D.A.V. Public School, Behror
Class- XI Science (2025-26)
Holidays Homework
ENGLISH

Attempt all questions in a neat and presentable manner. Use separate sheets if required. Submit on the first day after the holidays.

Literature-Based Tasks

1. Read the chapter The Portrait of a Lady and write a character sketch of the grandmother.

2. Compare the themes of A Photograph and The Laburnum Top in 150–200 words.

3. Write a summary of The Summer of the Beautiful White Horse in your own words.

4. Imagine you are the narrator from We're Not Afraid to Die.... Write a diary entry describing your emotions during the storm.

5. Explain the symbolism in the poem The Voice of the Rain in 100–150 words.

Writing Skills

6. Write an article on the topic: "The Impact of Social Media on Youth" (150–200 words).

7. Draft a speech on "Importance of Mental Health for Teenagers" for the school assembly.

8. Write a formal letter to the editor of a national newspaper expressing concern over rising pollution in your city.

9. Write a report on a cultural event held in your school recently (Word limit: 150–200 words).

10. Compose a story beginning with the line: "It was a cold, silent night when I heard a knock at the door..."

Creative & Project Work

11. Create a comic strip or storyboard illustrating a scene from any one chapter in Hornbill.

12. Prepare a character diary for any one major character from Snapshots (3–4 diary entries).

13. Choose any one poem from your syllabus and create a visual interpretation (drawing/painting) with a short explanation.

14. Watch a movie adaptation or documentary related to any literary theme in your syllabus and write a review (200 words).

15. Make a vocabulary notebook: List 25 new words from the textbook with meanings and example sentences.

PHYSICS

1. A vector has magnitude and direction. (a) Does it have a location in space? (b) Can it vary with time? (c) Will two equal vectors a and b at different locations in space necessarily have identical physical effects? Give examples in support of your answer.

2. State and illustrate Triangle Law of Vector Addition.

3. State with the help of two vectors that their dot product is Commutative and cross product is Anti Commutative.

4. A motorboat is racing towards north at 25 km/h and the water current in that region is 10 km/h in the direction 60 degree east of south. Find the resultant velocity.

5. Two tall buildings face each other and are at a distance of 180 m from each other. With what velocity must a ball be thrown horizontally from a window 55 m above the ground in one building so that it enters a window 10.9m above the ground in second building?

6. Obtain a relation between the distance travelled by a body in time t, if its initial velocity be u and acceleration

7. It is known that the period T of a magnet of magnetic moment M vibrating in a uniform magnetic field of intensity B depends upon M, B and I where I is the moment of inertia of the magnet about its axis of oscillations.

8. Write the dimensions of: Impulse, Pressure, Work, Universal constant of Gravitation.

9. Derive equations of motion using velocity –time graph

10. Derive kinematic equations of motion using method of calculus where acceleration of body is constant.

11. A car is moving along a straight line, say OP It moves from O to P in 18 s and returns from P to Q in 6.0 s. What are the average velocity and average speed of the car in going (a) from O to P? and (b) from O to P and back to Q ?

12. Car covers first half of the total distance with a speed of 36 kmh^{-1}and the second half with speed of 54 km h^{-1}. Find the average speed of the car.

13. A bus at rest accelerates uniformly to a velocity of 54 kmh^{-1}in 20 s. How much distance is travelled by the bus in 20 s?

14. The displacement of a particle starting from rest (at t= 0) is given by x= 6t^2–t^3.Calculate the time at which the particle will attain zero velocity again.

15. Displacement of a particle is given by the expression x = 3t^2+ 7t – 9,where x is in meter and t is in seconds. What is acceleration?

Project work

Make a presentation on types of motion . Investigating the relationship between distance, displacement, speed and velocity.

CHEMISTRY

1. Chapter - redox reaction
    Practice all intext n exercise questions and DPP
2. Chapter - GOC
    Practice questions paper solved
3. Topic -IUPAC nomenclature
    Practice all IUPAC nomenclature related questions
4. Topic -isomerism
    Practice DPP of isomerism

MATHS

1. Find the Domain and range:$\sqrt{4-x^2}$
2. If G={7,8} H={5,4,2} find the Cartesian product(G x H)
3. Write the set A={2,4,8,16,32} into set-builder form.
4. Find the domain of the function f(x)=$\frac{1}{x+2}$.
5. Find the Multiplicative inverse of Z = 3 - 5i .
6. Solve inequalities for real x:$\frac{x}{3} > \frac{x}{2} + 1$.
7. Convert (1-i)^4 into a+ib form
8. Find the multiplicative inverse: of z= $\sqrt{5}$ + 3i
9. A={1,2,3,4,5} B={3,5,8,15} C= {6,7,9,11} find A∩ $(B \cap C)$.
10. Let f={(1,1),(2,3),(0,-1)(-1,-3)} be a function form Z to Z defined by f(x)=ax+b, for some integers a,b. Determine a,b.
11. Solve the inequalities on the number line x/2 > (5x-2)/3-(7x-3)/5
12. Determine the Domain and Range of relation R Defind by R={x,x+5} : xϵ{0,1,2,3,4,5}
13. If $\left(\frac{1+i}{1-i}\right)^m = 1$ Find the value of m.
14. Find the Domain and Range $\sqrt{9-x^2}$
15. If a+ib = $\frac{(x+i)^2}{2x^2+1}$ $prove\ that$ $a^2 + b^2 = \frac{(x^2+1)^2}{(2x^2+1)^2}$
16. Let A={1,2,3,........,14}.Define a relation R from A to A by R={(x,y):3x-y=0},where x,y $\in A$, Write the domain, co-domain and range.
17. A solution of 9% acid is to be diluted by adding 3% acid solution to it .The resulting mixture is to be more than 5% but less than 7% acid. If there is 460 litre of 9% solution, how many litres of 3%solution will have to be added.
18. If A ={ 2,4,6,8} and B={3,6,9,8} and C ={3,6,,12,15} then find (AUB) – C and AUBUC.
19. If A ={ 1,3,5,7,9} B = { 2,3,4,5,6,7} C = {8,6,5,3,2,1} find A – B , B- C , A – C
20. Ravi obtained 70 and 75 marks in first two unit test. Find the minimum marks he should get in the third test to have an average of at least 60 marks.

BIOLOGY

1.Write down the botanical name of 25 plants and zoological name of 25 animals which are present in your Surroundings and learn them.

2. Make a herbarium file of minimum 10 species and write their medicinal uses in our life?

3.Find out 25 questions of objective type from each chapter taught as advance class

4. Prepare a presentation on any of the topic of your interest from till taught syllabus from various sources.

5 Prepare yourself for quiz competition which will be conducted in july.

PHYSICAL EDUCATION

Record Practical File
1. Sai Khelo India Test
2. Body Mass Index (Calculation Of Bmi)
3. 3. Flamingo Balance Test
4. Coordination Test
5. Partial Curl- Up
6. Push Ups For Boys
7. Modified Push Ups For Girls
8. 50m Dash Or 50m Standing Start
9. 600m Run / Walk
10. Sit And Reach For Flexibility
11. Harvard Step Test
12. Proficiency In Game And Sports (Skill Of Any One Ioa Recognised Sports/ Game Of Choice)
13. Five Asanas For Each Lifestyle Disease

I.P.

1. Write and Explain any five data type in python.
2. Write the uses of brackets in python program.
3. Why digital work is better than manual work ? Justify your answer in detail.
4. Write about any twenty stream of computer science in which humans are doing their job.
5. Write any ten functions of python program and describe their uses.

MUSIC

हिन्दुस्तानी संगीत गायन (034)

1. तीनताल व एकताल का परिचय (ठाह , दुगुन, तिगुन , चौगुन सहित लिखिए ।

2. प. विष्णु दिगम्बर पलुस्कर का जीवन परिचय व उनका संगीत में योगदान लिखिए।

3. तानपुरे का चित्र नाम सहित लिखिए ।

4. वर्तमान के ख्याल गायक व ध्रुपद गायक के नाम लिखिए ।