

NEW AL WUROOD INTERNATIONAL SCHOOL, JEDDAH

Affiliated to CBSE – New Delhi, No:5730008



Pre Mid Term Examination (2018 -2019)

Subject: Science

Date: 01-07-2018

Set: A

Time: 3 Hours

Class: 9

Max. Marks: 80

Instructions to the Candidates:

- 1 The question paper has 27 questions in all. All questions are compulsory.
- 2 Questions from serial no 1 and 2 are very short answer questions. Each question carries 1 mark.
- 3 Questions from serial no 3 to 5 are of 2 marks questions.
- 4 Questions from serial no 6 to 15 are of 3 marks questions.
- 5 Questions from serial no 16 to 21 are of 5 marks.
- 6 Questions from serial no 22 to 27 are of 2 marks questions. They are practical based questions.

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| 1. | Name the cell organelle which is commonly known as powerhouse of the cell. | 1 |
| 2. | Where are genes located in the cell? | 1 |
| 3. | Draw the v-t graphs for the following cases:
(a) Uniform acceleration
(b) uniform motion | 2 |
| 4. | (a) Explain why some of the leaves may get detached from a tree if we vigorously shake its branch .
(b) Why do you fall in the forward direction when a moving bus brakes to a stop and fall backward when it accelerates from rest ? | 2 |
| 5. | What is organic farming? | 2 |
| 6. | What is sublimation? Explain it with help of an activity and a diagram. | 3 |

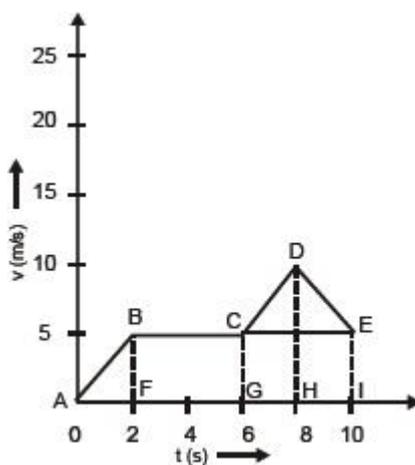
7. Answer the following: 3
- i) Carry out following conversion (a) 500 °C to Kelvin (b) 200 K to Celsius.
 - ii) Why are clothes spread out for drying?
 - iii) Why can a sponge be compressed though it is a solid?
8. Write difference between mixtures and compounds (any 4 points). 3
9. Make a comparison and write down ways in which plant cells are also different from animal cells. 3
10. What are manures? Give its classification 3
11. Kishore's mother wanted to use some eggs for incubation. Kishore helped his mother in separating rotten and spoiled egg from the good ones. He took a bucket of water to separate them. 3
- a) How can one separate the rotten eggs from the good ones using water?
 - b) What is the shell of egg made up of ?
 - c) What value of Kishore is seen in this act?
12. What are different patterns of cropping? 3
13. (a) An artificial satellite revolves around the Earth with a constant velocity. Is the statement true ? 3
- (b) A body covers one complete of a circular path of circumference of 176 m in 4 minutes. Find the displacement of a body in 6 minutes.
14. (a) Define distance and displacement. 3
- (b) A car accelerates uniformly from 18 km h⁻¹ to 36 km h⁻¹ in 5 s. Calculate (i) acceleration and (ii) the distance covered by the car in that time.
15. (a) A truck starts from rest and rolls down a hill with a constant acceleration. It travels a distance of 400m in 20 s. Find its acceleration. Find the force acting on it if its mass is 7000 kg. 3
- (b) Mathematically formulate Newton's second law of motion ($F=ma$).
16. a) Explain the following on the basis of kinetic model: 5
- i) Melting
 - ii) Liquefaction
 - iii) Boiling
- b) Classify the following in to osmosis/diffusion
- i) Spreading of virus on sneezing
 - ii) Swelling up of a raisin on keeping in water
 - iii) Preserving pickles in salt

iv) Aquatic animals using oxygen dissolved in water during respiration.

17. Explain the structure and function of mitochondria, with the help of a neat labeled diagram. 5

18. a) How do you differentiate between capture fishing, mariculture and aquaculture. 5
b) What is composite fish culture? Mention its advantages.

19. (a) Derive $S=ut + \frac{1}{2}at^2$, using v-t graph, where symbols having their usual meaning. 5
(b) Find the total displacement of the body from the following graph, during 6 to 8 seconds.



20. (a) State and Prove law of conservation of momentum. 5
(b) Two objects, each of mass 1.5 kg, are moving in the same straight line but in opposite directions. The velocity of each object is 2.5 m s^{-1} before the collision during which they stick together. What will be the velocity of the combined object after collision ?

21. a) How will you separate: 5
i) Pure water from sea water?
ii) Kerosene oil from a mixture of kerosene oil and petrol?
iii) Gold from a mixture of gold and copper filings?
b) A solution contains 40g of NaCl in 320 g of water. Calculate its concentration in terms of mass percentage of solution.

22. Why a cricketer lowers his hands while catching a ball? 2

23. Calculate force required to produce acceleration of 2 ms^{-2} , if the mass of the body is 5 kg. 2

24. A mixture of sand, powdered glass and common salt is dissolved in water and then filtered. Name the substance left on filter paper. Name the substance in the filtrate. 2
25. List any two precautions you must take while finding the melting point of ice and boiling point of water. 2
26. What are the major differences between cheek cells and onion peel cells? 2
27. a) Which stain is used for making temporary mount of an onion peel? 2
b) Why is staining of the material necessary?
