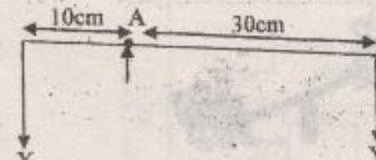


බස්නාහිර පළාත් අධ්‍යාපන දෙපාර්තමේන්තුව மேல் மாநாணக் கல்வித் திணைக்களம் Department of Education - Western Province			
තෙවන වර අවසාන ஆண்டு இறுதி மதிப்பீடு - 2019 Year End Evaluation			
ශ්‍රේණිය Grade	10	විෂය Subject	Science
පත්‍ර Paper	I	පැය Hours	01

Note :-

- Answer all the questions.
- In each of the questions 01 to 40, pick one of the alternatives (1), (2), (3), (4) which you consider is correct or most appropriate.
- Mark or cross (x) to the number corresponding to your choice in the answer sheet your provided.

- (01) Retarded growth of roots and red and purple patches on leaves are the deficiency symptoms shown due to,
 (1) Nitrogen (2) Phosphorous (3) Potassium (4) Calcium

- (02)  A uniform rod clamped at the point A, as shown in the figure. Weights of X, Y suspended and balanced the rod. Select the correct statement regarding it.
 (1) $X = Y$ (2) $Y < X$
 (3) $3Y > X$ (4) $2X = Y$

- (03) The organelles which synthesis protein and transport throughout the cell respectively are,
 (1) Ribosome and Rough endoplasmic Reticulum
 (2) Rough Endoplasmic Reticulum and Vacuoles
 (3) Ribosome and Golgi body
 (4) Rough Endoplasmic Reticulum and Mitochondrion

- (04) Select the Gymnosperm plant form given below.
 (1) Coconut (2) Paddy (3) Grass (4) Pinus

- (05) Select the answer indicates atomic number and mass number in a standard form of a Aluminum atom with 14 neutrons and 13 protons.
 (1) ${}_{14}^{26}\text{Al}$ (2) ${}_{13}^{27}\text{Al}$ (3) ${}_{14}^{27}\text{Al}$ (4) ${}_{13}^{14}\text{Al}$

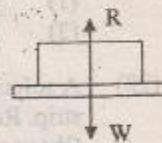
- (06) Not an evidence for a chemical change.
 (1) Formation of precipitation (2) Evolving gas bubbles
 (3) Dissolving (4) Combustion

- (07) A diagram given below indicates how a force acts on a feet of runner.
 To which direction does the runner exert a force?
 (1) A (2) B (3) C (4) D



- (08) A best method to identify carbondioxide gas is,
 (1) Insert a glowing splinter to the test tube with gas.
 (2) Bring a glowing splinter near to the mouth of the test tube.
 (3) Bubble the gas in a calcium hydroxide test tube.
 (4) The gas cannot be identified from above methods.

- (09) A trolley with 2 kg of mass is pulled on a horizontal plane which has no friction. If unbalanced force of 6 N acts on it. Calculate the acceleration of the trolley.
 (1) $\frac{1}{3} \text{ ms}^{-2}$ (2) 12 ms^{-2} (3) 3 ms^{-2} (4) $\frac{2}{3} \text{ ms}^{-1}$
- (10) Which organelle can be observed only through the electron microscope?
 (1) Nucleus (2) Vacuole (3) Cell wall (4) Ribosome
- (11) What is the reason for not adding metals like Na, K into the acids?
 (1) Because those metals are highly cost.
 (2) Those react violently with acids.
 (3) Because those metals not react with acids.
 (4) More amount of acids need for the reactions.
- (12) A plant with unisexual flowers,
 (1) Pumpkin (2) Chili (3) Shoe flowers (4) Sesbania
- (13) A structure ^{which} develops to carry out the function of corpus luteum.
 (1) Corpus albicans (2) Placenta
 (3) Graafian follicle (4) Umbilical cord
- (14) A, B, C, D, E are five consecutive elements on second and third periods. If D is an inert element select the stable compound which made by combination of any two elements.
 (1) ED_2 (2) B_2D (3) D_2B (4) EC
- (15) A motor vehicle travels from city A to city B with a speed of 60 kmh^{-1} on a linear path. Again it travels back from city B to A with 40 kmh^{-1} along the same route. The distance between two cities is 120 km. What is the mean speed of the vehicle?
 (1) 0 kmh^{-1} (2) 48 kmh^{-1} (3) 50 kmh^{-1} (4) 55 kmh^{-1}
- (16) When the following object kept on the equilibrium value of R (Perpendicular reaction) is 350 N. What is the mass of it?
 (1) 350 kg (2) 3500 N (3) 35 kg (4) 350 N
- (17) Select the true statement regarding the asexual reproduction.
 (1) Production of gametes.
 (2) Occurrence of Meiosis.
 (3) Production of organisms resembles of mother organism.
 (4) Participational of both parental organisms.
- (18) An organ stores human sperms temporarily.
 (1) Testes (2) Scrotum (3) Epididymis (4) Prostate gland
- (19) Select the answer which indicates the number of oxygen atoms in a 5 mol of carbondioxide molecule.
 (1) $\frac{6.022 \times 10^{23} \times 5}{2}$ (2) $6.022 \times 10^{23} \times 5 \times 2$ (3) 6.022×10^{23} (4) $\frac{6.022 \times 10^{23}}{5 \times 2}$
- (20) Select the polyatomic ionic group with a positive charge.
 (1) Carbonate (2) Sulphate (3) Ammonium (4) Nitrate
- (21) What is represented by the number belong to each element in a chemical formula of a compound?
 (1) The number of molecules in a mole of that compound.
 (2) The number of atoms in a mole of that compound.
 (3) The number of atoms of that elements present in a molecule of the compound.
 (4) There is no such number indicate at the bottom of the chemical formula.




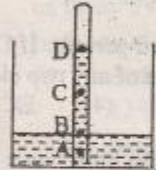
(22) Given below is an oxidation of Magnesium.
 $xMg(s) + yO_2(g) \rightarrow zMgO(s)$
 Select the answer with suitable number for X, Y, Z.
 (1) 3, 4, 4 (2) 3, 2, 2 (3) 1, 2, 1 (4) 2, 1, 2

(23) Fertilized egg cell is known as,
 (1) Blastula (2) Morula (3) Zygote (4) An embryo

(24) Na_2O , MgO , Al_2O_3 , SiO_2 , SO_3 are the oxides in third periodic elements. Select the answer which includes with strong acidic, Amphoteric, Strong basic oxides respectively.
 (1) SO_3 , Al_2O_3 , Na_2O (2) SiO_2 , Al_2O_3 , Na_2O
 (3) Na_2O , SO_3 , Al_2O_3 (4) Na_2O , Al_2O_3 , SiO_2

(25) A method of artificial vegetative propagation is shown in the above diagram. Select the group of plants which can obtain plants according to the method shown in the above diagram.
 (1) Guava, Papaw (2) Samanpichcha, Beans
 (3) Samanpichcha, Wal dehi (4) Wal dehi, Mango




(26)  Which point shows a pressure equivalent to the atmospheric pressure?
 (1) A (2) B (3) C (4) D

(27) In which part of the female reproductive system does the formation of a zygote occurs.
 (1) Inside the womb (2) Inside a graafian follicle
 (3) Inside the fallopian tube (4) Inside a primary follicle

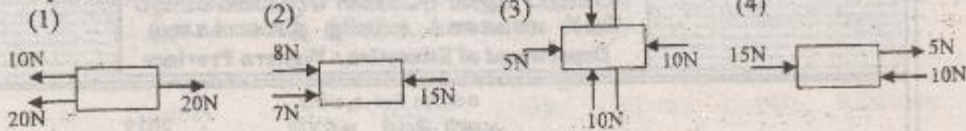
(28) A solution was made by dissolving a white powder produced by a by a burnt magnesium strip. Red and blue litmus strips were added to the solution;
 Observation - Change of color observed in red litmus only.
 Conclusion - Magnesium oxide is an acidic oxide.
 According to above :
 (1) Both observation and conclusion are incorrect.
 (2) Both observation and conclusion are correct.
 (3) Observation is correct but the white powder is acidic.
 (4) Observation is correct but conclusion is incorrect.

(29) Organisms which are not sensitive for antibiotics belongs to.
 (1) Bacteria (2) Archea
 (3) Archea and Eukarya (4) Bacteria and Eukarya

(30) Following figure shows and instrument filled with coloured water. What is shown by is experiment?
 (1) Showing pressure is equal at the same level of liquid.
 (2) Showing liquid pressure exerts all directions.
 (3) The pressure exerted by liquid column is not depend on its shape but only depend on its height.
 (4) Showing the liquid pressure change with density.



(31) Which of the following occasion forces act on the object balance and object at the equilibrium?



(32) Select the answer with elements which consist complete electronic configuration in the valency shell.

- (1) He, H, Ar (2) He, Ar, Be (3) Ar, Ne, He (4) He, Ne, As

(33) An Eukaryotic organism with chitinous cell wall can decompose the organic materials. The kingdom this organism belongs is.

- (1) Protista (2) Fungi (3) Plantae (4) Animals

(34) Gravitational acceleration on the moon is 1.6 ms^{-2} . The value of it on the earth is 10 ms^{-2} weight of an object on the moon is 32 N. What are its weight and mass on earth?

- (1) 20 N and 1.6 kg (2) 16 N and 160 kg
(3) 20 N and 2 kg (4) 200 N and 20 kg

(35) When a solid object completely immersed in water; up thrust act on it,

- (1) Greater than its weight.
(2) Equals to its weight.
(3) Equals to the volume of displaced water.
(4) Lesser than its weight.

(36) Select the most suitable answer of X, Y and Z from the given elements.

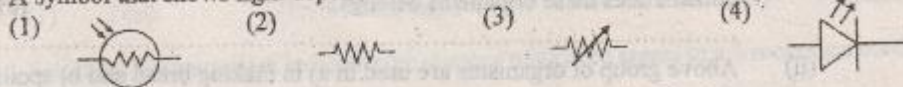
	X	Y	Z
(1)	Ca	Zn	Fe
(2)	Cl	Zn	Pb
(3)	Ca	Mg	Zn
(4)	Mg	Fe	Pb

Reduces
Reactivity
↓
Na
.....x
Al
.....y
Sn
.....z

(37) What is the adaptation shown by the *Hora* seed to disperse by wind?

- (1) Bearing wing like structures (2) Presence of hairs
(3) Having air filled shells (4) Presence of various patterns

(38) A symbol that shows light dependent resistor.



(39) Select an occasion where atoms do not combined by covalent bonds.

- (1) Graphite (2) Diamond
(3) Hydrogen chloride (4) Sodium chloride

(40) Recently several urban areas were affected by sudden floods. The main human activity cause for it is the,

- (1) Abundant of factories in urban areas.
(2) Deforestation.
(3) increasing the usage of polythene.
(4) Unplanned constructions and unplanned waste disposal.