MAHARSHI PATANJALI VIDYA MANDIR HOLIDAY HOMEWORK <u>CLASS IX</u> <u>SESSION 2023-24</u>



SUBJECT- ENGLISH

"The English language is a work in progress. Have fun with it". -Jonathan Culver

Learn the Question and Answers of the following lessons: -

Beehive

The Fun They Had

The Road not Taken (poem)

Moments

The Lost Child

Grammar:-

Tenses- Revise the rules of Tenses and write one- one example of each sub category of all three tenses in Assignment notebook.

Writing Skills

One of your friends who lives in Dehradun, has invited you and your parents to spend some of your days of summer vacation with his/her family in Dehradun. How did you find the place when you went there? Describe in 100-120 words.

TOPICS FOR ONE MINUTE SPEECH (ASL Activity)

- 1. Importance of a balanced diet
- 2. How to increase our immunity
- 3. Social distancing
- 4. The best time I ever had
- 5. My Ideal person
- 6. What I think about social media
- 7. My favourite sport
- 8. Why being different is ok
- 9. Any kind of survey or research work done by you individually or in groups.

<u>विषय हिंदी</u>

"राष्ट्रीय एकता की कड़ी हिंदी ही जोड़ सकती है।" - बालकृष्ण शर्मा नवीन

1.कक्षा में पढ़ाए गए पाठों एवं व्याकरण भाग की आवृत्ति करें।

2.'मेरे जीवन का लक्ष्य' इस विषय पर संकेत बिंदु के आधार पर अनुच्छेद लिखिए।

संकेत बिंदु-

* जीवन में लक्ष्य की आवश्यकता

*मेरा लक्ष्य

* मेरी प्रेरणा के आधार

*मेरे स्वयं के प्रयास

* उपसंहार

3-अपनी पाठ्य पुस्तक से कोई एक कविता कंठस्थ करें ।(क्रियाकलाप हेतु)

4- उपसर्ग प्रत्यय की आवृत्ति एवं अभ्यास करें।

A I-Activity

प्रधानमंत्री जी द्वारा आयोजित जी-20 शिखर सम्मेलन के आयोजन के विषय में दो मित्रों की बातचीत संवादात्मक शैली में लिखिए। (बॉक्स बनाकर सम्मिलित सभी देशों के ध्वज को से) किनारों को सजाएं।

SUBJECT- MATHEMATICS

"Without mathematics, there's nothing you can do. Everything around you is mathematics. Everything around you is numbers".

- Shakuntala Devi, Indian writer and mental calculator

INSTRUCTIONS: Solve the following questions in your assignment notebooks.

1. Evaluate:
$$\frac{15}{\sqrt{10} + \sqrt{20} + \sqrt{40} - \sqrt{5} - \sqrt{8}}$$
 (Take $\sqrt{5} = 2.236$ and $\sqrt{10} = 3.162$)

- 2. Find the value of x if $5^{x-3} \times 3^{2x-8} = 225$
- 3. Assuming that x is a positive real number and a, b, c are rational numbers,

Show that: (i)
$$\left(\frac{x^a}{x^b}\right)^{a+b} \times \left(\frac{x^b}{x^c}\right)^{b+c} \times \left(\frac{x^c}{x^a}\right)^{c+a} = 1$$

(ii) $\left(\frac{x^a}{x^b}\right)^{1/ab} \times \left(\frac{x^b}{x^c}\right)^{1/bc} \times \left(\frac{x^c}{x^a}\right)^{1/ac} = 1$

4. Simplify the following: $\frac{16 \times 2^{n+2} - 4 \times 2^n}{16 \times 2^{n+2} - 2 \times 2^{n+2}}$

- 5. If $\frac{9^n \times 3^2 \times 3^n 27^n}{3^{3m} \times 2^3} = \frac{1}{27}$, prove that m-n =1
- 6. Give a brief note on who invented rational numbers.
- 7. Give a brief note on the mathematician who invented geometry.

8. Prove that:
$$\frac{1}{1+x^{a-b}} + \frac{1}{1+x^{b-a}} = 1$$

9. If $x = \frac{\sqrt{5}-\sqrt{2}}{\sqrt{5}+\sqrt{2}}$ and $y = \frac{\sqrt{5}+\sqrt{2}}{\sqrt{5}-\sqrt{2}}$, find the value of $x^2 + xy + y^2$.

10. Find the rationalising factor of: (i) $\frac{2^{5}\sqrt{4}}{5\sqrt{16}}$

(ii)
$$(\sqrt{2} + \sqrt{3} + \sqrt{7})$$

INSTRUCTIONS: Solve the following questions in your Activity File.

 Plot the following rational numbers on the number line. -3/7, 5/8, 5/4, 11/5

2. Represent $\sqrt{9.7}$ on the number line. Also justify your answer.

3. Represent from $\sqrt{2}$ to $\sqrt{16}$ by the spiral method on the number line. Also give your observation about this spiral plotting.

4. Visualise 2.665 on the number line, using successive magnification.

SUBJECT: SCIENCE

"Everything is theoretically impossible, until it is done." - Robert A. Heinlein

BIOLOGY

STATE- ARUNACHAL PRADESH

CHAPTER FOR INTERNAL ASSESSMENT- NATURAL RESOURCES

General instructions-

- > Each student will do the activity individually.
- Make a brochure on the topics given below.
- You can paste pictures, draw drawings or make a collage.
- Write your-name, class, section and roll no. on the brochure .
- > Make a brochure on the following topics-

TOPICS FOR INTERNAL ASSESSMENT-

Roll no-1-10 - Air pollution; its causes and control.

Roll no-11- 20- Water pollution; its causes and control.

Roll no- 21-30- Soil pollution; its causes and control.

Roll no- 31-40- Diseases people suffer from due to air pollution and preventive measures.

Roll no- 41-last- Diseases people suffer from due to water pollution and preventive measures.

PHYSICS

1. Derive the three laws of uniformly accelerated motion on a sheet of white paper.

2. Solve 10 numerical from some other source on the topic of motion.

3. Draw all possible velocity time graphs neatly and also specify which graph is representing what.

SUBJECT- SOCIAL SCIENCE

"History can give us a fuller understanding of ourselves, and of our common humanity, so that we can better face the future". – Robert Penn Warren

HISTORY

I. Answer the following questions in your assignment notebook;

- 1. Explain the events which led to the outbreak of the Revolution.
- 2. How did philosophers influence the thinking of the people of France?
- 3. Describe any three features of the Constitution of France drafted in 1791?
- II. Revise the topics covered and do learn and practice them.

GEOGRAPHY

Map skills

Locate and label the following on the political map of India: -

- 1. The Island groups of India lying in the Arabian sea and Bay of Bengal.
- 2. The countries constituting Indian Subcontinent.
- 3. The states through which the Tropic of cancer passes.
- 4. The place situated on the three seas.
- 5. The Strait separating Sri Lanka from India.
- 6. The Union Territories of India.

Paste these maps in Assignment copy.

SUBJECT: INFORMATION TECHNOLOGY

"Let's go invent tomorrow instead of worrying about what happened yesterday." - Steve Jobs

Note: The answers to all step based as well as descriptive questions should be written neatly and properly only in the Theory Notebook.

- Q.1. Explain the different strengths and weaknesses of a computer.
- Q.2. Draw a well labelled diagram describing the basic features of a modern smartphone.

Also, describe the common functionality available in Smart Mobile devices.

- Q.3. Explain the various differences between RAM and ROM.
- Q.4. Describe in detail the various Peripheral Device Ports in a Computer System.
- Q.5. Describe in detail the various directories present in the Linux directory structure.
- Q.6. Explain the usage of the following Linux Commands and also give example of each:
 - pwd

- mkdir
- rmdir
- touch
- rm
- cd
- ls
- cd ~