₹ 210.
(i) What will a person have to pay for travelling a distance of 32 km?
(ii) Why did he decide to use CNG for his taxi as a fuel?
13. Determine the value of m and n so that the following pair of linear equations have infinite number of solutions.
 $(2m - 1)x + 3y = 5$;
 $3x + (n - 1)y = 2$
14. The age of the father is twice the sum of the ages of his 2 children. After 20 years, his age will be equal to the sum of the ages of his children. Find the age of the father.
15. $\frac{2x}{x - 3} + \frac{1}{2x + 3} + \frac{3x + 9}{(x - 3)(2x + 3)} = 0, \quad x \neq 3, -\frac{3}{2}$
16. Verify the $\frac{1}{2}, 1, -2$ are zeroes of cubic polynomial $2x^3 + x^2 - 5x + 22x^3 + x^2 - 5x + 2$. Also verify the relationship between the zeroes and their coefficients.
17. If p and q are zeroes of the quadratic polynomial $x^2 - (k+6)x + 2(2k-1)x^2 - (k+6)x + 2(2k-1)$. Find the value of k if $2(p+q) = pq$ and $2(p+q) = pq$
18. Determine two consecutive negative even integers whose product is 24?
19. A train travels at a certain average speed for a distance of 63 km and then travels a distance of 72 km at an average speed of 6 km/h more than its original speed. If it takes 3 hours to complete the total journey, what is its original average speed?
20. A motor boat whose speed is 18 km/h in still water takes 1 hour more to go 24 km upstream than to return downstream to the same spot. Find the speed of the stream.

ACTIVITIES(DO THESE ACTIVITIES WITH THE HELP OF CUTTING AND PASTING WORK IN YOUR MATHS LAB MANUAL)

1. To verify given sequence is in arithmetic progression by paper cutting , folding and pasting method.



2. To verify Pythagoras theorem.



Comparative study of J&K with Tamil Nadu in terms of population and language.

SCIENCE

PHYSICS

1. A concave lens has focal length of 20cm. At what distance from the lens a 5cm tall object be placed so that it forms an image at 15cm from the lens? Also calculate the size of the image.
2. An object 50 cm tall is placed on the principal axis of a convex lens. Its 20 cm tall image is formed on the screen placed at a distance of 10 cm from the lens. Calculate the focal length of the lens.
3. Draw the ray diagram in each case to show the position and nature of the image formed when the object is placed:
 - a) At the centre of curvature of a concave mirror
 - b) At 2F of a convex lens

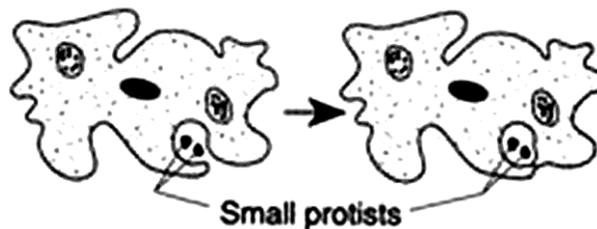
- c) Between F and P of the concave mirror
 - d) At infinity in convex mirror
4. A 10mm long all pins is placed vertically in front of a concave mirror. A 5mm long image of the all pin is formed at 30cm in front of the mirror . Find the focal length of the mirror.
 5. A spherical mirror produces an image of magnification -1 on a screen at a distance of 50cm from the mirror.
 - A) Write the type of the mirror.
 - B) Find the distance of the image from the object.
 - C) What is the focal length of the mirror?

CHEMISTRY

1. Explain following chemical reactions with 2 equations in each-
 - a. Combination
 - b. Decomposition
 - c. Displacement
 - d. Double displacement
 - e. Redox
 - f. Exothermic
 - g. Endothermic
2. Balance the following chemical reactions
 - a. $\text{MnO}_2 + \text{HCl} \longrightarrow \text{MnCl}_2 + \text{Cl}_2 + \text{H}_2\text{O}$
 - b. $\text{BaCl}_2 + \text{Al}(\text{SO}_4)_3 \longrightarrow \text{BaSO}_4 + \text{AlCl}_3$
 - c. $\text{Al} + \text{CuCl}_2 \longrightarrow \text{AlCl}_3 + \text{Cu}$
 - d. $\text{PbO} + \text{HCl} \longrightarrow \text{PbCl}_2 + \text{H}_2\text{O}$
3. Draw reactivity series and explain it with 3 examples.
4. Explain an activity to show the presence of hydrogen gas.
5. Explain an activity to show the presence of carbon dioxide gas.

BIOLOGY

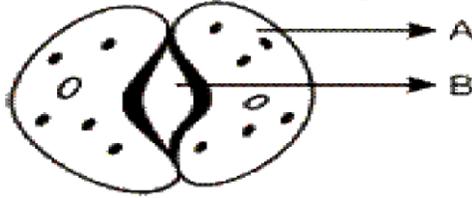
1. Draw well labelled diagram of human digestive system.
2. Explain how the nutrition takes place in different parts of human alimentary canal.
3. What is ATP?
4. Find out the information on light and dark reaction in plants.
5. Draw a flow chart showing different types of respiration in organisms.(Refer to your science textbook chapter 6.
6. Which activity is illustrated in the diagram of an Amoeba shown below?



7. A student covered a leaf from a destarched plant with a black paper strip and kept it in the garden outside his house in fresh air. In the evening, he tested the covered

portion of the leaf for presence of starch. What the student was trying to show?
Comment.

8. The parts shown as A and B in the given diagram are



PRACTICALS TO WRITE FROM MANUAL

- 1 EXPERIMENT-1,2,6,7,9&10

ACTIVITY

1. PPT on types of chemical reactions. (R.NO-1-10)
2. Clay models of different life processes (R.NO-11-20)
3. Photographs of plants in the absence of the different raw material of photosynthesis (R.NO-21-30)

NOTE *To complete the notebooks for CH-1,2, 6,10 & 11 Textbook exercises, extra questions given should be done in the notebooks. Notebooks should be completed in all aspects like index,margins ,dates, content, diagrams etc. Students to revise the syllabus of UT-1.*

SOCIAL SCIENCE

- I. **Write at least ten MCQ'S or very short type or objective type questions from following chapters:**
 - a. History: 1-Nationalism in Europe
 - b. Geography:1Resources and Development
 - c. Economics :1 Development
 - d. Political Science:1 Power Sharing
- II. **Revise all the above chapters.**

Do all Source based questions given in the textbook from the chapters done in the class.

ACTIVITY

Every student has to compulsorily undertake any one project on the following topics:

- Consumer Awareness
 - Social Issues
 - Sustainable Development
1. **Objective:** The overall objective of the project work is to help students gain an insight and pragmatic understanding of the theme and see all the Social Science disciplines from interdisciplinary perspective. It should also help in enhancing the Life Skills of the students. Students are expected to apply the Social Science concepts that they have learnt over the years in order to prepare the project report.

NOTE

The Project Report should be handwritten by the students themselves.

SANSKRIT

- चतुर्दश माहेश्वर सूत्राणां एवं दश प्रत्याहाराणां जश् झल , यण्, एच्, ऋक्, इक्, हल्, अच्, अक्, अण्) टी निर्माणम्, पी, पी
- शुचि पर्यावरणम् संबंधित चार्ट निर्माणम्
- सन्धि एवं तस्य भेदानां स्मरणं एवं लेखनम् टिप्पणी पुस्तिकायाम्
- पंच सुभाषितानां पीटी निर्माणं हिन्दी अर्थ सहितम्, पी,
- संस्कृत हिन्दी अनुवादस्य दश वाक्यानां निर्माणं कुर्वन्तु

ARTIFICIAL INTELLIGENCE

1. Create a 4 W Canvas for people living at a remote place and facing a problem of transportation. Prepare a complete problem statement template using 4W Canvas.
2. Make a PowerPoint presentation showing various project life cycle stages.
3. Make a e-collage showing various applications of AI around us.

NOTE:

Students to revise the syllabus of UT 1

THE END