

Samudra Devi Balika Vidyalaya
Grade – 11
Science - Ist Term Test

Time : 2 hrs.

I Part

* Answer all questions

2 Under line the correct answer.

01. The type of waves generate in a pond when throwing a stone to the pond is ?
- (a) Transverse wave
 - (b) Longitudinal wave
 - (c) No – wave generation
 - (d) Longitudinal wave generate and finally turns in to a transverse wave
02. What is the incorrect statement regarding sound ?
- (a) Sound is a energy
 - (b) Sound travels through water
 - (c) Sound travels through vaccum
 - (d) Sound travels faster in Iron than the air
03. An Instrument that use high frequency sound waves is
- (a) Spigmonano meter
 - (b) Stethoscope
 - (c) Spigmonano meter
 - (d) X ray machine
04. Find the Amplitude of the wave which having 1500 Hz frequency and 6000 m/s velocity.
- (a) 2 m
 - (b) 3 m
 - (c) 6 m
 - (d) 4 m
05. What is the relationship between resistance and resistivity
- (a) $R = S \frac{A}{l}$
 - (ii) $R = S \frac{l}{PA}$
 - (iii) $P = R \frac{1}{A}$
 - (iv) $P = R \frac{A}{l}$
06. Write the correct order of equipments in the house hold electric circuit
- (i) Service Fuse - Electricity meter – trip switch - fuse box
 - (ii) Service Fuse - fuse box - trip switch - Electricity meter
 - (iii) Service Fuse - Maintain Switch - Electricity meter – trip switch - fuse box
 - (iv) Service Fuse - Electricity meter – main switch - trip switch - fuse box

07. The mass of the water beaker is 540 g . When connecting a metal cylinder to the spring balance it shows 200 g in air. When it immerse in water it shown 160 g . What is the value shows by the balance at that time ?

- (i) 500 g (ii) 540 g
 (iii) 580 g (iv) 00 g

08. An object is fall's down from 25 m height building. After 2 seconds Find the height of the object from the earth ($g = 10\text{ms}^{-2}$)

- (i) 5 m (ii) 20 m
 (iii) 15 m (iv) 10 m

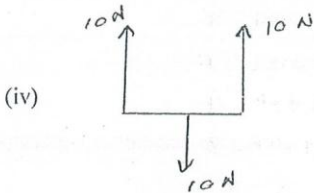
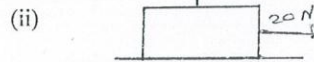
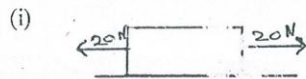
09. Find the velocity of the object at the above situation ?

- (i) 200ms^{-1} (ii) 20ms^{-1}
 (iii) 15ms^{-1} (iv) 10ms^{-1}

10. When a 220 v , 100 w bulb id glowing find the current flow through the bulb ?

- (i) 220×100 (ii) $\frac{220}{100}$
 (iii) $\frac{100}{220}$ (iv) $\frac{(220)^2}{100}$

11. Find the unbalance system



12. A fuse must be connected to the

- (i) Live wire (ii) Natural Wire
 (iii) Earth Wire (iv) Line or hentral wire

13. Mass of a woman is 50 kg. area of a shoe is 0.004m^2 . What is the pressure entered on the floor while she is standing using her both feet.

- (i) $\frac{50}{0.004 \times 2} \text{Nm}^{-2}$ (ii) $\frac{500}{0.004 \times 2} \text{Nm}^{-2}$

$\frac{500}{0.004} \text{Nm}^{-2}$

$\frac{50}{0.004} \text{Nm}^{-2}$

- (iii) (iv)

14. What is the colour of the natural wire in a Three phase Line ?

- (i) Brown (ii) Blue
(iii) Green (iv) Mixture of Yellow Green

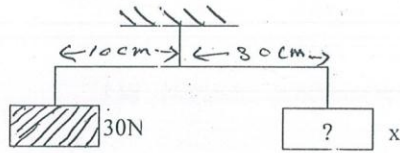
15. What is the type of metal used in the wire in side a fuse ?

- (i) Copper (ii) Tin
(iii) Lead (iv) Aluminium

16. What are the features of the image which is formed by a concave mirror when the object is kept beyond the $2f$

- (i) real , erect , enlarge (ii) real , inverted, small
(iii) Virtual , erect , enlarge (iv) Virtual , inverted , small

17.



It is two sides are balance in the above picture find the value of x ?

- (i) 10 N (ii) 15 N
(iii) 5 N (iv) 20 N

18. A - Bending a pencil in a glass filled with water

B - formation of mirage

C - formation of rainbow

D - the bottom of the well lifted

Select the phenomena relevant to the total internal reflection

- (i) A , B (ii) A , C
(iii) A , D (iv) B , C

19. Select the scalar quantity ?

- (i) Distance (ii) Weight
(iii) Force (iv) Velocity

20. What is the SI Unit of acceleration ?

- (i) ms^{-1} (ii) ms^{-2}

(iii) ms²

(iv) ms

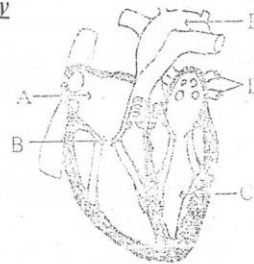
Grade – 11
Science - 1st Term Test

Time : 2 hrs.

II Paper

* Answer all questions

Biology



01. The above diagram shows the parts of the heart

- (a) Name A, B, C, D, E
- (b) What is the difference between the blood contain in A and C
- (c) Walls of C is thicken than the walls of A. Explain this
- (d) What is the vessel that carry oxygenated blood away from the heart ?

02. Name the process of entering Oxygen to the tissues which are transport by hemoglobin ?

- (a)
- (b)
- (c)
- (d)

03. Write the changes occur in blood in following situations

- (i) Anemia
- (ii) Diabetics
- (iii) Infection

04. Complete the following reactions relevant to the digestive system

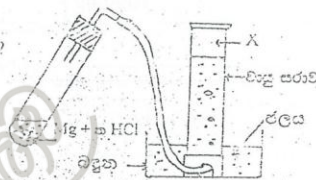
- (a) Starch $\xrightarrow{\text{Amylase}}$ _____
- (b) _____ $\xrightarrow{\text{Pepsin}}$ Polypeptide
- (c) Lipids $\xrightarrow{\text{Bile}}$ _____
- (d) Polypeptide $\xrightarrow{\hspace{1cm}}$ Amino acids

CHEMISTRY

02. Following elements are belongs to a period of the periodic table.

| | | | | | | | |
|----|----|----|----|---|---|----|----|
| Na | Mg | Al | Si | P | S | Cl | Ar |
|----|----|----|----|---|---|----|----|

- (1) What is the period of the above elements in the periodic table ?
 - (2) Write 2 changes that can be seen along the period from left to right
 - (3) Write e elements that are having the boiling point below 0°C ?
 - (4) Write the electronic configuration of Na atom ?
 - (5) Write the chemical equation of the compound which is formed by fusing Cl_2 and Mg
 - (6) What is the type of bond can be seen in this compound ?
- (II) The following diagrams shows the experiment done by student to show the reaction between Mg and Hydrochloric acid X gas evolved in this experiment.

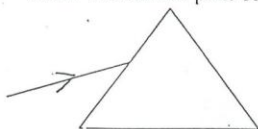


- (a) Name the gas evolved as X ?
- (b) When collecting the gas using the gas jar it is filled with water. Explain the reason ?
- (c) How are you going to identify the gas X ?
- (d) What is the type of Displacement that can be used to collect that gas ?
- (e) Suggest two methods to increase the rate of reaction in here.

PHYSICS

03. When light travels from one transparent medium to another it changes it's direction ?

- (a) What is the name used for the above phenomena ?
- (b) Which characteristic of height causes for the above phenomena ?
- (c) Draw the correct path of the light ray given below



- (d) How you can see a fish in a bottom of the pond. Draw the correct ray diagram.

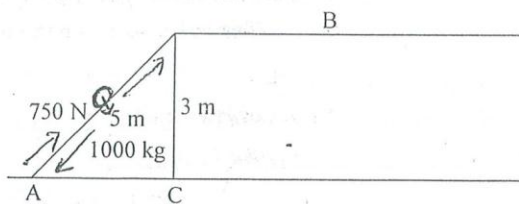
Air



Water

- (1) Sound can be generated by vibrating objects.
- (a) What is called frequency of a wave ?
 - (b) What is the type of wave of sound waves ?
 - (c) Velocity of a wave is 2000 ms^{-1} . amplitude is 10 m Find the velocity ?
 - (d) Some animals only can hear the high frequency sound waves explain the reason ?

- (2) People use simple machines in their day to day life



- (i) Calculate the load ?
- (ii) Calculate the efficiency if the inclined plane ?
- (iii) When the load carries to position B find the potential energy in it ?