

Class-IX
Home work
Subject: Mathematics

1. Write places where we use spiral roots.
2. Make 10 different questions of polynomial and find dividend, divisor and remainder.
3. Learn all identities related to polynomials and make two questions on each identity and solve it.
4. Make 10 questions of quadratic polynomial and factorise by using split into middle terms.
5. Revise chapter-1 and chapter-2 from R.D. Sharma OR any other reference book.

ENGLISH -1 (In A4 Size Sheet)

- Q1. You are the grandmother. How did you feel when your granddaughter gave you the novel 'Kashi Yatre'? Write your feelings.
- Q2. Read the Novel 'Three Man IN a Boat'

ENGLISH -2 (In A4 Size Sheet)

- Q1. You are concerned about protection of environment and wild life as Raman/ Kusum. Write an article in not more than 200 words on the topic 'Save Environment and wild life' for your school magazine.
- sQ2. Project work- Q .no. C 6 Unit -2 (page no.18)

Social Studies (Economics)

- Q.1 Visit to a village and collect the information about the economic activities of the villagers .
Points to be included
- a) Percentage of people included in the farm and non – farm activity
 - b) Cropping pattern
 - c) Crop variety improvement : Objective , Technique , Use of technology, Merits – demerits.
 - d) Irrigation method used

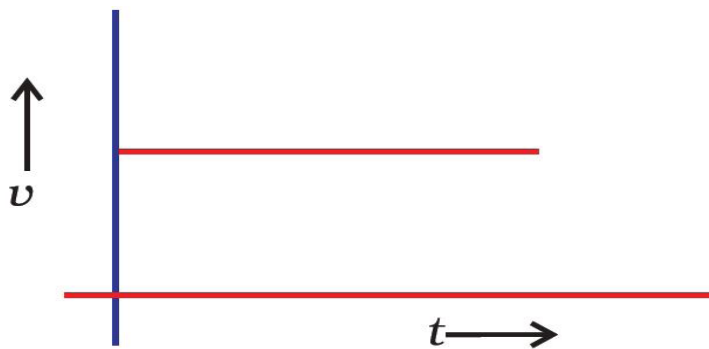
Subject: Biology

1. Revise chapter-5 from NCERT book or any other reference book.
2. Draw the diagram of plant or animal cell on chart paper and label it.
3. Write 5 points of differences between following in tabular form in your note book:-
 - (a) Xylem and phloem tissue.
 - (b) Simple permanent and complex permanent tissue.
 - (c) Parenchymatous and sclerenchymatous tissues.
 - (d) Parenchymatous and Collenchymatous tissues.
 - (e) Sclerenchymatous and collenchymatous tissues.

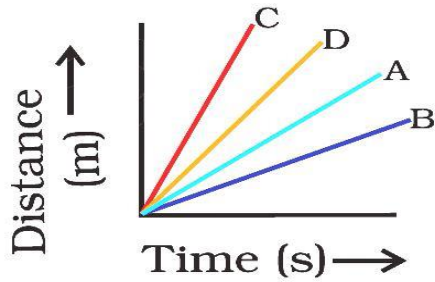
MOTION (PHYSICS)

Multiple Choice Questions

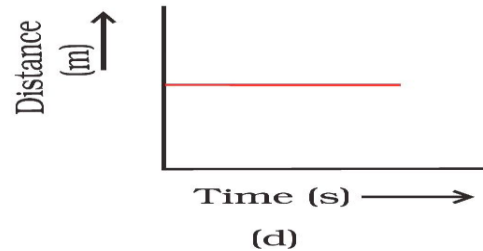
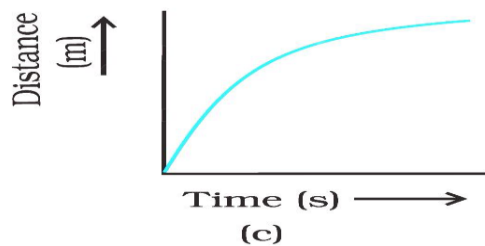
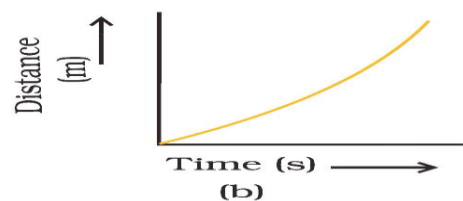
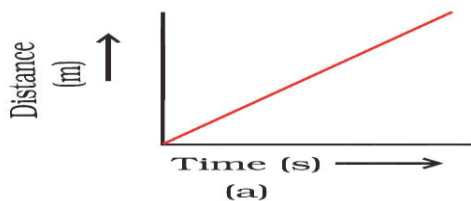
1. If the displacement of an object is proportional to square of time, then the object moves with
(a) uniform velocity (b) uniform acceleration
(c) increasing acceleration (d) decreasing acceleration
2. The distance time graph of a body coincides with its time axis. The body must be
(a) in uniform motion (b) at rest
(c) in uniformly accelerated motion (d) in zig-zag motion
3. From the given $v - t$ graph (see below Fig.), 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



4. The velocity time graph of a body is parallel to the time axis. The body is
(a) at rest (b) having uniform acceleration
(c) having zero acceleration (d) having non-uniform acceleration
5. A particle is moving in a circular path of radius r . The displacement after half a circle would be:
(a) Zero (b) πr
(c) $2r$ (d) $2\pi r$
6. 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) $u/2g$
7. 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
8. 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
9. Area under $a - v - t$ graph represents a physical quantity which has the unit
(a) m^2 (b) m
(c) m^3 (d) m/s
10. Four cars A, B, C and D are moving on a levelled road. Their distance versus time graphs are shown in below Fig.. Choose the correct statement
(a) Car A is faster than car D. (b) Car B is the slowest.
(c) Car D is faster than car C. (d) Car C is the slowest.

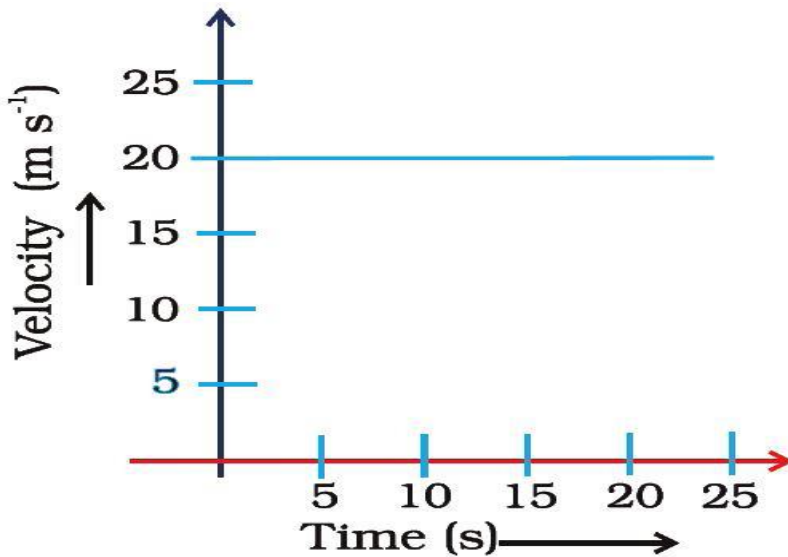


11. Slope of a velocity – time graph gives
 (a) the distance (b) the displacement
 (c) the acceleration (d) the speed
12. In which of the following cases of motions, the distance moved and the magnitude of displacement are equal?
 (a) If the car is moving on straight road (b) If the car is moving in circular path
 (c) The pendulum is moving to and fro (d) The earth is revolving around the Sun
13. Which of the following figures (see below Figure) represents uniform motion of a moving object.
 Correctly

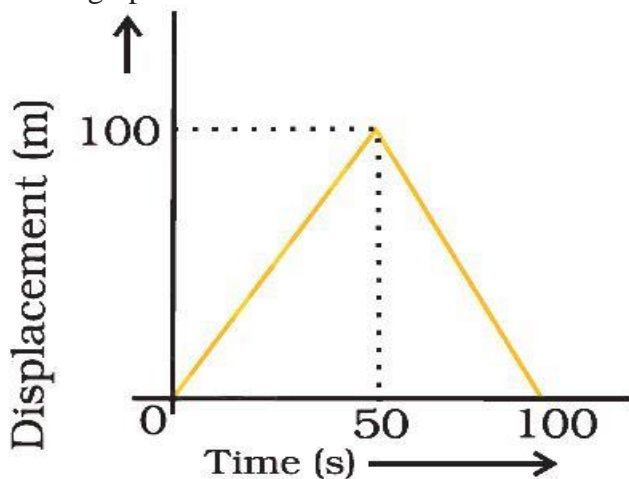


SHORT ANSWER QUESTIONS

14. 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 your answer.
15. How will the equations of motion for an object moving with a uniform velocity change?
16. A car starts from rest and moves along the x -axis with constant acceleration 5 m/s^2 for 8 seconds. If it then continues with constant velocity, what distance will the car cover in 12 seconds since it started from the rest?
17. A motorcyclist drives from A to B with a uniform speed of 30 km/h and returns back with a speed of 20 km/h . Find its average speed.
18. Draw a velocity versus time graph of a stone thrown vertically upwards and then coming downwards after attaining the maximum height.
19. The velocity-time graph (see below Figure) shows the motion of a cyclist. Find (i) its acceleration (ii) its velocity and (iii) the distance covered by the cyclist in 15 seconds.



20. A girl walks along a straight path to drop a letter in the letterbox and comes back to her initial position. Her displacement–time graph is shown in below figure. Plot a velocity– time graph for the same.



LONG ANSWER QUESTIONS

21. An object starting from rest travels 20 m in first 2 s and 160 m in next 4 s. What will be the velocity after 7 s from the start.
22. An electron moving with a velocity of 5×10^4 m/s enters into a uniform electric field and acquires a uniform acceleration of 10^4 m/s² in the direction of its initial motion.
- (i) Calculate the time in which the electron would acquire a velocity double of its initial velocity.
- (ii) How much distance the electron would cover in this time?
23. Obtain a relation for the distance travelled by an object moving with a uniform acceleration in the interval between 4th and 5th seconds.
24. Two stones are thrown vertically upwards simultaneously with their initial velocities u_1 and u_2 respectively. Prove that the heights reached by them would be in the ratio of $2u_1 : u_2$ (Assume upward acceleration is $-g$ and downward acceleration to be $+g$).
25. An object is dropped from rest at a height of 150 m and simultaneously another object is dropped from rest at a height 100 m. What is the difference in their heights after 2 s if both the objects drop with same accelerations? How does the difference in heights vary with time?

NOTE – Solution of all question should on separate A₄ size paper

CHEMISTRY

1. Differentiate between Crystalline and Non Crystalline (Amorphous) Substance with example.
2. What is thermodynamic scale?
3. Why it is advised that the Iodised salt should be stored in air tight container?
4. How gases can be liquefied by applying pressure?
5. Explain the activity which shows that air contains moisture.
6. Comment on the following statements:-
 - a) Sponge though compressible is a solid.
 - b) Two ice cubes are pressed between palm, When the pressure is released, the two cubes joint together.
7. What is the SI unit of Pressure?
8. Is heat and Temperature means same thing?
9. Why does the level of water not change when sugar/ salt is dissolved in water?
10. Differentiate between :-
 - a) Fluidity and Viscosity
 - b) Gas and Vapour
11. Which property of matter can be guessed from the zig- zag motion of dust particles?

Revise Chapter – 1

Note :- Write answer of given questions in your Note Book

हिन्दी

1. "स्वास्थ्य सर्वोपरि है।" इस तथ्य की जानकारी देते हुए अपने छोटे भाई को पत्र लिखकर दीजिए जो छात्रावास में रहता है और अक्सर बीमार हो जाता है।
2. आपके मुहल्ले में आए दिन चोरियाँ हो रही हैं उनकी रोकथाम के लिए थानाध्यक्ष को गश्त बढ़ाने हेतु पत्र लिखिए।
3. निम्न में से किसी एक विषय पर (200–250) शब्दों में निबंध लिखिए।

प्रकृति और मानव पर ग्लोबल वार्मिंग का प्रभाव

- भूमिका
- ग्लोबल वार्मिंग के खतरे
- बचाव हेतु उपाय
- उपसंहार

लोकतांत्रिक भारत में युवकों की भूमिका

- भूमिका
- स्वस्थ और शिक्षित युवक
- देश के विकास में युवाओं का योगदान
- प्रगतिशील युवा – प्रगतिशील देश
- शासकीय सहयोग
- नैतिकता
- राष्ट्र निर्माण
- उपसंहार

छात्र जीवन में अनुशासन

- भूमिका
- अनुशासन का अभिप्राय
- हीनता के कारण
- आदर्श अनुशासित छात्र
- उपसंहार

4. संवाद लेखन कीजिए शब्द सीमा (25–30) किसी एक विषय पर

1. आप और आपका मित्र क्रिकेट का मैच देख रहे हैं आपके बीच जो बातचीत होगी उसे लिखिए।

अथवा

आप अपने दोस्त से बहुत दिनों बाद मिलते हैं आप दोनो के बीच जो बातचीत होगी उसे संवाद रूप में लिखिए ।

समस्त कार्य हिन्दी कॉपी में कीजिए।