

ADARSH PUBLIC SCHOOL

HOLIDAYS' ASSIGNMENT

SESSION 2018-19

CLASS-X

INSTRUCTIONS :

- Do the work in respective notebooks.
- Revise the syllabus for Pre Mid Assessment.

ENGLISH

1. Attempt the following questions from the CBSE papers for the year 2018, 2017, 2016 & 2015.

- (a) Unseen Comprehension (b) Letter to Editor (c) Story Writing
(d) Editing / Omission (e) Rearrangement

2. WORKBOOK

Do all the Integrated Grammar Practice Exercises from 1 to 5.

3. Main Course Book

Read chapter 1, 2 and 3.

4. NOVEL – THE STORY OF MY LIFE. (Read the entire novel)

Write the character sketch of the following :

- (a) HELEN KELLER (b) ARTHUR KELLER (c) KATE KELLER
(d) MILDRED KELLER (e) ANNE SULLIVAN (f) MR. ANAGNOS
(g) DR. ALEXANDER GRAHAM BELL

5. Answer the following in 100-120 words :

- (a) The story 'Mrs. Packletide's Tiger' emphasizes that we should not be jealous of others' success and joy otherwise we will lose our own joy. Elaborate.
- (b) The prospect of earning the thousand rupees had stimulated the sporting and commercial instinct of the villagers. It suggests that money makes the man go. Elaborate.
- (c) The poet Shakespeare says that everything in this world is transitory except for the verses. Elaborate.
- (d) Their selfless action brought a new nobility to human life, gave promise of a greater hope for human society. The two boys didn't lose hope and worked hard to make their life better. Elaborate.
- (e) The Nightingale was very talented but she lacked self confidence. Based on your reading of the poem write a paragraph on the topic : 'Self Confidence is the most important quality to become successful in life'.

हिन्दी

1. सूचना लेखन -

- क. ग्रीष्मकालीन अवकाश में एक शैक्षणिक भ्रमण कक्षा दसवीं के छात्रों के लिए आयोजित किया जा रहा है । विद्यालय के सूचना पट्ट हेतु सूचना तैयार कीजिए ।
- ख. कक्षा नवी के छात्र अंकित के विद्यालय परिसर में, रुपए गुम हो गए हैं । इस हेतु सूचना तैयार कीजिए ।
- ग. आपके विद्यालय में निबंध लेखन प्रतियोगिता का आयोजन हो रहा है । इस हेतु सूचना तैयार कीजिए ।

2. निम्नलिखित विषयों पर अनुच्छेद लिखिए ।

- क. अच्छा स्वास्थ्य - एक वरदान
ख. ऊर्जा संरक्षण
ग. दया धर्म का मूल है
घ. पृथ्वी दिवस

3. विज्ञापन

क. 'जल ही जीवन है' जल संरक्षण के प्रोत्साहन हेतु एक विज्ञापन तैयार कीजिए ।

ख. 'कथक - केन्द्र' हेतु एक विज्ञापन तैयार कीजिए ।

ग. बच्चों की नई पत्रिका 'दादी माँ की चुनमुन' के लिए विज्ञापन तैयार कीजिए ।

4. संवाद लेखन

क. 'बढ़ती महँगाई' पर दो महिलाओं के बीच संवाद लिखिए ।

ख. शहर में आए दिन होने वाली सड़क दुर्घटनाओं को लेकर दो मित्रों के बीच संवाद लिखिए ।

ग. मोबाइल फ़ोन से होने वाले लाभ और हानि के संबंध में पिता व पुत्र के बीच हुई वार्तालाप को लिपिबद्ध कीजिए ।

5. पत्र लेखन

क. छात्रवृत्ति हेतु अपने प्रधानाचार्य को पत्र लिखिए ।

ख. आपके नाम से प्रेषित पाँच हजार रुपये के मनीआर्डर की प्राप्ति न होने का शिकायत पत्र अधीक्षक, पोस्ट ऑफिस को लिखिए ।

ग. बढ़ते अपराधों पर चिंता व्यक्त करते हुए किसी समाचार पत्र के संपादक को पत्र लिखिए ।

6. पठित पाठों पर आधारित प्रश्नोत्तर कंठस्थ करें ।

MATHEMATICS

1. If the sum of the squares of zeroes of the polynomial $6x^2 + x + K$ is $\frac{25}{36}$, find the value of K.

2. If α, β are zeroes of the quadratic polynomial $2x^2 - 3x + 7$, evaluate

(a) $\alpha^2 + \beta^2$ (b) $\alpha^3 + \beta^3$ (c) $\frac{1}{2\alpha-3} + \frac{1}{2\beta-3}$

3. If the remainder on dividing $x^3 + 2x^2 + Kx + 3$ by $x - 3$ is 21, find the quotient and the value of K. Hence find the cubic polynomial $x^3 + 2x^2 + Kx - 18$.

4. Find all the zeros of $3x^4 - 15x^3 + 17x^2 + 5x - 6$ if two of its zeros are $\pm \frac{1}{\sqrt{3}}$.

5. For which value of 'a' and 'b' are the zeroes of $g(x) = x^3 + 2x^2 + a$, also the zeroes of the polynomial $f(x) = x^5 - x^4 - 4x^3 + 3x^2 + 3x + b$? Which zeroes of $f(x)$ are not the zeroes of $g(x)$?

6. Determine graphically, the vertices of the triangle formed by the lines $y = x$, $3y = x$ and $x + y = 8$.

7. Draw the graphs of the equations $x=3$, $x=5$ and $2x - y - 4 = 0$. Also find area of the quadrilateral formed by the lines and the x -axis.

8. Draw the graph of the pair of linear equations $2x + y = 4$ and $2x - y = 4$. Write the coordinates of the vertices of the triangle formed by these lines and the y axis. Also find the area of this triangle.

9. Solve for x and y

(i) $\frac{x}{a} + \frac{y}{b} = a + b$, $\frac{x}{a^2} + \frac{y}{b^2} = 2$

(ii) $x + y = 3.3$

$$\frac{0.6}{3x-2y} = -1$$

(iii) $4x + \frac{6}{y} = 15$

$$6x - \frac{8}{y} = 14$$

(iv) $\frac{x}{a} - \frac{y}{b} = a - b$

$$ax + by = a^3 + b^3$$

(v) $\frac{b^2x}{a} - \frac{a^2y}{b} = ab(a + b)$

$$b^2x - a^2y = 2a^2b^2$$

$$\begin{aligned} \text{(vi)} \quad & 2(ax - by) + (a + 4b) = 0 \\ & 2(bx + ay) + (b - 4a) = 0 \end{aligned}$$

$$\begin{aligned} \text{(vii)} \quad & (a - b)x + (a + b)y = a^2 - 2ab - b^2 \\ & (a + b)x + (a + b)y = a^2 + b^2 \end{aligned}$$

$$\text{(viii)} \quad \frac{3a}{x} - \frac{2b}{y} = -5, \frac{a}{x} + \frac{3b}{y} = 2$$

$$\begin{aligned} \text{(ix)} \quad & \frac{a^2}{x} - \frac{b^2}{y} = 0 \\ & \frac{a^2b}{x} + \frac{b^2a}{y} = a + b \end{aligned}$$

$$\begin{aligned} \text{(x)} \quad & 2^x + 3^y = 17 \\ & 2^{x+2} - 3^{y+1} = 5 \end{aligned}$$

$$\begin{aligned} \text{(xi)} \quad & 97x + 103y = 303 \\ & 103x + 97y = 297 \end{aligned}$$

$$\begin{aligned} \text{(xii)} \quad & \frac{8}{2x+y} + \frac{5}{x+2y} = 3 \\ & \frac{12}{2x+y} - \frac{5}{x+2y} = 2 \end{aligned}$$

10. Find the values of p and q for which the following system of linear equations has infinite many solutions

$$2x + 3y = 7, (p + q)x + (2p - q)y = 21$$

11. For what value of K will the following system of linear equations have an infinite number of solutions ?

$$\begin{aligned} & 4x + 3y = 2 \\ & (2K + 3)x + (2K + 1)y = 4(K - 1) \end{aligned}$$

12. Determine the values of a and b for which the following system of linear equations has infinitely many solutions :

$$\begin{aligned} & 3x - (a + 1)y = 2b - 1 \\ & 5x + (1 - 2a)y = 3b \end{aligned}$$

13. For which values of p and q will the following pair of linear equations have infinitely many solutions ?

$$\begin{aligned} & 4x + 5y = 2 \\ & (2p + 7q)x + (p + 8q)y = 2q - p + 1 \end{aligned}$$

14. For which values of a and b, will the following pair of linear equations represent coincident lines ?

$$\begin{aligned} & x + 2y = 1 \\ & (a - b)x + (a + b)y = a + b - 2 \end{aligned}$$

15. The age of father is twice the sum of ages of his two children. After 20 years, his age will be equal to the sum of the age of his children. Find the age of the father.

16. Two numbers are in the ratio 5:6. If 8 is subtracted from each of the numbers, the ratio becomes 4:5. Find the numbers.

17. A number consists of two digits. When it is divided by the sum of digits the quotient is 6 with no remainder. When 9 is subtracted from the number, two digits are reversed. Find the number

18. The ratio of incomes of two persons is 9:7 and ratio of their expenditure is 4:3. If each of them manages to save Rs. 2000 per month, find their monthly incomes.

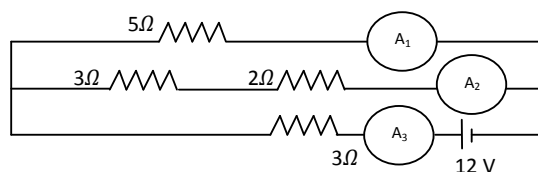
Do the following activities in Practical Note Book

1. To be familiar with an idea of probability of an event through a double colour cards experiment.
2. To obtain the solution of a quadratic equation by completing the square method.

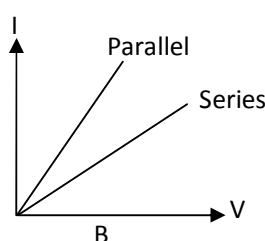
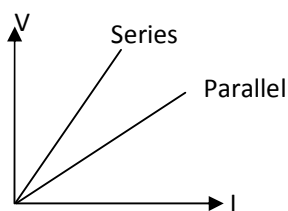
SCIENCE

PHYSICS

1. Is Joule's heating effect always desirable ? Discuss your answers in detail.
2. In the circuit shown below, calculate the current shown by ammeter A_1 , A_2 , A_3



3. Two bulbs A and B are rated 100W-120 V and 10W-120 V respectively. They are connected in parallel across 120 V source. Find the current in each bulb. Which bulb will consume more energy ?
4. Two students perform experiment on series and parallel combinations of two given resistors R_1 and R_2 and plot the following V-I graphs. Which of the graphs is (are) labelled correctly ? Justify.



5. Describe briefly the phenomenon of heat production by an electric current.

CHEMISTRY

1. Why do silver articles turn black when kept in the open for a few days ? Name the phenomenon involved and also name the black substance formed.
2. Why do we store silver chloride in dark coloured bottles ?
3. When the powder of a common 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. Name the metal initially taken in the powder form. Write balanced chemical equations for both the reactions.
- 4 (a) Define a balanced chemical equation. Why should an equation be balanced ?
(b) Write the balanced chemical equations for the following reactions.
 - (i) Phosphorous burns in chlorine to form phosphorus pentachloride.
 - (ii) Burning of Natural Gas.
 - (iii) The process of respiration.
5. Complete the practical file work related to the experiment – To observe the following reactions and classify them into
 - (i) Combination reaction
 - (ii) Decomposition reaction
 - (iii) Displacement Reaction
 - (iv) Double Displacement Reaction
 - (a) Action of water on quick lime.
 - (b) Action of heat on ferrous sulphate crystals.
 - (c) Iron nails kept in copper sulphate solution.
 - (d) Reaction between sodium sulphate and barium chloride solution.

BIOLOGY

1. With the help of activities show that light and carbon dioxide are necessary for photosynthesis.
2. Why is double circulation of blood necessary in human beings.
3. Draw a neat labelled diagram of an excretory unit of a human kidney and label its different parts.
4. Discuss the role of transpiration in transportation in plants.
5. Complete the practical file work related to experiment of making a temporary mount of leaf to show stomata.

SOCIAL SCIENCE

1. Make an informative and illustrative project on Disaster Management. The following topics are to be covered and supported with relevant pictures. Students are advised to collect facts, figures and recent developments with the help of newspapers, magazines and Internet.

- (a) Introduction to Disasters.
- (b) Man's role in causing Disasters.
- (c) Recent Manmade and Natural Disasters.
- (d) Steps taken by the Government to mitigate disasters.
- (e) Community Based Disaster Management.
- (f) Locate on the map of India, areas prone to earthquakes.

II. On the political map of India, mark the various soil types in India.

Answer the following questions :

1. Mention some modern techniques to Harvest Rain Water ? Compare them with the traditional ones.
2. Write about some inter – state water disputes caused by the multipurpose projects ?
3. Write about the developmental goals of landless rural labourers, prosperous farmers and medium farmers ?
4. Discuss about vertical and horizontal power sharing ?
5. What factors determine the use of land ? Illustrate land use pattern of India with the help of diagram.
6. India is a centralized federation. How ?
7. Discuss World Bank Criteria for measuring development.

ART & CRAFT

1. Make any useful object by using throw away material. Students can refer to their Art Book (P.No. – 118/119)
2. Typography – Create any interesting image, figure, picture or composition by arranging words in it. Students are advised to refer Page No 99 of their Art Book.

FOUNDATION OF INFORMATION TECHNOLOGY

1. Design the web pages on the following topics covering lists, tables and image tag in each web page and take the coloured printouts of its output and put it in a practical file along with its HTML Code.
 - Travel and Tour
 - My Family
 - School
 - Personal Blog
 - Future India
2. Design a website as a part of your project on the topic – ‘Save Earth, Save Environment’. The project should contain atleast 3 web pages linked with hyperlinks covering all the tags learnt in the class and take the coloured printouts of its output and put it in a practical file along with its HTML Code.
3. Write the answers for the following questions in FIT note book :
 - (a) Differentiate between (i) HTML and XML and ii) Well Formed Document and Valid Document.
 - (b) What are features of XML ?
 - (c) Write the advantages of XML.
 - (d) Write Naming Rules in XML.
 - (e) Define the following
 - (i) Root Element (ii) Child Element (iii) Prolog (iv) Data Instance
 - (v) XML Validator (vi) XML Parser

Have a Fun-Filled Vacation !