

ARMY PUBLIC SCHOOL, KANPUR
HOLIDAY HOMEWORK (2023-24)
Class X
SUBJECT: - ENGLISH

NOTE- All the holiday homework should be done in a separate file. Homework done in classroom notebook will not be accepted.

Q1. Read the chapter “Glimpses of India- Bakers from Goa, Tea from Assam, Coorg”. Draw a table with three columns.

	Bakers from Goa	Tea from Assam	Coorg
Staple food			
Dresses			
Natural vegetation			
Historical background			
Route			

ART INTEGRATED PROJECT: -

Q2. Write a BIO SKETCH of the famous poet / writer of Arunachal Pradesh.

Q3 Write a chapter review of “The Diary of Anne Frank”.

SUBJECT: - HINDI

1. किसी एक विषय पर विज्ञापन तैयार कीजिए।
2. देश प्रेम विषय पर कविता लिखिए।
3. अपनी रुचि अनुसार किसी भी एक खेल के विषय में विस्तार से लिखिए।
4. हरिहर काका कहानी की तरह कोई अन्य कहानी लिखिए और उससे मिलने वाली शिक्षा का भी उल्लेख कीजिए।

नोट- उपर्युक्त कार्यों के लिए आवश्यकतानुसार चित्रों का प्रयोग भी करिए।

और इसी से एक पोर्टफोलियो तैयार करिए जिसमें प्रथम पृष्ठ आपके अपने बारे में होना चाहिए।

SUBJECT: - SCIENCE

1. Make a PPT on any topic from the Chapter: Management of Natural Resources (Minimum 20 slides)

2. This will be assessed as your Portfolio (Internal Assessment)

3. Revise the chapters completed in the classes thoroughly for UT-1

SUBJECT-SOCIAL SCIENCE

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

Consumer Awareness

OR

Social Issues

OR

Sustainable Development

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.

SUBJECT-MATHS

Solve these questions in separate copy: -

1. Prove that $\sqrt{2}$ is irrational.
2. Prove that $5-3\sqrt{2}$ is irrational.
3. Find the largest number which divides 2053 and 967 and leaves a remainder of 5 and 7 respectively.
4. Two tankers contain 850 litres and 680 litres of kerosene oil respectively. Find the maximum capacity of a container which can measure the kerosene oil of both the tankers when used an exact number of times.
5. In a morning walk, three people step off together. Their steps measure 80 cm, 85 cm, and 90 cm respectively. What is the minimum distance each should walk so that all can cover the same distance in complete steps?
6. Find the least number which when divided by 12, 16, 24 and 36 leaves a remainder 7 in each case.
7. The length, breadth and height of a room are 825 cm, 675 cm and 450 cm respectively. Find the longest tape which can measure the three dimensions exactly.
8. Find the zeroes of the quadratic polynomial $6x^2 - 7x - 3$
9. and verify the relationship between the zeroes and the coefficients.
10. Find the zeroes of the polynomial $x^2 + \frac{1}{6}x - 2$ and verify the relation between the coefficients and the zeroes of the polynomial.
11. Find the zeroes of the quadratic polynomial $x^2 + 5x + 6$ and verify the relationship between the zeroes and the coefficients.
12. Find a quadratic polynomial, the sum and product of whose zeroes are 2 and 3
13. If one zero of the quadratic polynomial $x^2 + 3x + k$ is 2, then find the value of k
14. Solve for x and y:
 $11x + 15y + 23 = 0$; $7x - 2y - 20 = 0$.
15. Solve for x and y:
 $2x + y = 7$; $4x - 3y + 1 = 0$.
16. Find the value of k, so that the following system of equations has no solution: $3x - y - 5 = 0$; $6x - 2y - k = 0$
17. Find the value of k, so that the following system of equations has a non-zero solution:
18. $3x + 5y = 0$; $kx + 10y = 0$.
19. Solve the following system of linear equations graphically:
 $2x - 3y - 17 = 0$, $4x + y - 13 = 0$
Shade the region bounded by the above lines and x-axis.
20. Solve the following system of linear equations graphically: $2x + 3y - 4 = 0$, $3x - y + 5 = 0$
Shade the region bounded by the above lines and y-axis.

CASE STUDY 1

An asana is a body posture, originally and still a general term for a sitting meditation poses, and later extended in hatha yoga and modern yoga as exercise, to any type of pose or position, adding reclining, standing, inverted, twisting, and balancing poses. In the figure, one can observe that poses can be related to representation of quadratic polynomial.

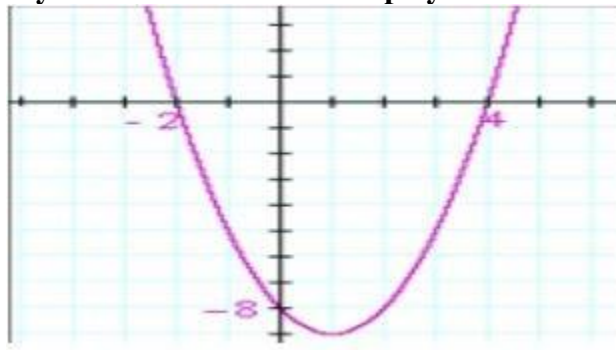
1. The shape of the poses shown is

- a) Spiral
- b) Ellipse
- c) Linear
- d) Parabola

2. The graph of parabola opens downwards, if

- a) $a \geq 0$
- b) $a = 0$
- c) $a < 0$
- d) $a > 0$

3. In the graph, how many zeroes are there for the polynomial?



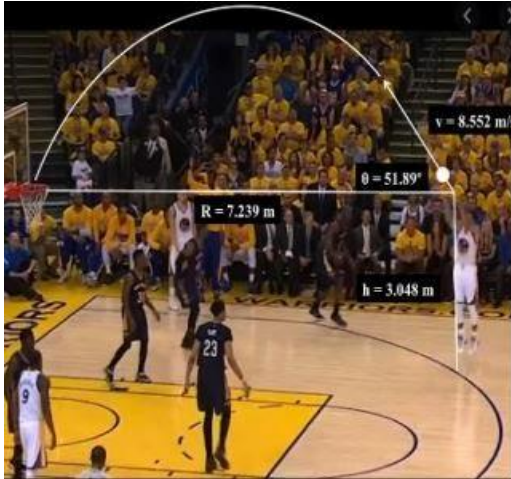
- a) 0
- b) 1
- c) 2
- d) 3

4. The two zeroes in the above shown graph are

- a) 2, 4
- b) -2, 4
- c) -8, 4
- d) 2, -8

CASE STUDY 2

Basketball and soccer are played with a spherical ball. Even though an athlete dribbles the ball in both sports, a basketball player uses his hands, and a soccer player uses his feet. Usually, soccer is played outdoors on a large field and basketball is played indoor on a court made out of wood. The projectile (path traced) of soccer ball and basketball are in the form of parabola representing quadratic polynomial.



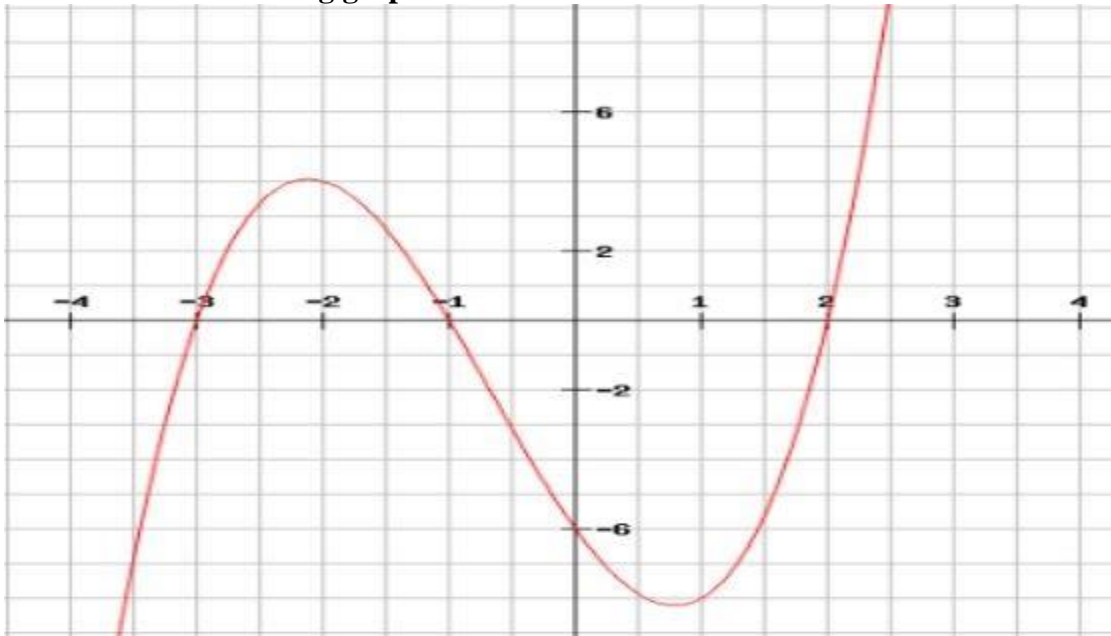
1. The shape of the path traced shown is

- a) Spiral
- b) Ellipse
- c) Linear
- d) Parabola

2. The graph of parabola opens upwards, if

- a) $a = 0$
- b) $a < 0$
- c) $a > 0$
- d) $a \geq 0$

3. Observe the following graph and answer



In the above graph, how many zeroes are there for the polynomial?

- a) 0
- b) 1
- c) 2
- d) 3

4. The three zeroes in the above shown graph are

- a) 2, 3,-1
- b) -2, 3, 1
- c) -3, -1, 2
- d) -2, -3, -1

5. What will be the expression of the polynomial?

- a) $x^3 + 2x^2 - 5x - 6$
- b) $x^3 + 2x^2 - 5x + 6$
- c) $x^3 + 2x^2 + 5x - 6$
- d) $x^3 + 2x^2 + 5x + 6$

ACTIVITY

Write and learn all formulas from chapter 1 to 5 in A4 sheet.

SUBJECT: INFORMATION TECHNOLOGY

ACTIVITY 1. Create a table of contents for topics of any subject of your choice.

QUESTIONS:

1. Create a table of contents for your project.
2. Create a document in Word on a topic of your choice of a minimum of 10 pages.
3. Format the document with various fonts (minimum 12, maximum 15) and margins (Minimum 2, maximum 4). The document should be included.
 - a) A bulleted or numbered list
 - b) A table containing relevant details
- c) A picture of lion using clip art gallery
- d) An example of word art
- e) A header with student name & date
- f) A footer with pagination Create a table of contents for this document.

ACTIVITY 2. Mail Merge

1. Type a letter inviting friends and/or family to a party you are hosting. For example, you can host a birthday party or your parents' anniversary party. You pick the event. Your letter will serve as your form letter. Save your letter as Mail Merge Letter.
2. Format the letter as left aligned (block letter) with .5" or 1" margins depending on the length.
3. Make sure your address is listed at the top of the document. Then insert two blank lines and put the date in the month, date, year format. Then enter four blank lines and leave space for your merge fields. Example: Title First Name Last Name Address 1 Address 2 City, State Pin Code (Eventually you will be entering your merge fields to replace this information.)
4. Create a data source with the names and addresses of at least five families in which you wish to mail the letters. Create fields such as: title, first name, last name, address 1, address 2, city, state, and pin code. Or make appropriate field names of your choice but make sure you include the address information. Save your data source as Mail Merge Data.
5. Now, return to your main document (Mail Merge Letter) and set it as the form document and identify your data source.

6. Enter your merge fields into your main document. Merged fields should be used for the recipients address and after Dear.
7. After your merge fields are entered merge the document and save it. Save the merged document as Mail Merge Merged.
8. Create labels inserting your merged fields for the recipient's name and address. Save the merged labels as Mail Merge Labels.
9. Print your form letter, one merged letter, and one label.

ACTIVITY 3

QUESTIONS:

1. A student is planning her goals about the marks she should attain in the forthcoming Semester 4 examinations in order to achieve a distinction (75%). Assuming that examination of each subject is for 100 marks, her marks of the previous semesters are given as below.

	Subject1	Subject2	Subject3	Subject4
Semester1	82	67	53	87
Semester2	88	78	76	69
Semester3	89	85	91	67

Find out how many marks she should obtain in 4th semester to secure distinction.

2. A business owner wants to decide if he should try to increase the sales of a product or price of an existing product in order to increase the profit by 10%.

Current Sales	82
Cost per Unit	75
Profit per unit	12

The owner believes that he can either increase sales by 5 units without incurring additional costs while the price can be increased by Rs 8 without affecting the sales.

3. The current profit situation of a business owner is as follows.

Current Sales	82
Cost per Unit	75
Profit per unit	12

Using the scenario manager, find the effect of in the new profit in case of the following situations.

- a. Sales = 70 and cost = 80
- b. Sales = 90 and cost = 72
- c. Sales = 85 and cost = 80
- d. Sales = 65 and cost = 80

SUBJECT: PHYSICAL ACTIVITY TRAINER

- Make a Yoga File.
- Make One major Game (Football, Basketball, Athletics , Handball & Badminton_) File with measurement

SUBJECT-INTRODUCTION TO FINANCIAL MARKET

Q.1- Worrying about matters we can do nothing or worrying for no reason at all is a sign of internal stress. Explain in 100 words. (Employability skill)

Q2-What makes a great business Idea? Explain one such business idea which you want to execute. (Employability skill) (250 words)