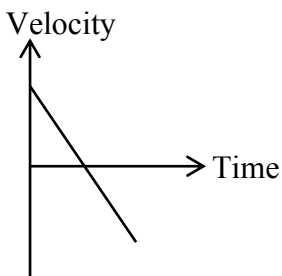


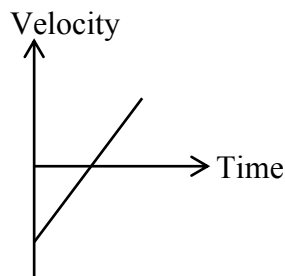
- 10) Some characteristics of covalent compounds are given below.
- A) Most of the compounds are in the solid state at room temperature
 - B) They have low melting points and boiling points
 - C) Aqueous solutions of covalent compounds conduct electricity.

The correct ones are,

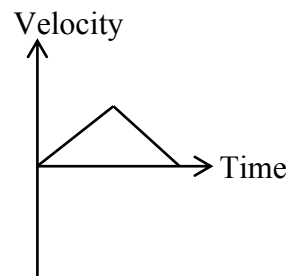
- 1) Only A
 - 2) Only B
 - 3) A and B only
 - 4) B and C only
- 11) What is position of an element in the periodic table with the atomic number of 16
- 1) IInd group 3rd period
 - 2) IIIrd group 3rd period
 - 3) VIth group 3rd period
 - 4) IIIrd group 3rd period
- 12) What is correct velocity time graph for the motion of a ball from the time it is projected upward until it reaches the ground.



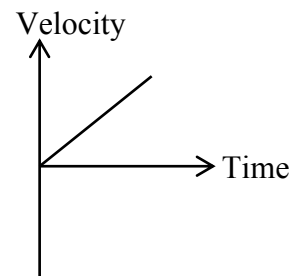
1)



2)



3)



4)

- 13) Select the correct statement out of the given a, b, c
- a) It is very important to contain fibres in food.
 - b) Vitamin C is a fat soluble Vitamin
 - c) The main elements contribute to make bio molecules are C, H, N and K.
- 1) a and c
 - 2) a and b
 - 3) b and c
 - 4) only a

- 14) When 30 meters per second is expressed in kilometers per hour is,

1) $\frac{30 \times 30 \times 60}{1000}$ 2) $\frac{30 \times 60}{1000}$ 3) $\frac{30 \times 1000}{60 \times 60}$ 4) $\frac{60 \times 60 \times 30}{1000}$

- 15) The vitamin help to synthesis collagen fibers is

- 1) Vitamin C
- 2) Vitamin A
- 3) Vitamin K
- 4) Vitamin D

- 16) A motor cycle moving with a velocity of 40 ms^{-1} gained an acceleration of 2 ms^{-2} with in 10S. What is the velocity of the motor cycle at the ended of the 10S.

- 1) 60 ms^{-1}
- 2) 80 ms^{-1}
- 3) 100 ms^{-1}
- 4) 400 ms^{-1}

- 17) The pair of hormones help for the development of secondary sexual characteristics in girls and maintaining the menstrual cycle is

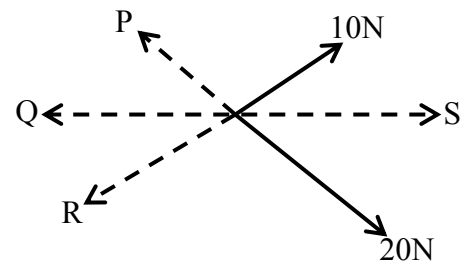
- 1) Oestrogen and Testosterone
- 2) Oestrogen and Progesterone
- 3) Oestrogen and Adrenaline
- 4) Pogesterone and Testosterone

18) A meter ruler is suspended at the middle using a string. A mass of 250g is hung at the point 30cm. What is the mass should be hung at the other end of the ruler to balance it?
 1) 100g 2) 1kg 3) 150g 4) 1.5kg

19) Which of the following ion doesn't have equal number of electrons to Ar.
 1) Na^+ 2) S^{2-} 3) K^+ 4) Ca^{2+}

20) A characteristic of Asexual reproduction is
 1) New species are produced
 2) Meiosis occur
 3) Produce gametes
 4) Give rise to off springs which are more like maternal organism.

21) The resultant of 20N and 10N forces would be,
 1) P
 2) Q
 3) R
 4) S



22) The number of moles of oxygen atoms contain in one mole of Al_2O_3 is
 1) $\frac{3}{2}$ 2) 2 3) 3 4) $\frac{3}{2}$

23) The force exerted on three objects x, y, z are given in the following table

| Object | Mass (kg) | force (N) |
|--------|-----------|-----------|
| x | 20 | 40 |
| y | 18 | 36 |
| z | 12 | 24 |

What are the objects with same acceleration?

1) x and y 2) x and z 3) y and z 4) x, y and z

24) What is the velocity would have in an object of 20000N to gain an equal momentum in a motor car of 6000kg moving at a velocity of $6ms^{-1}$?
 1) $18ms^{-1}$ 2) $180ms^{-1}$ 3) $9ms^{-1}$ 4) $6ms^{-1}$

25) Select the correct relationship between the animal group and the animals belong to that group?
 1) Coelenterata - Hydra, Coral polyps
 2) Mollusca - Snail, Earth worm
 3) Annelida - Bivalves, Leech
 4) Arthropods - Centepede, squid

26) What is the molecule with the highest relative molecular mass (H=1, S=32, O=16, N=14, Ca=40, C=12, Cl=35.5)

- 1) H_2SO_4 2) NH_4Cl 3) $CaCO_3$ 4) CH_3OH

27) What are the factors that the friction between two contact surfaces depend on

- 1) Surface area of the contact surfaces, normal reaction
- 2) Normal reaction, Nature of the contact surfaces
- 3) Nature of the contact surfaces and the area of the contact surfaces.
- 4) Area of the contact surfaces, Normal reaction, Nature of the contact surfaces.

28) Which of the following cell organelles can be observed only through the electron microscope?

- 1) Cytoplasm
- 2) Chloroplasts
- 3) Nucleus
- 4) Ribosomes

29) The number of water molecules in 9g of water is, (H=1, O=16)

- 1) $\frac{6.022 \times 10^{23}}{9 \times 18}$
- 2) $\frac{18}{9} \times 6.022 \times 10^{23}$
- 3) $\frac{9}{18} \times 6.022 \times 10^{23}$
- 4) $9 \times 18 \times 6.022 \times 10^{23}$

30) Select the incorrect relationship between the cell organelle and its function

- 1) Mitochondria - Produce energy
- 2) Ribosomes - Packing the secretory substance
- 3) Nucleus - Controls cellular activities.
- 4) Endoplasmic reticulum - transport substances within the cell.

31) How many number of chromosomes contain in a human nerve cell?

- 1) 1
- 2) 23
- 3) 46
- 4) 45

32) Another feature of a plant with parallel leaf venation is

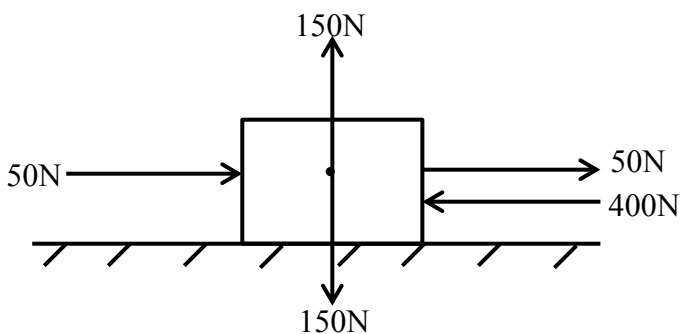
- 1) has an unbranched stem
- 2) has tetramerous flowers
- 3) Possess a tap root system
- 4) has two cotyledons in a seed

33) Select the correct statement about atom 3_1H and 2_1H

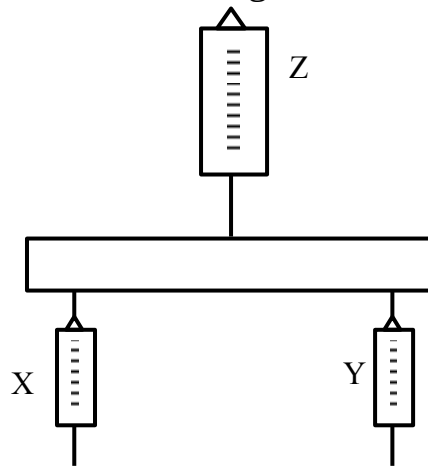
- 1) The mass number of two atoms are equal
- 2) The number of electrons in two atoms are differ
- 3) The atomic number of both atoms are equal
- 4) The number of neutrons in two atoms are equal

34) Forces exerted on an object is given below. What is the resultant of the force?

- 1) 400N
- 2) 100N
- 3) 300N
- 4) 500N



35) A wooden strip is at equilibrium as in the diagram below.



If the reading of the spring balance X is 15N what would be the reading of spring balance Z.

- 1) 5N 2) 10N 3) 30N 4) 15N

36) The sea horse belongs to

- 1) Mammalia 2) Pisces
3) Echinodermata 4) Coelenterata

37) Select the correct statement about the mass of an object.

- 1) An object with the mass 60kg on the earth, weight 10kg on the moon.
2) The SI unit of measuring mass is kg.
3) Mass is a vector quantity as it has a magnitude and a direction
4) If a same force is exerted on an objects with unequal masses their acceleration is equal.

38) The number of O atoms contain in 4 molecular moles of CO_2

- 1) $\frac{6.022 \times 10^{23} \times 4}{2}$ 2) $6.022 \times 10^{23} \times 4 \times 2$
3) $\frac{6.022 \times 10^{23} \times 2}{4}$ 4) $6.022 \times 10^{23} \times 4$

39) What is the correct statement about the micro organisms.

- 1) All micro organisms belong to Domain Archaea
2) Some bacteria are important for Nitrogen fixation
3) Protozoans possess a chitinous cell wall.
4) Yeast is a multi cellular fungi

40) What is the main reason for increasing the waste problem in Sri Lanka

- 1) A bundance of non decaying materials.
2) Classification doesn't occur properly
3) Increasing the protests
4) Misunderstands in people about waste.