

Name = Pallavi

Roll no - 30

K88VGVE

SUMMATIVE ASSESSMENT - I, 2015-16

SCIENCE

Class - IX

Time Allowed : 3 hours

Maximum Marks : 90

General Instructions :

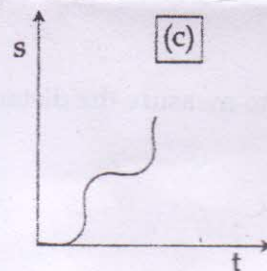
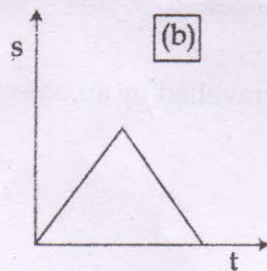
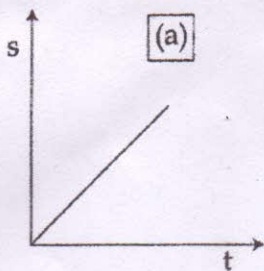
1. The question paper comprises of two Sections, A and B. You are to attempt both the sections.
2. All questions are compulsory
3. All questions of Section-A and all questions of Section-B are to be attempted separately.
4. Question numbers 1 to 3 in Section-A are one mark questions. These are to be answered in one word or in one sentence
5. Question numbers 4 to 6 in Sections-A are two marks questions. These are to be answered in about 30 words each.
6. Question numbers 7 to 18 in Section-A are three marks questions. These are to be answered in about 50 words each
7. Question numbers 19 to 24 in Section-A are five marks questions. These are to be answered in about 70 words each.
8. Question numbers 25 to 33 in Section-B are multiple choice questions based on practical skills. Each question is a one mark question. You are to select one most appropriate response out of the four provided to you.
9. Question numbers 34 to 36 in Section-B are questions based on practical skills. Each question is of two marks.

SECTION-A

- | | | |
|---|--|---|
| 1 | Name the fluid connective tissue. | 1 |
| 2 | Name the device used to measure the distance travelled by an object. | 1 |
| 3 | Write the units of 'g'. | 1 |
| 4 | Why a wooden table is considered a solid? Give two reasons. | 2 |
| 5 | Name the simple permanent tissue which has living cells with thin walls. What is the function of this tissue in the stems and roots? | 2 |
| 6 | State the law of conservation of momentum and write its any two applications. | 2 |
| 7 | Differentiate between solid, liquid and gases. Give any three points. | 3 |
| 8 | (a) State the factors on which evaporation of liquid depends. | 3 |

(b) Why our palm feels cold when acetone/perfume is poured on it?

- 9 Name the separation technique by which we can obtain coloured components from ink? Give two more applications of the technique used. 3
- 10 Differentiate between prokaryotic and eukaryotic cell. 3
- 11 Draw a well labeled diagram of nerve cell. 3
- 12 A force of 5N produces an acceleration of 8 m/s^2 in mass m_1 and an acceleration of 24 m/s^2 in mass m_2 . What acceleration would it give if both the masses are tied together? 3
- 13 Explain : 3
- Universal gravitational constant
 - Free fall
- 14 Differentiate between average speed and average velocity. Write the mathematical formula for each. Illustrate the difference between these two quantities with the help of an example 3
- 15 Describe the motion represented by the following displacement time graphs : 3



- 16 Do action and reaction act on the same body or on different bodies? Explain your answer with the help of example. How are they related in magnitude and direction? Write the total momentum of the gun and the bullet before firing. 3
- 17 Ashok read a newspaper report that we in India have had the green revolution which contributed to increased food grain production, white revolution led to increased availability of milk and blue revolution to increased fish yield, yet after 67 years of independence in our country problem of malnutrition and hunger persists. He was much agitated on reading the report. 3
- What does food security mean?
 - "We should increase the food production without degrading the environment". Give reasons to support the statement.
 - What can Ashok do at an individual level to combat the problem of hunger in our

- 18 Write down the advantages of manures over fertilizers. 3
- 19 List six physical properties of non-metals. Name two non metals. Name a non - metal that is liquid at room temperature. 5
- 20 State any three characteristics of the particles of matter? 5
Which of the following are matter?
table, oxygen, affection, milk, cold, thirst, salt.
- 21 (a) Define tissue. What is the importance of tissues in multicellular organisms? 5
(b) Are plants and animals made of same types of tissues? If no, then. Write three points of difference.
- 22 a) State Newton's third law of motion. 5
b) A car of mass ~~1000~~ 1000 kg moving with a velocity of 40 km/h collides with a tree and comes to a stop in 5 s . What will be the force exerted by the car on the tree?
- 23 (a) What is uniform motion? Draw an appropriate graph to explain its meaning. 5
(b) Draw a velocity-time graph for an object in uniform motion. Show that the area under the velocity-time graph gives the displacement of the object in the given time interval.
- 24 (a) List the various factors which are responsible for loss of stored food grains. 5
(b) How these factors affect the produce?
(c) What can be done to prevent this loss?

SECTION - B

- 25 Some students were doing experiments in laboratory, the teacher instructed that the chemicals should be used in specific quantity. This is because : 1
(a) To avoid wastage
(b) To get the correct result
(c) To give chance to every student
(d) To avoid delay
- 26 Moksh wanted to observe starch granules in potato under a microscope. He took a freshly out slice of a potato and pressed it on a slide. The stain that he should use to observe starch granules clearly is : 1

- (c) methylene blue (d) iodine

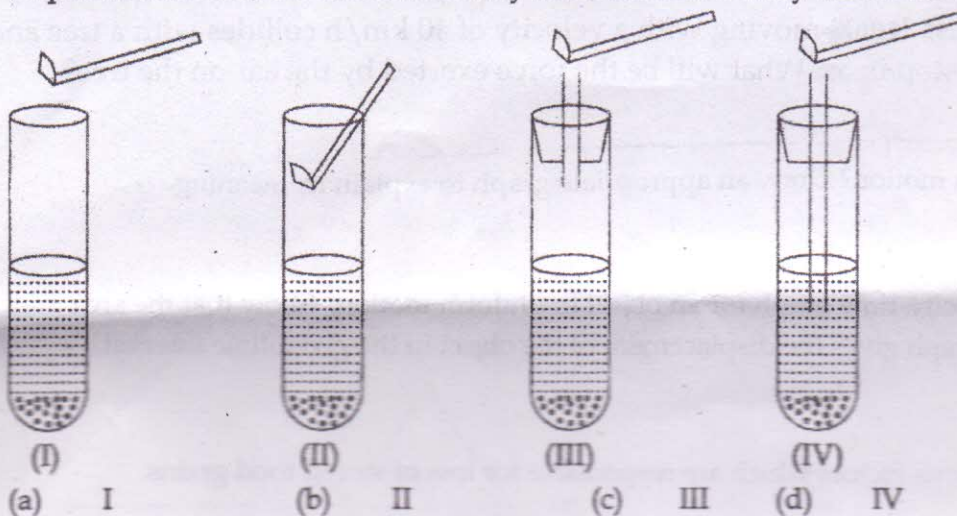
27 Carbon disulphide was added to a mixture of iron filings, sulphur powder and iron sulphide 1 taken in a boiling tube. Which of the following observations is correct ?

- (a) Iron filings will dissolve in Carbon disulphide.
(b) Sulphur powder will dissolve in Carbon disulphide.
(c) Iron sulphide will dissolve in Carbon disulphide.
(d) Nothing will dissolve in Carbon disulphide.

28 A test tube contains a mixture of iron filings and sulphur powder. To dissolve sulphur 1 powder, which is most commonly used solvent ?

- (a) alcohol (b) ether
(c) Carbon disulphide (d) water

29 Four students used different ways for burning of hydrogen produced by action of dilute 1 sulphuric acid on zinc. The correct way has been followed by the student.



30 When an onion peel cell is observed under a compound microscope the part that can be 1 observed is :

- (a) Nucleolus (b) Ribosomes
(c) Nucleus (d) Endoplasmic Reticulum

31 When stained appropriately, the muscle which shows alternate light and dark bands is : 1

- (a) striated (b) smooth
(c) Cardiac (d) unstriated

32 A mixture contains iodine, ammonium chloride and sand. Only iodine and ammonium 1 chloride sublimate. Only iodine dissolves in carbon tetrachloride. How will you separate the three components ? Sequence of steps will be :

- (a) Sublimation, addition of CCl_4 .

- (c) Sublimation, addition of H_2O , filtration.
- (d) evaporation, distillation, crystallization.

- 33 A student performed the experiment "To establish relationship between weight of a rectangular wooden block lying on a horizontal surface and minimum force required to just move it using a spring balance". If the weight of the given wooden block is nearly 200g wt and three known weights of 100g wt each are to be successively placed on the wooden block to take three more readings, then which one of the following spring balances, available in the laboratory would you select for the best results in the experiment? It is known that a force of 90g wt is required to just move the block on the surface. 1
- (a) Range 0-100g wt ; Least count 1.0g wt
 - (b) Range 0-200g wt ; Least count 2.0g wt
 - (c) Range 0-250g wt ; Least count 2.0g wt
 - (d) Range 0-500g wt ; Least count 5.0g wt
- 34 Rima took fine chalk powder, egg albumin, starch powder and alum powder in four test tubes A, B, C and D respectively. After adding water to all the four test tubes, identify the test tubes as true solution, suspension and colloid. 2
- 35 In an experiment to determine the boiling point of water, the stop watch used, to note down the temperature of water at different intervals of time, has 20 divisions between 0 to 10s marks. Find the least count of the stop watch. How does noting down temperature of water at different time-intervals help in confirming that temperature has reached boiling point? 2
- 36 A student took x gram water in a beaker and dipped p gram of raisins in it. After keeping raisins in water for about 2 hours he measured the mass of soaked raisins as q grams. He also measured the mass of water left in the beaker which was y grams. On the basis of his observations write the correct formula to find the percentage of water absorbed by raisins. Mention the process due to which weight of raisins increase? 2