Department of Education –Western Province
Second term Test Evaluation -2018

Grade 10	Subject - Science	Paper -1	Time – 1 hour

Name:- ……………………………………… Index Number:- ………………

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.

1. Theory of cell was introduced by

   1) Schleiden and Schwann   2) Robert Hooke   3) Carl Woese   4)Alexander Flemne

2. Select incorrect answer about nucleic acid that contained in living matter

   1) Store genetic materials of organisms

   2) Variations are occurred due to mutations of DNA molecule

   3) Some viruses contain both DNA and RNA

   4) Important to systhesis of protein in the organisms

3. Cramps and Nausea are deficiency symptoms of human body due to lack of a certain element. What is that element?

   1) Sodium   2) Potassium   3) Iodine   4) Phosphorous

4. At which instance contain 1 mol of substances from followings? (H-1, C-12, o-16)

   1) Hydrogen atom of 2g of hydrogen

   2) Oxygen atoms of 8g of oxygen

   3) Water molecules of 8g of water
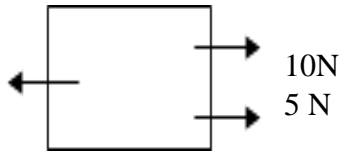
   4) Methane molecules of 16g of methane

5. When heating a certain element, it gives bright white colour flame forming white colour powder. What is that element?
   1) Fe   2) Al   3) Mg   4)Pb

6. If a vehicle needs 5s to complete 15m. Find the mean speed of it?
   1) $75ms^{-1}$ 2) $10ms^{-1}$ 3) $3ms^{-1}$ 4) $20ms^{-1}$

1

7.

8N

10N

5 N

This picture shows 3forces acting on an object. Find the direction and the magnitude of the forces that should be applied to keep the object at rest?

1) 15N   2) 4.7N   3) 7N   4) 23N

8. Human nitrogenous excretion process mainly done by

1) Kidney   2) Skin   3) Lungs   4) Bladder

9. The molecular formula of water is H_2O. The number of atoms in 18g of water is (H-1, O-16)

1) 6.023×10^{23} 2) $6.023 \times 10^{23} \times 3$ 3) $2 \times 6.023 \times 10^{23}$ 4) $6.023 \times 10^{23} \times 18$

10. $^{35}_{17}X$ Number of neutrons present in the element is

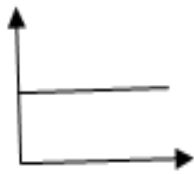1) 18   2) 17   3) 35   4) 52

11. What is the relevant displacement time graph when an object moving uniform velocity

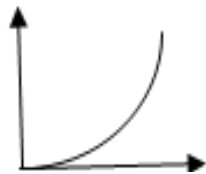Displacement (m)   Displacement(m)   Displacement(m)   Displacement (m)
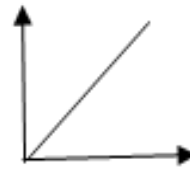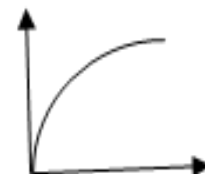
Time (S)   Time (S)   Time (S)   Time (S)

12. Select the instance which is not an example for couple of forces of moment

1) Rotating the steering wheel   2) Opening a tap

3) Rotating a nut using spanner   4) Unscrewing a nail with a screw driver

13. Function of the smooth endoplasmic reticulum of a cell

1) Secretion   2) Do the respiratory reactions

3) Synthesis of protein   4) Transport and production of lipids and

steroids

14. What is the instance that meiosis can takes place?

1) Development of somatic cells   2) Development of embryo

3) Production of sperms   4) Division of molula

15. Who introduced the periodic table at first as the classification method of elemets
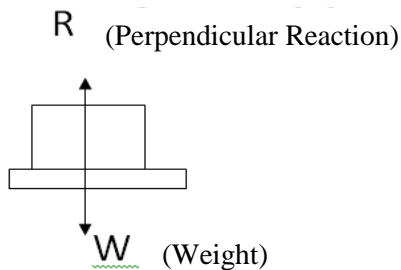
1) Niels Bohr   2) Mendeleeff

3) Ernest Rutherford   4) John Dolton

16. Which element has the highest electronegativity according to Pauling Scale?

    1) F   2) Cl   3) N   4) P

17.

R (Perpendicular Reaction)

If the perpendicular reaction is 100N. What is the mass ofthe object?

    1) 100kg   2) 10g

    3) 10kg   4) 0.1kg

W (Weight)

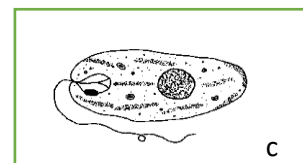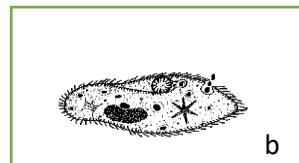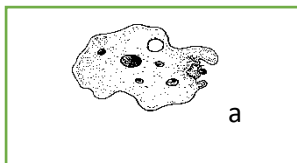18. What is the instance mention below which increase the frictional force.

    a) Applying sand on railway line when travelling hill countries

    b) Applying Boric powder on caram boards

    c) Using a rope when climbing trees

    1) a and c   2) a and b   3) b and c   4) All a,b and c

19. What is the disease which causes due to lack of vitamin A

    1) Scurry   2) BeriBeri

    3) Bito patches in the eye   4) Osteoporosis

20.Select the correct answer the appendages, are used for location by following unicellular organisms

    1) Flagella, cilia, pseudo podia   2) pseudo podia, cilia, flagella,

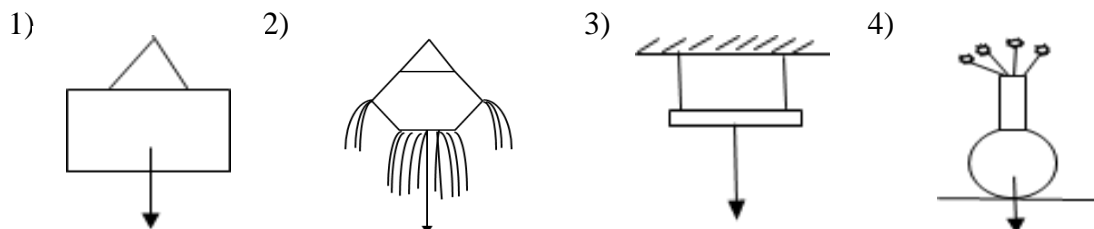   3) Flagella, pseudo podia,cilia   4) cilia, pseudo podia,flagella

21. The ring A is in equilibrium under the action of shown system of forces. The resultant force that acting on the ring A is?

    1) 50N force upward   2) 50 N force downward

    3) Zero   4) None of above

22. 19 protons are contained in an atom named R. Select the stable electronic configuration of the iron formed by R.

   1) 2,8,7   2) 2,8,8,1   3) 2,8,8,2   4) 2,8,8

23. What is the respond which shows equilibrium on object of under 3 parallel forces.

   1)   2)   3)   4)

24. What is the momentum of a vehicle mass with 1000kg when it's travelling 20ms^{-1} velocity?

   1) $1000/20kgms^{-1}$ 2) 1000 x 20kgms^{-1}

   3) $20/1000kgms^{-1}$ 4) $1/2$ x 1000 x 20 kgms^{-1}

25. Select the correct scientific name of human according to binominal nomenclature

   1) Homo Sapiens   2) Homo sapiens
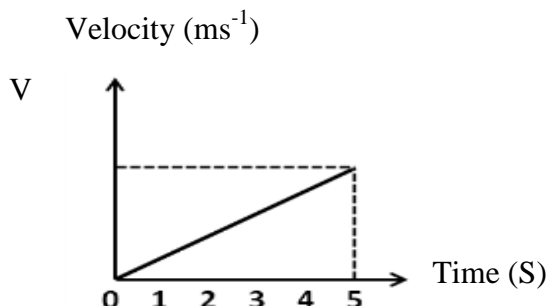
   3) *Homo sapiens*   4) *homo Sapiens*

26. A certain element

   • Have allotropes in nature
   • High Boiling point
   • Use for extraction of metals

   What is that element?

   1) Carbon   2) Sulphur   3) Aluminum   4) Potassium

27. Following velocity (V) time (T) graph shoes 4ms^{-2} acceleration. What is the Final velocity of it

   Velocity (ms^{-1})

   1) 10ms^{-1} 2) 20ms^{-1}

   3) 0.8ms^{-1} 4) 0.4ms^{-1}

   Time (S)

28. Select the answer which is not required for equilibrium of an object under 2 forces.

4

1) Two forces are same in magnitude 2) Twoforces are acting on same line

3) Two forces are same in direction 4) Resultant is zero of both forces

29. After releasing one ovule from one ovary how long does it takes to issue an ovule again from the same ovary.

1) 56 days   2) 28 days   3) 14 days   4) 30 days

30. Select the adaptation that shows by flowers of coconut tree to avoid self-pollination

1) Hercogamy   2) Having extrose stamens

3) Having unisexual flowers   4) Self-sterility

31. Select correct statement about speed and velocity

1) Speed is vector quantity and velocity is scaler

2) When an objects falls down velocity is gradually decreased

3) Always velocity of a moving object is constant

4) The magnitude and direction are not changed when object is in uniform velocity

32. Which factor is constant at always with the time when a fruit is fulling to ground (consider No, resistance of air)

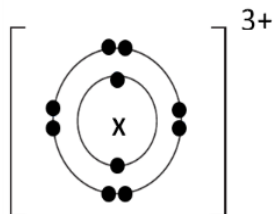1) Acceleration   2) Speed   3) Velocity   4) Displacement

33. Following are few common features belongs for a group of organism.

- Triploblastic, coelomic, posses jointed limbs
- Form tagma by collecting several segments
- Show sexual dimorphism

What is the name of the group of organism which show above features?

1) Echinodermata   2) Mollusca   3) Mammalia   4) Arthropoda

34.

What is the place of element in the periodic table which form X^{3+} on

1) 2nd period, 2nd group   2) 2nd period, 3rd group

3) 3rd period, 2nd group   4) 3rd period, 3rd group

35. The object with mass 'm' moves in acceleration of 'a' when the resultant force is 'f' on the object'. What is the correct relationship among a, m and f?

1) a=f/m   2) a=m/f   3) a=f x m   4) af/m

36. Following statements are related with ionic compounds.

   a) Ionic bonds are formed by sharing of electrons

   b) Ionic compound have low melting points/boiling points

   c) Aqueous solutions of ionic compounds have positive ions and negative ions

   d) Aqueous solutions of ionic compounds can conduct electricity

   Correct statements are   1. a and b   2. b and d   3. c and d   4. a and d

37. Write proper values for (a), (b), (c) respectively mention in table given below.

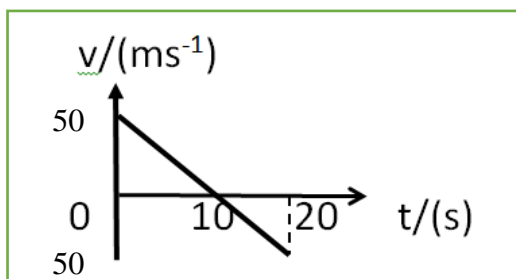| Element	Atomic number	Mass number	Number of protons	Number of neutrons
H	(a)	1	1	0
C	6	(b)	6	6
Al	13	27	©	14

   1) 1,12,13   2) 1,6,13   3) 1,12,23   4) 0,12,13

38. A_2O is chemical formula of oxide of A what is the chemical formula nitrite of A.

   1) ANO_3 2) $A(NO_3)$ 3) A_2NO_3 4) $A_3(NO_3)$

39. Following velocity graph represent the motion of a stone thrown upward vertically with initial velocity of $50ms^{-1}$

What is the maximum hight stone was reached?

   1) 50 m

   2) 250 m

   3) 270 m

   4) 20m

40. Select the true statement about human reproduction

   1) Sexual maturity is only common for female

   2) Formation of ovules of females start at foetus state

   3) Pregnancy period of female is about 360 days approximately

   4) Primary sexual characteristics can be identified with the beginning of adolescence.