

IX MODEL QUESTION PAPER - 2018

TIME: 3.00 Hrs.

SUBJECT – SCIENCE (83E)

Max. Marks:70+20=90

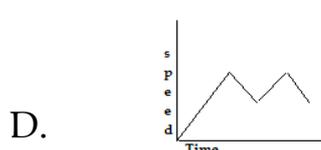
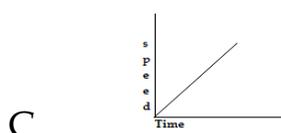
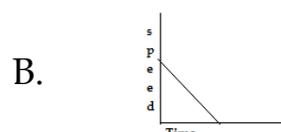
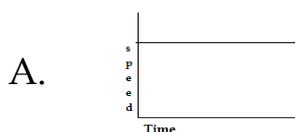
Instructions

1. This question paper consists of two parts. Part A- Theory questions and Part B- Activity based questions.
2. Part A consists of 36 and Part B consists of 13 questions.

Part A (Theory)

I Four alternatives are given for the each question below, choose the correct one
8 x 1=8

1. Dissolved Oxygen level of a reservoir is drastically reduced due to the industrial wastes released to it. Immediate consequence of this will be,
A. Reduction in the reproduction rate of aquatic organisms
B. Amoebic dysentery in surrounding people
C. Death of aquatic organisms
D. Increase in the population of aquatic plants
2. When RBC's are kept in hypertonic salt solution, their size
A. Increases
B. Decreases
C. Decrease initially and then increases
D. Remains same
3. Distribution of electrons in Chlorine atom is 2,8,7. Then the valency of chlorine is
A. 7 B. 2 C. 8 D. 1
4. Correct pair of egg laying mammals among the following is,
A. Echidna-Platypus B. Kangaroo-Rat
C. Echidna- Bat D. Platypus-Whale
5. The one which does not belongs to the group among the following is,
A. Apis Serena indica B. Apis dorseta
C. Apis flore D. Apis mellifera
6. A graph which represents uniform motion is,

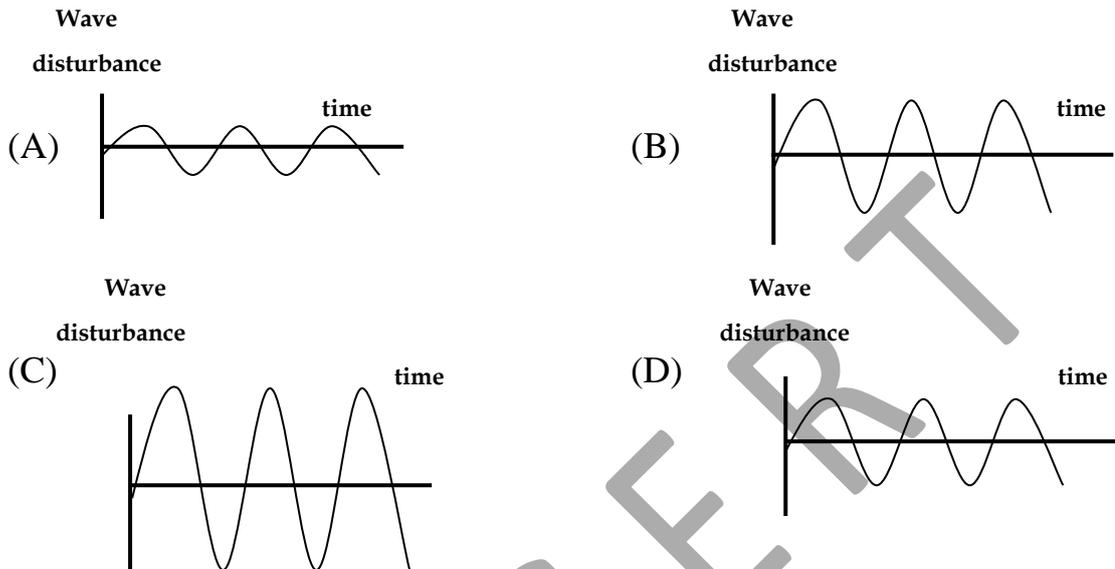


7. Correct order of the process of the rain formation

- (i) As the hot air rises, it expands and cools.
- (ii) water vapour in the air to condense in the form of tiny droplets.
- (iii) water evaporates and goes into the air.
- (iv) The hot air rises up carrying the water vapour with it.

- (A) (ii), (i), (iv), (iii) (B) (ii), (i), (iv), (iii)
(C) (iii), (iv), (i), (ii) (D) (iii), (iv), (ii), (i)

8. The sound wave with larger amplitude among the following is,



II. Match the animals given in column 'A' with the correct set of characters given in column 'B': 1x4=4

A

B

- | | |
|---------------|--|
| i. Jelly fish | a) Triploblastic, sea dwelling, jointed legs. |
| ii) Ascaris | b) Triploblastic, sea dwelling, water-driven tube system |
| iii) Prawn | c) Triploblastic, land dwelling, segmented body |
| iv) Star fish | d) Triploblastic, sea dwelling, porous body |
| | e) Triploblastic, parasitic, pseudocoelom |
| | f) Diploblastic, parasitic, dorsiventrally flattened body. |
| | g) Diploblastic, aquatic, cavity in the body. |

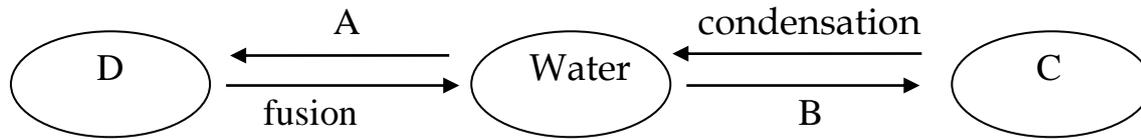
III. Answer the following questions in one sentence each:

6x1=6

- 10. What are isobars?
- 11. Differentiate between balanced and unbalanced force.
- 12. What do you mean by 1 Nm work is said to be done?
- 13. Define the reverberation of sound.
- 14. Sometimes an antibiotic does not cure the common cold. Why?
- 15. Name any two cropping patterns can be followed to get maximum benefits.

IV. Answer the following questions in two or three sentences each: 14x2=28

16. The following diagram shows change in the state of the water with temperature at constant pressure. Name A, B, C, D in this.

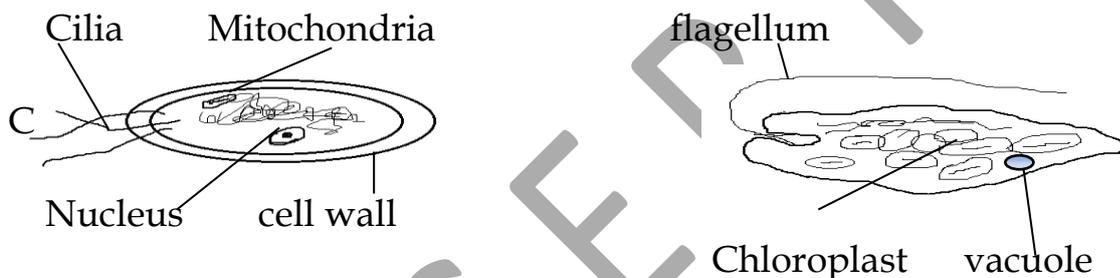


17. Write any two similarities between the properties of protons and neutrons.

18. Give reason- (a) Lysosomes are called as suicide bags of the cell.

(b) Mitochondria is known as power house of the cell.

19. A student has drawn an unicellular prokaryotic and an unicellular eukaryotic Organisms respectively as follow. Identify the two mistakes in the diagrams and correct them.



20. Name the following.

A. connective tissue having fluid matrix.

B. Water conducting tissue in plants.

C. Tissue responsible for the movement of our body.

D. Tissue connects two bones to each other.

21. A solution is obtained by dissolving 50g of sugar in 250g of water. Calculate the Concentration in terms of mass by mass percentage of the solution.

22. 'Integrated farming can play vital role in obtaining high yield from the farm in the crops'. Justify this statement with at least two scientific reasons.

23. What is uniform circular motion? Give two examples.

24. The value of 'g' is slightly greater at polar regions than at the equators. Give reason.

25. Write two differences between audible sound and ultrasonic sound.

26. What is inertia? Name two factors on which it depends .

27. Two Indian submarines are on war exercise in Arabic sea. Ultrasonic signal sent by one submarine is received by the another submarine after 7 seconds. How far are the submarines from each other?(velocity of sound in salt water is 1531m/s)

28. How mass and weight are different from each other? Explain with example.

29. Explain the role of forests in maintaining the quality of air and water.

V Answer the following questions:

4x3=12

30. Give reason

A. A throwball player lowers his/her hand while catching the ball along the direction of the motion of the ball .

B. When a fast moving horse stops suddenly a careless rider falls in the forward direction.

C. Wheels of vehicle provided with mud guards.

31. Draw the diagram of Neuron and label a)Axon b) Dendrite

32. A. Write any two common characters possessed by liquids and gases.

B. Wooden chair placed in your classroom is a solid substance.

Give two reasons for it.

33. Draw a distance time graph using the data given in the table and indicate the distance travelled by the body in 7 seconds.

Time in seconds	0	2	4	6	8	10
Distance in meters	0	6	12	18	24	30

VI Answer the following questions:

3x4=12

34. Write the formulae of the following .

A. iron(III) oxide

B. calcium phosphate

C. hydrogen sulphide

D. Magnesium sulphate

(clue:- valency of the ions- hydrogen -1, magnesium, calcium , oxide, sulphide,sulphate-2, iron(III) , Phosphate-3)

35. A. Differentiate between acute and chronic diseases.

B. Public cleanliness is very important for individual health .How? give two reasons.

36. Define.-

A.Kinetic energy

B. Potential energy

C. Power

D. Work

Part B- Activity based questions.

I Four alternatives are given for the each question below, choose the correct one.

4 x 1=4

1. Correct sequential order in the preparation of green manure are

(a) Green plants get converted into green manure.

(b) Growing some plants like sun hemp or guar, prior to the sowing of the crop Seeds.

(c) sun hemp or guar are mulched by ploughing them into the soil.

A. a→b→c

B. b→c→a

C. b→a→c

D. c→b→a

2. In an experiment to demonstrate reflection of the sound, the clock which is a source of sound is kept in front of the pipe at an angle of 55° . The angle on which the other piece of pipe should be adjusted to hear the clear sound on the other side of the normal is,

A. 45°

B. 55°

C. 65°

D. 35°

3. In practical exam after observing a slide under microscope student identified it as cardiac muscle. The character that helped her to identify this is
- Spindle shaped cells
 - Cells with only one nucleus
 - Non-striated cells
 - Striated and branched cells.
4. The statement which is true about the air pollution among the following is
- Growth of lichens is less on the bark of the trees besides busy roads.
 - Lichens are grown only in the areas where there is air pollution.
 - Lichens are not at all found in the areas where there is air pollution.
 - Growth of lichens is more on the bark of the trees besides busy roads.

II. Answer the following questions in one sentence each:

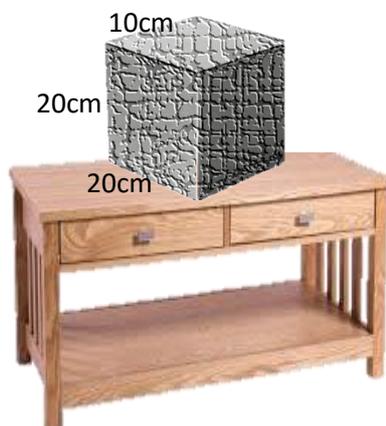
4x1=4

- A student has dissolved 10g of NaCl in 60mL of water in a 100mL beaker. But the water level in the beaker remains same. Why?
- A student had collected some plant samples from a pond during the field visit under a microscope he/she observed that they do not have a well-differentiated body design, To which group of Plantae they belongs to?
- After preparing a survey report over the spreading of common cold student notes that his classmates are more frequently prone to it rather than his neighbours. Give possible scientific reasons for this.
- A student glows a bulb by using dynamo which is attached to his bicycle wheel. Write the sequential energy conversion steps involved.

III Answer the following questions in one sentence each:

4x2=8

- Suggest an activity to understand Rutherford's alpha scattering experiment and briefly explain it.
- Briefly explain the procedure to prepare a temporary slide of plant cell using onion peel.
- A block of iron is kept on a tabletop of your classroom. The mass of wooden block is 10 kg and its dimensions are 20 cm x 20cm x 10 cm. Find the pressure exerted by the wooden block on the table top when it is kept on the table top as shown in the following figure.



12. Complete the table

Compound	Combining elements	Ratio by mass
	Hydrogen, Oxygen	1:8
Carbon monoxide		3:4
Calcium oxide	Calcium, Oxygen	
Magnesium chloride		24:71

VI Answer the following questions:

1x4=4

13. Explain the experiment that you have carried out to separate common salt from Ammonium chloride mixture with the help of a diagram.

D S E R T