

Department of Education –Western Province

Second term Test Evaluation -2018

Grade 11

Subject - Science

Paper -1

Time – 1 hour

Name

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Note –

- Answer all questions.
- In each of the question 1 to 40, Pick one of the alternatives 1,2,3,4 which you consider is correct or most appropriate.
- Mark a cross (x) on the number corresponding to your choice in the answer sheet provided.

01. Factors necessary for photosynthesis are shown in the diagram below. Factors represented by

A, B, C and D are,

1. Light, Oxygen, Carbon dioxide, Water
2. Oxygen, water, Carbon dioxide, glucose
3. Carbon dioxide, oxygen, water, glucose
4. Water, light, oxygen, Carbon dioxide



02. Which of the following are granulocytes and non-granulocytes respectively?

1. Neutrophils, Basophils
2. Neutrophils, Eosinophils
3. Monocytes, Basophils
4. Neutrophils, Monocytes

03. What is the most suitable indicator to identify separately two solutions which contain lime juice and gastric juice?

1. Litmus papers
2. PH papers
3. Methyl Orange
4. Phenolphthalein

04. Select the answer that contains only vector quantities.

1. Distance, Displacement, Speed
2. Displacement, velocity, acceleration
3. Distance, Time, Mass
4. Displacement, Time, Mass

05. Which blood vessel of the human blood circulatory system contains deoxygenated blood?

1. Pulmonary veins
2. Coronary arteries
3. Pulmonary artery
4. Aorta

06. Which substance may have a pH value of 7?

1. Acetic acid
2. Ammonia
3. Soap water
4. Ethyl alcohol

07. Following are some compounds in the human small intestine Lactase, Lactose, Maltase ,Maltose, Sucrase, Sucrose out of them select the correct enzyme and the substrate respectively.

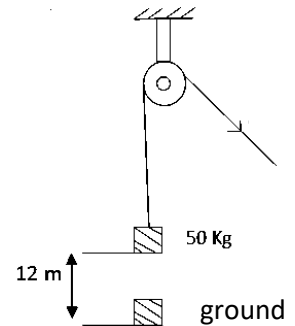
1. Maltose , Maltase 2. Sucrose , Sucrase 3. Lactase , Lactose 4. Lactose , Lactase

08. Two minutes were taken to lift a cement bag of 50 kg up to 12 m from the ground. What was his rate of doing work?

1. 30 Js^{-1} 2. 40 Js^{-1} 3. 50 Js^{-1} 4. 6000 Js^{-1}

09. Select the correct answer related to the process of food digestion.

Organ	Type of Enzyme	Substrate	End Product
1. Pancreas	Amylase	Protein	Polypeptides
2. Salivary gland	Ptyalin	Starch	Maltose
3. Pancreas	Pepsin	Protein	Polypeptides
4. Small intestine	Trypsin	Protein	Polypeptides



10. Which factor does not affect on rate of a reaction?

1. Surface area of reactants 2. Temperature at which the reaction occurs
3. Concentration of reactant 4. Boiling point of the reactant

11. Which factor/s is/are affected on the friction that act on objet?

- a. Weight of the object
b. The nature of the surfaces in contact
c. The area of the surfaces in contact
1. a and b 2. a and c 3. b and c 4. Only c

12. Which is the disease that not associated with the blood circulatory system?

1. Hypertension 2. Atherosclerosis 3. Albinism 4. Hypotension

13. The genetic disorder that may occur due to sex linked recessive gene is,

1. Albinism 2. Thalassemia 3. Hemophilia 4. AIDS

14. What is the hormone secreted by pituitary gland that influence the releasing of ovum from the Ovary ?

1. LH 2. FSH 3. Oestrogen 4. Projesteron

15. A. Styrofoam dissolved in petrol

B. Diluted HCl solution

C. Alcoholic iodine solution

D. Mixture of water and acetone

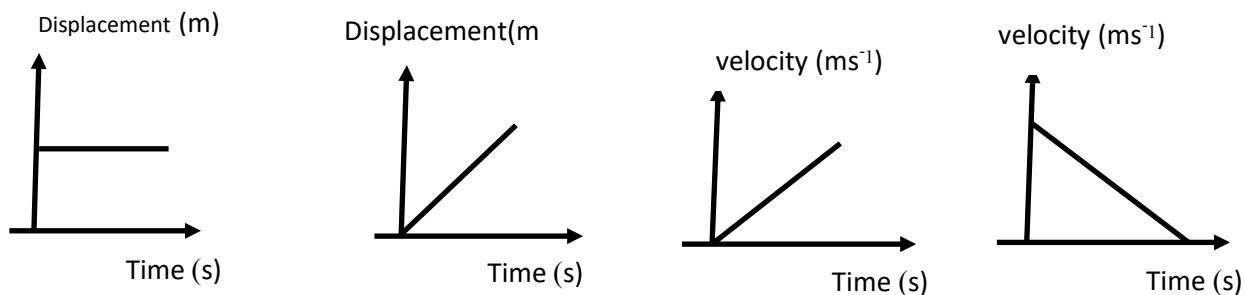
In which solutions contain polar solvent and polar solute from above given solutions

1. A and D 2. A and C 3. B and D 4. C and D

16. In which answer does a balanced chemical equation for decomposition reaction contain?

1. $2 \text{KMnO}_4 \longrightarrow 2 \text{K}_2\text{MnO}_4 + \text{MnO}_2 + \text{O}_2$
2. $\text{Zn} + \text{CuSO}_4 \longrightarrow \text{ZnSO}_4 + \text{Cu}$
3. $2 \text{Mg} + 2 \text{HCl} \longrightarrow 2 \text{MgCl}_2 + \text{H}_2$
4. $2 \text{H}_2\text{O}_2 \longrightarrow 2 \text{H}_2\text{O} + \text{O}_2$

17. Which graph does represent uniform velocity?



18. What is the force required for a motor bicycle moving with a mass of 250 Kg and uniform velocity of 12ms^{-1} to increase its velocity up to 20ms^{-1} within 10 second?

1. 2 N
2. 120 N
3. 160 N
4. 200 N

19. People who are living in temperate countries wearing dark cloths and using black colour containers To cook meals. What is the phenomenon common for above situations.

1. Absorption of thermal radiation
2. Reflection of thermal radiation
3. Convection of thermal radiation
4. Conduction of thermal radiation

20. The amount of heat required to supply to increase the temperature of a piece of copper with the mass of 150 g from 30°C to 50°C (Specific heat capacity of copper = $40 \text{Jkg}^{-1}\text{K}^{-1}$)

1. 300 J
2. 1200 J
3. 1800 J
4. 2700 J

21. Which of the following is a compound with ionic bonds?

1. CO_2
2. H_2O
3. KF
4. H_2S

22. What is the gas use to produce margerin?

1. N_2
2. H_2
3. O_2
4. CO_2

23. What is the best statement that explain the Avogadro constant well? (H=1, C=12, O=16, Ag = 108)

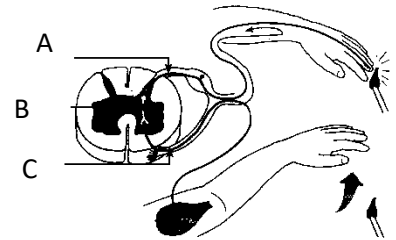
1. Amount of atoms contains in 108 g of silver.
2. Amount of atoms contains in 44 g of CO_2
3. Amount of atoms contains in 90 g of glucose.
4. Amount of atoms contains in 34 g of ammonium

24. Which of the following is the best method to prepare sample of oxygen at the laboratory?

1. Heating crystals of potassium permanganate.
2. Electrolyzing of acidulated water
3. Heating the Calcium Carbonate
4. Fractional distillation of condensed air

25. Below given is a diagram of reflex arc. What are the neurons mark as A, B and C

1. Intermediate neuron, motor neuron, sensory neuron
2. Sensory neuron, Intermediate neuron, motor neuron
3. motor neuron, Intermediate neuron, sensory neuron
4. sensory neuron, motor neuron, intermediate neuron,

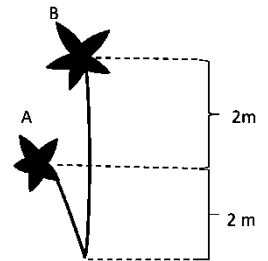


26. What is the required mass of NaOH to prepare 500 ml of NaOH solution with a concentration of 0.4 mol dm^{-3} (N = 23, O=16, H = 1)

1. 12.0 g
2. 8.0 g
3. 4.0 g
4. 10.0 g

27. An insect with a mass of 6 g is flown from the flower A to Flower B as given in the Diagram. What is the change of the potential energy of the insect? ($g=10 \text{ ms}^{-2}$)

1. $2 \times 10 \times 6 \text{ J}$
2. $4 \times 10 \times 6 \text{ J}$
3. $6/1000 \times 10 \times 2 \text{ J}$
4. $6/1000 \times 10 \times 4 \text{ J}$



28. If 5 LED lamps with 12 W are lighted up for 4 hours, Calculate the quantity of electrical energy Spent

1. 24 kWh
2. 2.4 kWh
3. 0.24 kWh
4. 0.024 kWh

29. What is the percentage of parental genotypes received to the F_2 generation in a $BB \times bb$ cross?

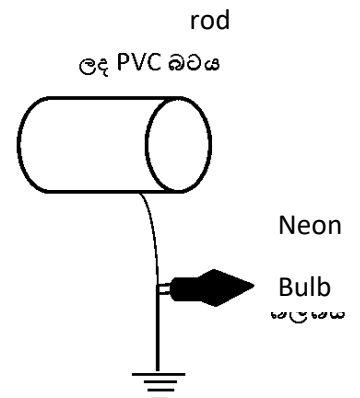
1. 25%
2. 50%
3. 75%
4. 100%

30. When considering the efficiency and life time which lamp is most suitable for energy Conversation?

1. LED lamp
2. Filament Lamp
3. Compact fluorescent light (C.F.L)
4. Fluorescent lamp

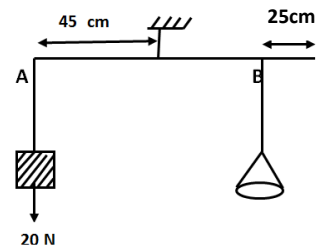
31. A PVC rod charged by rubbing with polythene is connected to the earth through the neon bulb by using a wire. Which of the following is the correct observation and explanation?

1. The neon bulb lighted up once, electrons flowed from earth to PVC
2. Neon bulb lighted up once, electrons flowed from PVC to the earth
3. Neon bulb did not light up, electrons did not flow.
4. Neon bulb did not light up, electrons flowed from PVC rod to the earth



32. The hormone that prepared the body to activate in an emergency is,
 1. Testosterone 2. Oestrogen 3. Adrenaline 4. Glucogen
33. The amount of heat required to convert 1 Kg of water at 100°C into steam at the same temperature is ,
 1. Specific heat capacity of water . 2. Specific latent heat of fusion of ice
 3. Boiling point of water 4. Specific latent heat of vaporization of water
34. What is the best method to identify the basic pigments of an ink?
 1. Chromatography 2. Solvent extraction 3. Recrystallization 4. Fractional distillation
35. Which answer shows the correct order of the domestic electric circuit?
 1. Electric meter , Over load circuit breaker , isolator , trip switch
 2. Over load circuit breaker, Electric meter , isolator , trip switch
 3. Over load circuit breaker, isolator , Electric meter , trip switch
 4. Isolator , Electric meter , Over load circuit breaker , trip switch
36. Which phenomenon can be explained by using Newton's third law?
 1. Falling a fruit from the tree 2. Motion of the boat to opposite direction of the rowing
 3. Falling of passengers to the forward when apply break to the buss
 4. Moving of objects in the space

37. Weight of 20 N is hung at point A using a rod with 1 m. Find out the weight should place at the point B which is 45 cm away from point A to balance the rod .
 1. 5 N 2. 60 N 3. 45 N 4. 30 N



38. When apply a voltage of 12 v to the main lamp of a motor vehicle, a current of 1.5 A flows through it. The power of main lamp of the vehicle is,
 1. 18 W 2. 12 W 3. 15 W 4. 8 W
39. What is the organism which contribute to spread virus " Nipha" through out the world?
 1. Fly 2. Bat 3. Cattle 4. Rabbit
40. Which procedure that should be used to reduce non communicable diseases?
 1. Increase the consumption of food with containing saturated fats.
 2. Increase the consumption of salt.
 3. Increase the consumption of fiber containing foods
 4. Increase the body mass by good food habits.

