

APEX PUBLIC SCHOOL

CLASS IX

ENGLISH:

Holiday Homework (2021-22)

1. Select an author from the two textbooks that have been prescribed in the syllabus. Research and prepare a biographical sketch (in the form of PPT.) of the life and achievements. Your research must focus on the following topics o His /Her Life o Significant works.
 - o Features of his writing style. o Achievements.
 - o Include famous characters, storylines and quotations from his works.
2. Complete Unit 1 and Unit 2 in workbook 'Words and Expressions 1'(use pencil)
3. Revise and complete all the chapters in your notebook done in the online classes.
4. Prepare a speech on 'The importance of school education in a child's development.' Shoot a video delivering the speech.(3mins)
5. Grammar notebook work: Make a tense chart with one example of each tense. Do five exercises based on 'Tenses'.

विषय- हिंदी

निर्देश- सारा कार्य अनिवार्य है। अवकाश कार्य एक PDF रूप में ,mail करें उस पर अपना नाम, कक्षा, सेक्शन, विषय लिखें। अवकाश कार्य के अंक दिए जाएंगे।

प्रश्न-1. अपनी पाठ्य-पुस्तक स्पर्श से पाठ- 'रैदास' या 'रहीम' पर अपनी उत्तरपुस्तिका में परियोजना कार्य तैयार कीजिए।

प्रश्न-2. Term-1 के सभी पढ़ाए गए पाठों का लिखित कार्य पूर्ण कीजिए व दोहराइए।

प्रश्न-3. 'कोरोना' से संबंधित हमें क्या-क्या सुरक्षा व सावधानियाँ अपनानी चाहिएँ उत्तरपुस्तिका में लिखें

प्रश्न-5 पाठ- 'गिल्लु' पर आधारित एक स्कैच तैयार कीजिए जिसमें लेखिका महादेवी का गिल्लु के प्रति स्नेह दर्शाया गया हो।

प्रश्न-6. अनुस्वार और अनुनासिक के 20-20 शब्द पढ़ाए गए पाठों में से लिखें।

-29 जुलाई को स्कूल के स्थापना दिवस पर कविता लिखकर या विडियो भेजें (स्कूल की वर्दी में)।

SOCIAL SCIENCE

A. Project Work – DISASTER MANAGEMENT

Activity-Individual Activity



1. Make a project on earthquake prone areas in India – causes, impact on life and property seismic zones , mitigation strategies used to reduce the impact in earthquake prone areas. (Roll No. 1-20)

2. Collect information on areas prone to cyclones in India –warning systems, effects of cyclones, mitigation strategies to be used while construction of buildings (Roll. No. 21-40)

GUIDELINES FOR THE PROJECT

a. Project to be done on A-4 size sheet

b. Project should be hand written for 15 pages

c. On the first page student Performa to be given- Name, Class, Roll no., Name of the school, year of submission and topic.

d. Acknowledgement

e. Content or Index

f. At the last Bibliography or references

g. Newspaper cuttings, maps, diagram , illustrations are must

h. Project should be strictly based on India

i. Use your Disaster Management book for reference

B. “The Covid-19 pandemic could have a devastating impact on the livelihood and food security of millions of people across India ” On an A4 size sheet, write down the steps that can be taken by Central government of India to ensure and tackle Food security in India during pandemic situation.[Refer to Ch-4 (Economics) Food Security in India]

MATHEMATICS

WORKSHEET :- 1

Number System

1. Write first five whole numbers in $\frac{p}{q}$ form, where p and q are integers and $q \neq 0$
2. Find decimal expansion of $\frac{17}{8}, \frac{3}{15}, \frac{2}{7}, \frac{50}{3}$.
3. Find four rational numbers between $\frac{2}{9}$ and $\frac{3}{7}$.
4. Find decimal form of $\sqrt{23}$ and $\sqrt{24}$ upto 3 decimal places.
5. Find two Irrational numbers between $\sqrt{23}$ and $\sqrt{24}$.
6. Find one Irrational and one rational number between 2 and $\sqrt{5}$.
7. Write two numbers whose decimal expansions are terminating.
8. What can be the maximum number of digits in the repeating block of digits in the decimal expansion of $\frac{5}{7}$?
9. Write two numbers whose decimal expansions are non-terminating non-repeating (non-recurring).
10. Find the value of $(256)^{0.16} \times (256)^{0.09}$
11. Find two Irrational numbers between 2016 and 2017.
12. Represent $-\frac{7}{5}$ on the number line.
13. Represent following on number line
 - i) $\sqrt{5}$
 - ii) $\sqrt{13}$
 - iii) $\sqrt{9.3}$
 - iv) $\sqrt{2}$
14. Represent $3 + \sqrt{2.6}$ on the number line.
15. Insert two Irrational numbers between $\frac{2}{3}$ and $\frac{3}{2}$

WORKSHEET :- 2

Polynomial

1. Write the coefficient of y^3 in $5y^3 + 2y^2 - y + 5$
2. Find the coefficient of x^2 in $(x^2 - 1)(x - 2)$
3. If $(x - 2)$ is one of the factor of $3x - 2a$, then find the value of a .
4. Find the degree of polynomial $\frac{x^3 + 3x - 1}{5} - \frac{5}{2}x^2 - x^5$
5. If $p(x) = x^3 - 3x^2 + 2x - 3$ find the value of $p(1) + p(-1)$.
6. Find zeros of the polynomial $z^2 - 8$
7. Divident = Divisor \times Quotient + _____.
8. Give an example of Trinomial of degree 3.
9. Give one example of each monomial, binomial and quadratic polynomial.
10. Check whether $x = 3$ is a zero of polynomial $x^2 - 3x + x - 3$.
11. Write the degree of the polynomial $\sqrt{7}$
12. If one of the zero of polynomial $3x^2 + 5x + k$ is -1 , then find out the value of k .
13. Express $4x^2 - 4x + 1$ as a square of binomial.

Part – B

14. Check whether $q(x)$ is a multiple of $r(x)$ or not.
If $q(x) = 2x^3 - 11x^2 - 4x + 5$, $r(x) = 2x + 1$
15. Show that $(x - 5)$ is a factor of $x^3 - 3x^2 - 4x - 30$ by Remainder theorem.
16. Evaluate by using suitable identity : $(997)^3$

Lab Manual Activity

Activity 1 > Construct a Square Root Spiral

SCIENCE

Physics

1) Revise and complete chapter-8“MOTION” done in online classes.

2) Activity-‘How to determine direction of motion in circular path?’

Make a video or power point presentation to demonstrate it.

3) Do assignment in physics notebook.

ASSIGNMENT -1

MOTION

SHORT ANSWER QUESTIONS

1. The displacement of a moving object in a given interval of time is zero. Would the distance travelled by the object also be zero? Justify your answer.

2. A body goes from point A to B and then returns from B to A. What is the total displacement?

3. A particle is moving in a circle of diameter 5m. Calculate the distance covered and the displacement when it completes 3 revolutions.

4. A body thrown vertically upwards reaches a maximum height ‘h’. It then returns to ground. Calculate the distance travelled and the displacement.

5. A body travels a distance of 15m from A to B and then moves a distance of 20m at right angles to AB. Calculate the total distance travelled and the displacement.

6. An object is moving in a circle of radius ‘r’. Calculate the distance and displacement

(i) When it completes half the circle

(ii) When it completes one full circle.

7. In a long distance race, the athletes were expected to take four rounds of the track such that the line of finish was same as the line of start. Suppose the length of the track was 200m.

(a) What is the total distance to be covered by the athletes?

(b) What is the displacement of the athletes when they touch the finish line?

(c) Is the motion of the athletes uniform or non-uniform?

(d) Is the displacement of an athlete and the distance covered by him at the end of the

race equal?

8. John travels 250 m to North but then back-tracks to South for 105 m to pick up a friend. What is John's total displacement?

9. A farmer moves along the boundary of the square field of side 10m in 40 seconds. What will be the magnitude of displacement of the farmer at the end of 2 minute 20 seconds from its initial position?
10. Define uniform and non-uniform motion. Write one example for each.

CHEMISTRY

- 1) A Pictorial Project Report On The States of Matter.
- 2) Revise and complete Ch-1 “Matter in our surrounding” done in online classes.
- 3) Make a Pictionary of 50 new words related to chemistry from the chapters of NCERT and also paste pictures related to the topic.

BIOLOGY

- 1) Learn and write all question and answers of the chapter Fundamental Unit of Life and write in a separate notebook.
- 2) Make a project on sustainable use of natural resources in a file along with the pictures.
- 3) Write onion peel and cheek peel epithelial cells experiments in your lab manual.

Information and Technology

Q1) Answer the following questions.

1. Name the type of printer to be used for printing text and graphics with high speed but at low cost.

2. Name the input device used to sense and read thick and thin black stripes present on the items usually sold at supermarkets.



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3. Hari has used a word processor to write his history homework. Here is some of his homework.

Quit India Speech by Mahatma Gandhi on August 8th1942.
“Everybody will be his own master. It is to join a struggle for such democracy that I invite you today. Once you realize this you will forget all the differences, and think of your selves as Indians only, engaged in the common struggle for Independence.”

- a) Choose three features/tools from the box that Hari can use to make the title stand out.

Spelling Checker, Print Preview, Cut Paste, Bold ,Underline, Strike out, Italics

- b) Write one Word Processing tool that he can use to find the synonym of “struggle”

Q2) Tarini FancyInc.is planning in the Office Building to connect all computer each spread over within distance of 50Metres.

- a) Suggest the economical cable type having high speed data transfer which can be used to connect these computers.
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- b) Which type of network (out of LAN and MAN) will be formed by connecting these computers?
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Q3) Multiple choice questions

1. Identify the device shown in the figure



- a) Co-axial cable
b) Ethernet Cable
c) Twisted pair cable
d) None of the above
2. Suppose you have bought all hardware components required for assembling a Computer after assembling the Computer System, which will be the very first software to be installed:
- a) Hardware Drivers
b) Operating System
c) Antivirus Software
d) Word Processing Software
3. Functions of an operating system include?
- a) File system management
b) Memory Management
c) Processor Management
d) All of the above.
4. Members of 'Nibbles & Bytes', the computer club of a school wants to prepare and print Participation Certificate for all the participants in their annual inter school symposium using a spreadsheet, where the details of the participating students along with the events and schools are entered. Which of the following office techniques is most appropriate to get the desired results:
- a) Cut and Paste
b) Find and Replace
c) Copy and Paste
d) Mail Merge
5. Which option would you use to display the digit 2 in the formula H_2O ?
- a) Lowered
b) Superscript
c) Subscript
d) Laid down

6. The terms “operating system” refers to:-

- a) A set of programs which controls computer working.
- b) The way a computer operates
- c) Conversion of high level language into machine code.
- d) The way a floppy disk drive operates.

7. Which of the following services is not provided by an Internet Service Provider (ISP):

- a) An internet connection
- b) Web Browser
- c) Modem
- d) Technical help

8. From the following techniques which one is suitable for maintaining data integrity and which one is suitable for ensuring security of information?

- a) Data encryption and Password protection
- b) Backing up data regularly

Q4) Fill in the Blanks

- a) _____ are used for manipulating text based documents such as letters or drafts.
- b) _____ is a set of wires that carries signals to and from the CPU.
- c) 'Start' button is located at the _____
- d) Movement of mouse causes a corresponding movement of _____ on screen.

Q5) Write True or False

- a) CPU controls all the operations of computer hardware. []
- b) MICR stands for Magnetic Inkjet character Reader. []
- c) Screen of monitor is divided into dot scaled Pixels. []
- d) Ctrl key is used as the special purpose key. []
- e) C++ and Java are the examples of High Level Languages. []

Q6) Short answer type questions

a) What is data?

b) Give the basic difference between a CRT monitor and a LCD monitor?

c) What is network and what is the need for networking?

d) What is the purpose of clipboard?

e) Differentiate between super script and subscript.

ART

Draw any one colorful picture in your drawing copy

1. Let's save water
2. A village participating in a village cleanliness drive
3. The girls playing hockey

Work experience

Make a collage painting on half sheet white chart/card board using old magazine , newspaper.

Topic –still life

