GEETA DEVI DAV PUBLIC SCHOOL
BHANDARKOLA, SATAR ROAD, DEOGHAR
SUMMER VACATION HOLIDAY HOMEWORK-(2025-26)

Class: -IX

ENGLISH

- Read Chapter no. 3,4 & 5 of your prescribed books (Beehive & Moments) find out 15 new words from each chapter and write their meanings. (To be done in the subject notebook)
- Create a mind map for the following:

(i) Theme and Characters of 1.The Fun They Had & 2. The Road Not taken
(ii) Plot Summary of 'The Lost Child'story from Moments.

- Read any one of the following poems from the book 'Beehive'. Choose the stanza/line you Like the most in the poem and depict it in a creative manner.

1. The Road Not Taken
2. Wind

(How to do: Use your imagination to convert the poem in an artistic representation on A3 or A4 sheets. The presentation should be self- explanatory.)

Or

- Make a pictorial project on the life of the poet- Robert Frost depicting the life events, awards and literary works in about 5-6 pages. (Use A4 size colored sheets)

- The worksheet (link is given below) is to be attempted. (Please take a printout)

https://docs.google.com/document/d/e/2PACX-1vQ8v0QJfJnV_4y6NmNZikMN_RA-go3m9l6PU3HO5ImrhH1V3TFEWRcGI0lmaVJ8Q1egDa3jruewea_X/pub

MATHS
Activities

To verify the algebraic identity $(a + b)^2 = a^2 + 2ab + b^2$

To represent some irrational numbers on the number line.

Assignment

Answers the following MCQs
(1)Can we write 0 in the form of p/q?

a) Yes
b) No
c) Cannot be explained
d) None of the above

(2) What is the degree of the polynomial $\sqrt{3}$?

a) 0
b) 1
c) ½
d) 2

(3)The number obtained on rationalising the denominator of $1/(\sqrt{7}-2)$ is

a) $(\sqrt{7}+2)/3$
b) $(\sqrt{7}-2)/3$
c) $(\sqrt{7}+2)/5$
d) $(\sqrt{7}+2)/45$

(4)The coefficient of x in $7x^2+6x-2$ is

a) 2
b) 6
c) -2
d) 7

(5)The value of $\sqrt{10}$ times $\sqrt{15}$ is equal to

a) $5\sqrt{6}$
b) $\sqrt{25}$
c) $10\sqrt{5}$
d) $\sqrt{5}$

(6) $X - x^3$ is a _____ polynomial.

a) Linear
b) Quadratic
c) Cubic
d) None of the above

(7) The decimal representation of the rational number is

a) Always terminating
b) Either terminating or repeating
c) Either terminating or non-repeating
d) Neither terminating nor repeating

(8)If $x^2+kx+6 = (x+2)(x+3)$ for all k, find the value of k.

a) -1
b) 1
c) 3
d) 5

(9) $2\sqrt{3}+\sqrt{3}$ =

a) 6
b) $2\sqrt{6}$
c) $3\sqrt{3}$
d) $4\sqrt{6}$

(10)The degree of the constant polynomial is

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

Factorise $x^2 – 1 – 2a – a^2$

and $x^3 – 6x^2 + 3x + 10$

Verify whether the indicated numbers are zeros of the polynomials corresponding to them in the following cases:

F(x) = 3x + 1, x = −1/3
F(x) = x^2 – 1, x = 1,−1

G(x) = 3x2 – 2 , x = 2/√3 , −2/√3
P(x) = x3 – 6x2 + 11x – 6 , x = 1, 2, 3

F(x) = 5x – π, x = 4/5
F(x) = x2 , x = 0

F(x) = lx + m, x = −m/l
F(x) = 2x + 1, x = ½

Are the following statements true or false? Give reasons for your answer.

i) Every whole number is a natural number.
ii) Every integer is a rational number.
iii) Every rational number is an integer.
iv) Every natural number is a whole number,
v) Every integer is a whole number.
vi) Every rational number is a whole number.

Complete the following sentences:

Every point on the number line corresponds to a …… number which may be either …… or …….
The decimal form of an irrational number is neither ….. nor ……
The decimal representation of a rational number is either ..… or …..
Every real number is either … number or … number.
Represent √9.4 on the number line

If x = ½ is a zero of the polynomial f(x) = 8x3 + ax2 – 4x + 2, find the value of a.

HINDI

1-निम्नलिखित विषयों में से किन्हीं दो विषयों पर लगभग 150 शब्दों का अनुच्छेद लिखिए।
क-विज्ञापन का महत्व
ख-आर्टिफिशियल इंटेलिजेंस से लाभ एवं हानि

2-मोबाइल के अत्यधिक प्रयोग से होने वाली हानि के विषय में बताते हुए अपने छोटे भाई या बहन को एक पत्र लिखिए।
3-अनुप्रास,यमक और श्लेष अलंकार परिभाषा एवं उदाहरण सहित याद कीजिए।
4-वाक्य अर्थ के आधार पर उदाहरण सहित याद कीजिए।।

परियोजना कार्य
'दो बैलों की कथा'पाठ के समान पशु या पक्षी पर आधारित किन्हीं दस (10) रचनाओं के नाम उनके लेखकों के नाम सहित लिखिए। उनमें से किसी एक रचना का सारांश और लेखक या लेखिका का जीवन परिचय भी लिखिए।

अथवा

2-भारत के प्रमुख ऐतिहासिक स्थलों के नाम सचित्र लिखिए और किसी एक प्रमुख ऐतिहासिक स्थल के विषय में संपूर्ण जानकारी लिखिए।

SANSKRIT

बालक,कवि,साधु,भवत् (त्रिषु लिङ्गेषु) उत्तरपुस्तिकायां लिखित्वा स्मरत।

परियोजनाकार्यम्- भारतस्य विविधसंस्थाभि: स्वीकृतानि संस्कृतस्य आदर्शवाक्यानि चित्रफलके सुन्दरै: अक्षरै: लिखत।

SCIENCE

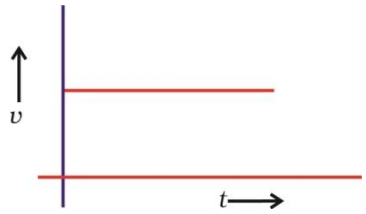
PHYSICS

1. A particle is moving in a circular path of radius r. The displacement after half a circle would be:
   (a) Zero
   (b) πr
   (c) 2 r
   (d) 2πr

2. A body is thrown vertically upward with velocity u, the greatest height h to which it will rise is,
   (a) u/g (b) $u^2/2g$ (c) u^2/g (d) u/2g
3. The numerical ratio of displacement to distance for a moving object is
   (a) always less than 1
   (b) always equal to 1
   (c) always more than 1
   (d) equal or less than 1

4. If the displacement of an object is proportional to square of time, then the object moves with
   (a) uniform velocity
   (b) uniform acceleration
   (c) increasing acceleration
   (d) decreasing acceleration

5. From the given v — t graph, it can be inferred that the object is
   (a) in uniform motion
   (b) at rest
   (c) in non-uniform motion
   (d) moving with uniform acceleration



6. Suppose a boy is enjoying a ride on a merry-go-round which is moving with a constant speed of 10 m/s . It implies that the boy is
   (a) at rest
   (b) moving with no acceleration
   (c) in accelerated motion
   (d) moving with uniform velocity

7. Area under a v — t graph represents a physical quantity which has the unit (a) m^2
   (b) m^3
   (c) m
   (d) m / s

8. Slope of a velocity — time graph gives
   (a) the distance
   (b) the displacement
   (c) the acceleration
   (d) the speed

9. In which of the following cases of motions, the distance moved and the magnitude of displacement are equal?
   (a) If the car is moving on straight road
   (b) If the car is moving in circular path
   (c) The pendulum is moving to and fro
   (d) The earth is revolving around the Sun

10. 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 you answer.

CHEMISTRY

(1). Research how different states of matter (solids, liquids, gases) are utilized in various industries (e.g., food, medicine, manufacturing).

(2). The Importance of Kinetic Theory:

Explain how the kinetic theory of matter explains the behavior of different states of matter.

(3). Properties of Matter in Everyday Life:

Explore how the properties of matter influence everyday life, such as how the properties of water allow life to exist on Earth or how the properties of different materials are used in construction.

(4). Create a Model:

Build a model of the different states of matter, showcasing the arrangement of particles in each state.

(5). Develop a Presentation:
Prepare a presentation or poster outlining the key concepts of matter, including its different states and properties.

BIOLOGY

Project -:

1) Make use of eco-friendly materials for preparing the model of Plant cell or Animal cell

Assignment -:

2) Differentiate between

a) Prokaryotic cell and Eukaryotic cell
b) Diffusion and Osmosis
c) Plant cell and Animal cell
d) Hypertonic and Hypotonic solution

3) Make a list of scientists and their contribution in cytology

SOCIAL SCIENCE
HISTORY / CIVICS

Project – Prepare a timeline chart for French revolution in class work copy.
Draw the political map of Europe and locate France, it's capital , port towns and neighbouring countries in 1/4th size chart paper.

Assignment – Learn the question answer of French revolution and What is democracy? Why democracy?

GEOGRAPHY

1. **PROJECT/ACTIVITY**

(1) Find out the longitudinal and latitudinal extent of your state.

(iii) Collect information about the 'Silk Route'. Also find out the new developments, which are improving communication routes in the regions of high altitude.

2. **MAP SKILLS**

On an outline map of India show the following.

(i) Mountain and hill ranges: the Karakoram the Zaskar, the Patkai Bum, the Vindhya Range, the Aravalli Range, Cardamom hills,

(ii) Peaks – K2, Kanchenjunga, Nanga Parbat and AnaiMudi.

(iii) Plateaus, Chotanagpur and Malwa

(iv)The Indian Desert, Western Ghats, Lakshadweep Islands

3. WEATHER DIARY

Maintain a diary recording daily temperature, rainfall, humidity, and wind direction for a week.

Compare with data from another city or country.

4. POSTER MAKING

Topics: "RELIEF MAP OF INDIA" (Page No. 9) AND "India: Extent and Standard Meridian" (Page No. 3) by using appropriate colour or symbols.

Note:- write answers in a separate copy and Activity work in project file.

ECONOMICS

Assignment

Investigate the farming methods which were used in palampur as well as the irrigation facility or, role of technology and the type of cropping .And compare these practices with traditional farming methods and also find out the challenges faced by the farmers in both the method .

Project

Develop a presentation or poster showcasing the different non farming activities and the importance of village economy

ARTIFICIAL INTELLEGENCE (AI)

Answer the following questions-

1) What are communication skills?
2) Write down the elements of communications?
3) Explain briefly the 7Cs basic principles of communications
4) What are verbal communications? Give one example for oral communications.
5) What are the advantages and disadvantages of verbal communications?
6) Define nonverbal communications?
7) What is the importance of writing skills in communications?
8) What do you mean by self-management skills?
9) How can one build self-confidence?
10) What are the differences between interests and abilities?
11) What are the factors that decrease our self-confidence?
12) Write four steps of Self-motivation.

***********Best Of Luck*********