DAV PUBLIC SCHOOL, MUZAFFARPUR

HOLIDAYS - HOME WORK

CLASS: IX

English:

- 1. You are Ravinder/Kamlesh . You are concerned about the neglect of games and sports in schools. Write an article in about 100-150 words about the state of sports and games in schools.
- 2. Write a story in about 150-200 words that begins with the following words:
 - "I didn't tell my Dad about the green monster I had
 - found at the bottom of the garden"
- 3. Define the following with examples:
 - i. Metaphor
 - ii. Simile
 - iii. Personification
- 4. Prepare at least 10 multiple choice questions from the following chapters.
 - i. The Lost Child
 - ii. The Sound of Music

Mathematics:

- 1. Do fair and revise fortnightly of Ch -1 and Ch -2 from NCERT.
- 2. Do MCQ's questions from R.S. Agrawal of Ch 1 and Ch 2.
- 3. Project work:-
 - (I). Square Root Spiral on chart paper with unique.
 - (II). Life History of Indian Mathematician.

Physics:

- 1. What is the acceleration of a body moving with uniform velocity?
- 2. What does the slope of a distance time graph gives?
- 3. Can displacement be zero even when distance is not zero? Give Example.
- 4. How can you get speed of an object from its distance time graph?
- 5. How can you get distance of an object from its speed time graph?
- 6. Can a body have zero velocity and still acceleration? Give example.
- 7. Is it possible in straight line motion a particle having zero speed and a non-zero velocity?
- 8. On a 60km straight road a bus travels the first 30km with an uniform speed of 30kmh⁻¹. How fast must the bus travel the next 30km so as to have average speed of 40kmh⁻¹ for the entire trip?
- 9. A driver takes 0.20 seconds to apply the brakes. If he is driving a car at a speed of 54kmh⁻¹ and brakes cause a deceleration of 6.0ms⁻¹. Find the distance travelled by the car after he sees need to put the brakes.

- 10. A ball thrown vertically upwards with a speed of 19.6ms^{-1} from the top of a tower returns to the earth in 6 seconds. Find the height of the tower.(g= 9.8ms^{-2})
- 11. A bullet initially moving with a velocity of 20m/s strikes a target and comes to rest after penetrating a distance of 0.01m in the target. Calculate the retardation produced by the target.
- 12. A body moving in a straight line at 72kmph undergoes an acceleration of 4m/s². Find its speed after 2 seconds.
- Draw the shape of the distance time graph for uniform and non-uniform motion of object. A bus of starting from rest moves with uniform acceleration of 0.1ms⁻² for 2 minutes. Find
 - a) The speed required.
 - b) The travelled.
- 14. (a) Define uniform acceleration. What is the acceleration of a body moving with uniform velocity?

(b) A particle moves over three quarters of a circle of radius r. What is the magnitude of its displacement?

- 15. A bus accelerates uniformly from 54km/h to 72km/h in 10 seconds. Calculate
 (i) Acceleration in m/s²
 - (ii) Distance covered by the bus in metres during this interval.
- 16. A car moves with a speed of 30km/h⁻¹ for half an hour. 25km/h⁻¹ for two hours. Calculate the average speed of the car.
- 17. What can you say about motion of an object whose distance time graph is a straight line parallel to the time axis?
- 18. What is the quantity which is measured by the area occupied below velocity-time graph?
- 19. Draw a velocity-time graph of a stone thrown vertically upwards and then coming downwards after attaining the maximum height.
- 20. What is the numerical ratio of average velocity to average speed of an object when it is moving along a straight path?
- 21. What can you say about motion of an object if its speed time graph is a straight line parallel to the time axis?
- 22. Kiran hired a taxi and noticed the initial reading of its odometer as 24803 km. After the journey, she noted the final reading of the odometer as 25118km. If the journey took 4 hours 40 minutes, calculate the speed of the taxi during the entire journey.
- 23. A marble rolling on a smooth floor has an initial velocity of 0.4m/s. If the floor offers a retardation of 0.2m/s². Calculate the time it will take to come to rest.
- 24. At a certain instant, an auto driver is driving at a speed of 30km/h. Then the uniformly accelerates the auto after 2.5minutes, the speed of auto becomes 60km/h. What is the average speed of auto? What is the value of uniform acceleration during the given interval of time?
- 25. A train 100m long is to cross a river of bridge of length 800m. What time will it take to cross the bridge? The train moves with a constant velocity of 36km/h.

26. Plan to go to a place by a vehicle. Take reading of odometer and speedometer after every 5 minutes till you reach your destination. Record these observations in tabular form; plot graphs between distance - time and speed time. State whether this motion is uniform or non-uniform.

Biology:

- Learn and write question answer of lesson Fundamental unit of life and Tissues.
- Draw diagram of Plant cell animal cell and Bacterial cell.
- Draw diagram of Simple permanent Plant tissues and Muscular tissues.

Chemistry:

- Chapter 1: MATTER IN OUR SURROUNDINGS
- 1. The smell of hot sizzling food of reaches you several meters away but to get the smell calc have to go close. Why?
- 2. A piece of chalk can be broken but iron cannot, why?
- 3. Rubber band changes its shape. Is it solid?
- 4. What is matter?
- 5. Name the physical state of matter which can be easily compressed.
- 6. How is humidity related to evaporation?
- 7. Name the suitable technique to separate ammonium chloride from sand.
- 8. What is the tincture of iodine?
- 9. Sponge is a solid but still can be compressed, why?
- 10. Why solid carbon dioxide is called dry ice?
- 11. Differentiate between boiling and evaporation.
- 12. Define latent heat of fusion and latent heat of evaporation.
- 13. How is humidity related to evaporation?
- 14. Describe an activity to show that particle have space among them.
- 15. Compare the properties of solid liquid and gas.

History and Civics:

- 1. Prepare and write the notes on the French Revolution(cover the following topics likely, reign of terror, role of philosophers, condition of women, how revolution put massive impact on world and India)
- Prepare and write the facts regarding what democracy and why democracy? Cite few examples from different countries of the world which does not have any kind of democracy and people are sufferer in the hands of their rulers.