PRATAP PUBLIC SCHOOL, SECTOR – 6, KARNAL

HOLIDAYS HOMEWORK

CLASS 11 (SCIENCE)

ENGLISH

1. Revise the syllabus done so far.
2. Keeping the format of the 'poster making' in mind, design posters on the given topics:

a) Inter –school Essay writing competition.
b) Announcing staging of a play.
c) Need for regular exercise.
d) Spreading message of communal harmony.
e) Need for joining defence services. on summer camp going to be organized in your school. (in the fair notebook only)

3. Attempt the given questions

a) While walking in a park in your neighbourhood you found a small plastic bag containing some documents and some cash. Write a notice in about 50 words to be put on the park notice board asking the owner to identify and collect it from you. You are Amar/Amrita 9399123456
b) You are Simar/Smriti of Lotus International School, Jodhpur. Your school has decided to contribute in controlling traffic near your school and requires the names of volunteers from IX to XII. Write a notice to be displayed notice board.
c) Arts Club of your school is going to organise a drawing and painting competition. Write a notice in not more than 50 words, to be displayed on the school notice board, inviting students to participate in it. Give all the necessary details. You are Rishabh/Ridhima, Secretary, Arts Club, Sunrise Public School, Gurugram, Haryana.
d) The Students' Council of your school has organised an excursion to Andaman for the students of classes X and XII during winter break. As the President of the Council, write a notice in about 50 words.
e) Times of Readers Club is organising a Book Fair at its Noida Head Office. The students of your school are invited at the event. Draft a notice for the bulletin board informing the students while inventing necessary details. You are Yash Vardhan Tomar, Principal, A.K. Academy.

4. Based on the reading of 'Portrait of a Lady' by Khushwant Singh.
   Prepare a project file on "Aging in India; State of Elderly

***Maintain a proper notebook for English and complete the notes of the chapters covered so far.**

XI MATHEMATICS Holiday's Homework

1. Write & learn all identities of Trigonometry function at least on 5

pages.

2. Make graph of Trigonometry functions at least on 6 pages with domain

and range.

3. Make Venn diagram of sets.

4.Prepare fair register for ch-2 and ch-3 from NCERT and NCERT EXEMPLAR book.

HOLIDAYS HOME WORK

CLASS 11TH CHEMISTRY 2024

A. Intext problems of (NCERT)

- Some basic concepts of chemistry (unit 1)
- Atomic structure (Unit 2)

B. Back exercise of (NCERT)

- Some basic concepts of chemistry (unit 1)
- Atomic structure (Unit 2)

C . Prepare one Chart related to application part of chemistry

Contact your teacher about the topic

D Write down two Excercises of titrations for the practical you had done

Neutralisation reactions of NaOH and HCl

E. Solve question paper of UNIT Test I

Pratap Public School, Sector-6, Karnal

Holiday Homework-2024

XI (Biology)

1.Prepare questions along with answers from the chapter no.1,2,4 and 14 as per the following instructions:

i) MCQ type-10

ii) Assertion-reason type questions-10

iii)Short answer type questions-10

iv)Long answer type questions-5

2.Write following practicals in practical file (in the same sequence):

i) To study parts of compound microscope.

ii) Test for the presence of sugar, starch, proteins and fats in suitable plant and animal materials.

Iii) Study of distribution of stomata on the upper and lower surfaces of leaves.

Iv) To study Specimens/slides/models and identification with reasons - Bacteria, Oscillatoria, Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicotyledonous plant and one lichen.

v) Virtual specimens/slides/models and identifying features of - Amoeba, Hydra, liver fluke, Ascaris, leech, earthworm, prawn, silkworm, honey bee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit.

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PRATAP PUBLIC SCHOOL, KARNAL
PHYSICS HOLIDAYS WORK
CLASS-11TH
TOPIC- UNITS AND MEASUREMENTS

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1. Assertion : '*Light year*' and 'Wavelength' both measure distance.
   Reason : Both have dimensions of time.
2. Assertion : Light year and year, both measure time.
   Reason : Because light year is the time that light takes to reach the earth from the sun.
3. Assertion : Force cannot be added to pressure.
   Reason : Because their dimensions are different.
4. Assertion : Linear mass density has the dimensions of $[M^1L^{-1}T^0]$.
   Reason : Because density is always mass per unit volume.
5. Assertion : Rate of flow of a liquid represents velocity of flow.
   Reason : The dimensions of rate of flow are $[M^0L^1T^{-1}]$.
6. Light year is a unit of
   (a) Time (b) Mass (c) Distance (d) Energy
7. Which of the following is not equal to *watt*
   (a) *Joule*/*second* (b) *Ampere* × *volt*
   (c) $(Ampere)^2 \times ohm$ (d) *Ampere*/*volt*
8. Newton–*second* is the unit of
   (a) Velocity (b) Angular momentum
   (c) Momentum (d) Energy
9. Which of the following is not represented in correct unit
   (a) $\frac{\text{Stress}}{\text{Strain}} = N/m^2$ (b) Surface tension = N/m
   (c) Energy $= kg\text{-}m/\sec$ (d) Pressure $= N/m^2$
10. Select the pair whose dimensions are same
    (a) Pressure and stress (b) Stress and strain
    (c) Pressure and force (d) Power and force
11. Dimensional formula $ML^{-1}T^{-2}$ does not represent the physical quantity
    (a) Young's modulus of elasticity (b) Stress
    (c) Strain (d) Pressure
12. Dimensional formula ML^2T^{-3} represents
    (a) Force (b) Power (c) Energy (d) Work
13. The dimensions of *calorie* are
    (a) ML^2T^{-2} (b) MLT^{-2} (c) ML^2T^{-1} (d) ML^2T^{-3}
14. Whose dimensions is ML^2T^{-1}
    (a) Torque (b) Angular momentum
    (c) Power (d) Work
15. Which pair has the same dimensions

(a) Work and power (b) Density and relative density

(c) Momentum and impulse (d) Stress and strain

TOPIC- MOTION IN A STRAIGHT LINE

1. Assertion : A body can have acceleration even if its velocity is zero at a given instant of time.

Reason : A body is momentarily at rest when it reverses its direction of motion.

2. Assertion : Two balls of different masses are thrown vertically upward with same speed. They will pass through their point of projection in the downward direction with the same speed.

Reason : The maximum height and downward velocity attained at the point of projection are independent of the mass of the ball.

3. Assertion : If the displacement of the body is zero, the distance covered by it may not be zero.

Reason : Displacement is a vector quantity and distance is a scalar quantity.

4. Assertion : The average velocity of the object over an interval of time is either smaller than or equal to the average speed of the object over the same interval.

Reason : Velocity is a vector quantity and speed is a scalar quantity.

5. Assertion : An object can have constant speed but variable velocity.

Reason : Speed is a scalar but velocity is a vector quantity.

6. A person travels along a straight road for half the distance with velocity v_1 and the remaining half distance with velocity v_2 The average velocity is given by

(a) $v_1 v_2$ (b) $\frac{v_2^2}{v_1^2}$ (c) $\frac{v_1 + v_2}{2}$ (d) $\frac{2v_1 v_2}{v_1 + v_2}$

7. The displacement-time graph for two particles *A* and *B* are straight lines inclined at angles of 30^o and 60^o with the time axis. The ratio of velocities of $V_A : V_B$ is

(a) $1:2$ (b) $1:\sqrt{3}$ (c) $\sqrt{3}:1$ (d) $1:3$

8. A car travels from *A* to *B* at a speed of $20\ km/hr$ and returns at a speed of $30\ km/hr$. The average speed of the car for the whole journey is

(a) $25\ km/hr$ (b) $24\ km/hr$ (c) $50\ km/hr$ (d) $5\ km/hr$

9. A boy walks to his school at a distance of 6 *km* with constant speed of 2.5 *km*/*hour* and walks back with a constant speed of 4 *km/hr*. His average speed for round trip expressed in *km*/*hour*, is

(a) 24/13 (b) 40/13 (c) 3 (d) 1/2

10. A car travels the first half of a distance between two places at a speed of 30 *km*/*hr* and the second half of the distance at 50 *km*/*hr*. The average speed of the car for the whole journey is

(a) 42.5 *km/hr* (b) 40.0 *km/hr* (c) 37.5 *km*/*hr* (d) 35.0 *km/hr*

11. One car moving on a straight road covers one third of the distance with 20 *km/hr* and the rest with 60 *km/hr*. The average speed is

(a) 40 *km/hr* (b) 80 *km/hr* (c) $46\frac{2}{3}$ *km/hr* (d) 36 *km/hr*

12. A car moves for half of its time at 80 *km/h* and for rest half of time at 40 *km/h*. Total distance covered is 60 *km*. What is the average speed of the car

(a) 60 km/h (b) 80 km/h (c) 120 km/h (d) 180 km/h

13. A train has a speed of 60 *km/h*. for the first one hour and 40 *km/h* for the next half hour. Its average speed in *km/h* is

(a) 50 (b) 53.33 (c) 48 (d) 70

14. Which of the following is a one dimensional motion

(a) Landing of an aircraft (b) Earth revolving a round the sun

(c) Motion of wheels of a moving trains (d) Train running on a straight track

15. A 150 *m* long train is moving with a uniform velocity of 45 *km/h*. The time taken by the train to cross a bridge of length 850 meters is

(a) 56 *sec* (b) 68 *sec* (c) 80 *sec* (d) 92 *sec*

TOPIC- MOTION IN A PLANE

1. Assertion : In projectile motion, the angle between the instantaneous velocity and acceleration at the highest point is 180°.

Reason : At the highest point, velocity of projectile will be in horizontal direction only.

2. Assertion : Two particles of different mass, projected with same velocity at same angles. The maximum height attained by both the particle will be same.

Reason : The maximum height of projectile is independent of particle mass.

3. Assertion : The maximum horizontal range of projectile is proportional to square of velocity.

Reason : The maximum horizontal range of projectile is equal to maximum height attained by projectile.

4. Assertion : Horizontal range is same for angle of projection θ and $(90 - \theta)$.

Reason : Horizontal range is independent of angle of projection.

5. Assertion : For projection angle $\tan^{-1}(4)$, the horizontal range and the maximum height of a projectile are equal.

Reason : The maximum range of projectile is directly proportional to square of velocity and inversely proportional to acceleration due to gravity.

6. The maximum range of a gun on horizontal terrain is 16 *km*. If $g = 10 m/s^2$. What must be the muzzle velocity of the shell

(a) 200 *m/s* (b) 400 *m/s* (c) 100 *m/s* (d) 50 *m/s*

7. A stone is just released from the window of a train moving along a horizontal straight track. The stone will hit the ground following

(a) Straight path (b) Circular path (c) Parabolic path (d) Hyperbolic path

8. A bullet is dropped from the same height when another bullet is fired horizontally. They will hit the ground

(a) One after the other (b) Simultaneously

(c) Depends on the observer (d) None of the above

9. An aeroplane is flying at a constant horizontal velocity of 600 *km/hr* at an elevation of 6 *km* towards a point directly above the target on the earth's surface. At an appropriate time, the pilot releases a ball so that it strikes the target at the earth. The ball will appear to be falling

(a) On a parabolic path as seen by pilot in the plane

(b) Vertically along a straight path as seen by an observer on the ground near the target

(c) On a parabolic path as seen by an observer on the ground near the target

(d) On a zig-zag path as seen by pilot in the plane

10. A bomb is dropped from an aeroplane moving horizontally at constant speed. When air resistance is taken into consideration, the bomb

(a) Falls to earth exactly below the aeroplane (b) Fall to earth behind the aeroplane

(c) Falls to earth ahead of the aeroplane (d) Flies with the aeroplane

11. A projectile fired with initial velocity u at some angle θ has a range R. If the initial velocity be doubled at the same angle of projection, then the range will be

(a) $2R$ (b) $R/2$ (c) R (d) $4R$

12. If the initial velocity of a projectile be doubled, keeping the angle of projection same, the maximum height reached by it will

(a) Remain the same (b) Be doubled

(c) Be quadrupled (d) Be halved

13. In the motion of a projectile freely under gravity, its

(a) Total energy is conserved (b) Momentum is conserved

(c) Energy and momentum both are conserved (d) None is conserved

14. The range of a projectile for a given initial velocity is maximum when the angle of projection is 45^o. The range will be minimum, if the angle of projection is

(a) 90^o (b) 180^o (c) 60^o (d) 75^o

15. The angle of projection at which the horizontal range and maximum height of projectile are equal is

(a) 45^o (b) $\theta = \tan^{-1}(0.25)$ (c) $\theta = \tan^{-1} 4$ or $(\theta = 76°)$ (d) 60^o

You will solve all the exercises from the NCERT text book of

ch1 - - units and measurements

ch2- - motion in a straight line

ch3 -- motion in a plane

ch4—laws of motion.

MUSIC

Make practical file

Syllabus

(1)Raag- bhimplasi, bhairavi

Parichay and notations

(2)Taal- Dadra,Kehrwa,

Teentaal parichay and notations

(3)jeevan parichaya-Tansen,pandit vishnu narayan bhatkhande, pandit vishnu digamber pluskar

PAINTING

* Make 5 sheets of still life on half imperial size sheet.

* Make 5 sheets of landscape on half imperial size sheet.

PHYSICAL EDUCATION

* Prepare Practical file.

COMPUTER SC.

Write the following programs in python, execute them and write in practical file along with the output (Programs should be interactive).

1.WAP to calculate simple interest and amount payable .

2.WAP to calculate percentage of marks in five subjects.

3.WAP to calculate area of right angle triangle.

4.WAP to check whether given year is leap year or not.

5.WAP to generate numbers from 1 to n and calculate their sum.

6.WAP to generate table of a particular number for first 10 multiples.

7.WAP to calculate factorial of a number.

8.WAP to calculate a^b .

9.WAP to generate numbers from n to 1.

10. WAP to generate tables from 5 to n for first 10 multiples.