



Minuwangoda Education Zone

Second Term Test - 2025

Grade 10

Science

Name :

Time - 1 hours

Part – I

Select the most appropriate answer for all question.

1) The speed of motor car is 40 kilometers per hour. How it is expressed in standard way?

(i) 40 *KMPH*

(iii) 40 kmh^{-1}

(ii) 40 km/H

(iv) 40 kmh

2) Which of the following bio molecules contain phosphorous?

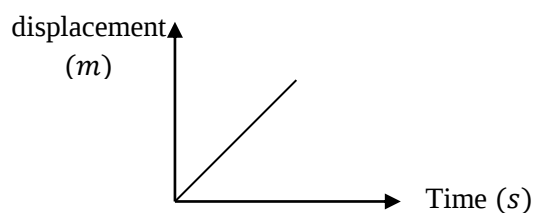
(i) Nucleicacids

(iii) Lipids

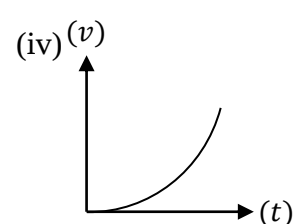
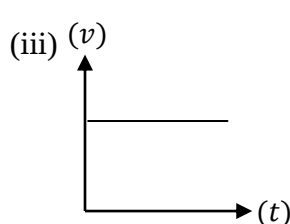
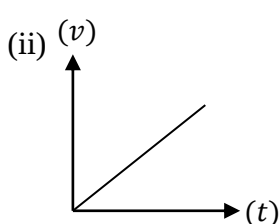
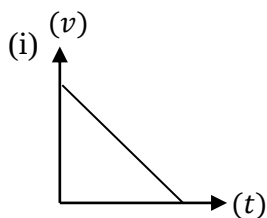
(ii) Proteins

(iv) Carbohydrates

3) The displacement time graph for the motion of an object is given below.



What is the correct velocity time graph related to above graph.



4) Which compound doesn't contain silicon?

(i) Quartz

(iii) Clay

(ii) Coal

(iv) Sand

5) The unit of momentum is,

(i) gms^{-2}

(iii) kgms^{-1}

(ii) kgms^{-2}

(iv) Nms^{-1}

6) What is the element that gains noble gas configuration only by gaining electrons

(i) Potassium

(iii) Fluorine

(ii) Helium

(iv) Alluminium

- 7) The cell organelles that cellular respiration and protein synthesis takes place respectively are,
- Vacuole, Endoplasmic reticulum
 - Ribosomes, nucleus
 - Mitochondria, Ribosomes
 - Nucleus, Golgi bodies
- 8) How many sodium hydroxide molecules are there in 10g of sodium hydroxide? ($Na = 23, O = 16, H = 1$)
- $\frac{1}{10} \times 6.022 \times 10^{23}$
 - $\frac{1}{4} \times 6.022 \times 10^{23}$
 - $10 \times 6.022 \times 10^{23}$
 - $4 \times 6.022 \times 10^{23}$
- 9) Select the incorrect statement about minerals.
- The most common minerals in human body are calcium and sulphur.
 - Minerals are inorganic compounds.
 - Extra thickness of leaves is a symptom of zinc deficiency
 - Goiter is caused by Iodine deficiency
- 10) What is the displacement of an object with in first 2s which is projected vertically upwards of an initial velocity of 40 ms^{-1}
- 60 m
 - 80 m
 - 40 m
 - 70 m
- 11) There are 2 energy levels in the neutral atom X. It has 7 protons in the nucleus. To which group of the periodic table does the X belongs?
- Group VIII
 - Group II
 - Group V
 - Group I
- 12) A certain molecule is given below. The elements suitable for x and y respectively are,
- C, H
 - F, N
 - O, H
 - N, H
-
- 13) A uniform rod is kept in equilibrium as in the diagram below. What is the mass of A.
- 720 g
 - 240 g
 - 560 g
 - 120 g
-
- 14) Not a property possessed by water due to inter molecular bonds.
- Less specific heat capacity.
 - High boiling point
 - Having a higher density than that of ice
 - Exist as a liquid at room temperature

- 15) An instance where the couple of forces is applied is,
 (i) Fixing a pvc tube to increase the length of the handle of spanner.
 (ii) tightening a nail with a screw driver
 (iii) Opening a window
 (iv) Measuring the weight of an object using the newton balance
- 16) Gecko, Penguin, Dolphin and Ichthyophis are respectively belongs.
 (i) Amphibia, Mammalia, Pisces, Reptilia
 (ii) Amphibia, Aves, Mammalia, Reptilia
 (iii) Reptilia, Aves, Mammalia, Amphibia
 (iv) Reptilia, Mammalia, Pisces, Amphibia
- 17) How many number of chromosomes are there in a fertilized egg?
 (i) 23 (ii) 22 (iii) 43 (iv) 46
- 18) What is the resultant force acts on the following object
- (i) 50 N
 (ii) 70 N
 (iii) 30 N
 (iv) 20 N


- 19) How many calcium carbonate moles are there in 20g of calcium carbonate? ($Ca - 40, C - 12, O - 16$)
 (i) 2 (ii) 5 (iii) 0.2 (iv) 0.5
- 20) The positively charged polyatomic ion is,
 (i) sulphate (iii) Ammonium
 (ii) Bicarbonate (iv) Hydroxyl
- 21) If an acceleration of $5ms^{-2}$ results when a force of 20N is applied on a certain object. What is the mass of the object.
 (i) 20 kg (ii) 4 kg (iii) 100 kg (iv) 5 kg
- 22) The nitrate of metal A is $A(NO_3)_3$. What is the chemical formula of oxide of A?
 (i) AO (ii) AO_3 (iii) A_2O_3 (iv) A_2O
- 23) Select the correct plant part and the example that the vegetative propagation occurs.
 (i) Under ground stem - sweet potatoes (iii) Seeds - Orange
 (ii) Roots - curry leaves (iv) Leaves - Aloe
- 24) A seed dispersed by water and a flower pollinated by water respectively are,
 (i) coconut, valisnaria (iii) sea mango, areconut
 (ii) hydrilla, coconut (iv) coconut, lotus

- 25) What is the nature of the skin of animal group with an incompletely divided ventricle?
- with glands
 - thin mucous skin
 - dry skin without glands
 - skin covered by features
- 26) Select the compound with highest number of atoms.
- CH_3COOH
 - $Al_2(CO_3)_3$
 - $CO(NH_2)_2$
 - HNO_3
- 27) Select the pair of molecules with same relative molecular mass. ($N = 14, O = 16, C = 12, H = 1$)
- N_2 and CO
 - CH_4 and N_2
 - NO and O_2
 - N_2 and H_2
- 28) What is the correct deficiency symptom and relevant vitamin?
- Deforming of bones - vitamin *E*
 - Night blindness - vitamin *A*
 - Scurvy - vitamin *B*
 - Rickets - vitamin *C*
- 29) Which of the following aqueous solution of oxide turns blue litmus in to red colour?
- Magnesium oxide
 - Sulphur dioxide
 - Sodium oxide
 - Calcium oxide
- 30) Not a method of increasing friction is,
- Cutting grooves on tires
 - Cutting grooves on sole of shoes
 - Covering the bicycle paddle with a rubber case
 - Using broad tires in heavy vehicles
- 31) The substance that should be added more to the diet to prevent the constipation is,
- Glucose
 - Starch
 - Protein
 - Cellulose
- 32) How many number of oxygen atoms are there in $\frac{1}{4}$ molecular moles of $C_6H_{12}O_6$?
- $\frac{6.022 \times 10^{23}}{4}$
 - $\frac{6.022 \times 10^{23} \times 6}{4}$
 - $\frac{6.022 \times 10^{23} \times 2}{3}$
 - $\frac{6.022 \times 10^{23}}{6}$
- 33) What is the scientific name of coconut plant?
- Cocos Nucifera*
 - cocos nucifera*
 - cocos NUCIFERA*
 - Cocos nucifera*
- 34) Which of the following industries use fungi?
- A* – Production of antibiotics
B – Production of yoghurt
C – Production of vinegar
- A* only
 - B* only
 - A* and *C* only
 - A* and *B* only
- 35) The frictional force acting on the bodies that are in motion,
- towards the moving direction of the object
 - towards the gravity
 - opposite to the moving direction
 - opposite to the gravity

- 36) A block of wood with the mass of 15kg is placed on a table. What is the force exerted on the wooden block by the table?
- (i) 100 N (ii) 150 N (iii) 15 N (iv) 10 N
- 37) What is the most suitable incident to demonstrate the Newton's 3rd law?
- (i) Falling a fruit from a coconut tree.
(ii) Moving a vehicle with a uniform velocity along a straight path.
(iii) Moving an air filled balloon when leaving the air inside it
(iv) Decreasing the velocity of an object projected vertically upward.
- 38) An object moving with the uniform velocity of 8 ms^{-1} increases its velocity up to 18 ms^{-1} within 10s. If the mass of the object is 10 kg what is the unbalanced force exerted on it?
- (i) 2.8 N (ii) 10 N (iii) 20 N (iv) 80 N
- 39) A place for the disposing of garbage in proper manner is in,
- (i) Muthurajawela (iii) Aruwakkal
(ii) Peliyagoda (iv) Meethotamulla
- 40) The pathogen that caused for chikungunya is,
- (i) a virus (iii) protozoa
(ii) bacteria (iv) fungi