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X - STD	2019 - 2020	Marks : 50	1.00 : Hr.
ONE MARK	SCIENCE		
TEST NO : 1	Phy : 1. Laws of Motion Che : 7. Atoms and Molecules Bio : 12. Plant anatomy and Plant physiology 13. Structural Organisation of Animals		

I. Choose the best answer : **30 x 1 = 30**

1. The unit of 'g' is ms^{-2}. It can be also expressed as .....

   (a) $cm\ s^{-1}$ **(b)** $N\ kg^{-1}$ **(c)** $N\ m^2\ kg^{-1}$ **(d)** $cm^2\ s^{-2}$

2. The mass of a body is measured on planet Earth as M kg. When it is taken to a planet of radius half that of the Earth then its value will be ..... kg.

   (a) 4 M **(b)** 2 M **(c)** M/4 **(d)** M

3. The physical quantity which is the measure of inertia is .....

   (a) density **(b)** weight **(c)** force **(d)** mass

4. The SI unit of force is .....

   (a) energy **(b)** joule **(c)** newton **(d)** dyne

5. Opening a door is an example of ..... **(a)** a non contact force **(b)** contact force **(c)** balanced **(d)** unbalanced

6. A thief stole a box with valuable article of weight 'w' and jumped down a wall of height 'h'. Before he reached the ground he had experienced a load of .....

   (a) $\frac{w}{2}$ **(b)** zero **(c)** w **(d)** 2w

7. The value of universal gravitational constituent is .....

   (a) $6.743 \times 10^{-11}\ Nm^2\ kg^{-1}$ **(b)** $6.673 \times 10^{-11}\ Nm^2\ kg^{-1}$

   (c) $6.743 \times 10^{-11}\ Nm^{-2}\ kg$ **(d)** $6.673 \times 10^{-1}\ Nm^{-2}\ kg^{-1}$

8. The ball is thrown up, the value of g will be .....

   (a) zero **(b)** +ve **(c)** –ve **(d)** negligible

9. The act of cleaning a carpet by heating it with a stick is an example for inertia of .....

   (a) motion **(b)** direction **(c)** rest **(d)** momentum

10. A lift of mass 1000 kg which is moving with an acceleration of $1ms^{-2}$ in upward direction, then the tension developed in string which is connected to lift is .....

    (a) 10,000 N **(b)** 10,800 N **(c)** 9800 N **(d)** 11000 N

11. Mass of 1 mole of Nitrogen atom is .....

    (a) 28 amu **(b)** 14 amu **(c)** 28 g **(d)** 14 g

12. The gram molecular mass of oxygen molecule is .....

    (a) 16 g **(b)** 18 g **(c)** 32 g **(d)** 17g

13. 1 mole of any substance contains molecules ..... **(a)** 6.023×10^{23} **(b)** 6.023×10^{-23} **(c)** 3.0115×10^{23} **(d)** 12.046×10^{23}

14. Pick out the isotopes among the following pairs .....

    (a) ${}_6C^{13}, {}_7N^{14}$ **(b)** ${}_{18}Ar^{40}, {}_{20}Ca^{40}$ **(c)** ${}_6C^{12}, C_6{}^{14}$ **(d)** ${}_5B^{12}, {}_6C^{13}$

15. Mass of an electron is .....

    (a) 9.1083×10^{-31} kg **(b)** 9.1083×10^{-34} kg

    (c) 1.67262×10^{-27} kg **(d)** 1.67×10^{-24} gm

16. The mass of an atom is measured in .....

    (a) kg **(b)** amu **(c)** g **(d)** Pm

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17. Mass number is the .....

(a) Number of protons (b) Sum of protons and electrons

(c) Number of neutrons (d) Sum of protons and neutrons

18. Casparian strips are present in the .....

(a) cortex (b) pith (c) pericycle (d) endodermis

19. Kreb's cycle takes place in ..... (a) chloroplast

(b) mitochondrial matrix (c) stomata (d) inner mitochondrial membrane

20. ..... are racket shaped particles seen is inner mitochondrial membrane.

(a) Porin (b) ATP (c) Oxysome (d) Grana

21. Leucoplasts are ... ... plastids.

(a) Colourless (b) Yellow (c) Orange (d) Red

22. ..... is the outermost layer of the root.

(a) Epiblema (b) Cortex (c) Endodermis (d) Stele

23. Amphivasal bundle belongs to ..... type of vascular bundle.

(a) concentric (b) collateral (c) conjoint (d) radial

24. Mammals are ..... animals. (a) Cold blooded

(b) Warm blooded (c) Poikilothermic (d) All the above

25. The body of leech has ..... (a) 23 segments

(b) 33 segments (c) 38 segments (d) 30 segments

26 The segments of leech are known as ..... (a) Metameres (somites)

OTP1 (b) Proglottids (c) Strobila (d) All the above

27. The ovaries of leech lies in the ..... segment.

(a) 10^{th} (b) 11^{th} (c) 13^{th} (d) 15^{th}

28. Dental formula of rabbit is .....

(a) $\frac{2033}{1023}$ (b) $\frac{2003}{1003}$ (c) $\frac{2030}{1020}$ (d) $\frac{2023}{1220}$

29. In leeches there are ..... pairs of nephridia.

(a) 18 (b) 15 (c) 17 (d) 12

30. The ..... glands are modified glands of the skin.

(a) perineal (b) mammary (c) gastric (d) salivary

II. Match the following : **4 x 1 = 4**

31. 1. Newton's III law - (a) Gall bladder

2. 112 g of N_2 - (b) Secondary growth

3. Cambium - (c) Flying nature of bird

4. Liver - (d) 4 moles

III. Short Answer questions : **8 x 2 = 16**

32. Why does a gun recoil when a bullet is fired ?

33. Which law is used in geotropism ?

34. Give any two examples for heterodiatomic molecules.

35. What is a hetro atomic molecule ? Give two examples.

36. Give the common name of the Hirudinaria granulosa.

37. What does CNS stand for ?

38. Mention two important characteristics of class Mammalia.

39. What is the significance of clitellum ?

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SRF Ramanatic HSS, Villam 622809.

X - STD	2019 - 2020	Marks : 50	1.00 : Hr.
ONE MARK	SCIENCE		
TEST NO : 2	Phy : 2. Optics Che : 8. Periodic Classification of Elements Bio : 14. Transportation in plants and circulation in animals 15. Nervous system		

I. Choose the best answer : **29 x 1 = 29**

1. A small bulb is placed at the principal focus of a convex lens. When the bulb is switched on, the lens will produce .....

(a) a convergent beam of light **(b) a divergent beam of light**
(c) a parallel beam of light **(d) a coloured beam of light**

2. Power of a lens in –4D, then its focal length is .....

(a) 4m **(b) – 40 m** **(c) – 0.25 m** **(d) – 2.5 m**

3. If V_B, V_G, V_R be the velocity of blue, green and red light respectively in a glass prism, then which of the following statement gives the correct relation ? .....

(a) $V_B = V_G = V_R$ **(b)** $V_B > V_G > V_R$ **(c)** $V_B < V_G < V_R$ **(d)** $V_B < V_G > V_R$

4. The eye defect 'Presbyopia' can be corrected by .....

(a) Convex lens **(b) Concave lens**
(c) Convex mirror **(d) Bi focal lenses**

5. Velocity and wavelength of light are related by a relation .....

(a) $g = c\lambda$ **(b)** $\gamma = \frac{c}{\lambda}$ **(c)** $c = \gamma\lambda$ **(d) both b & c**

6. According to snell's law .....

(a) $\mu = \frac{\sin i}{\sin r}$ **(b)** $\mu = \frac{C_a}{C_m}$ **(c)** $\mu = \frac{\sin r}{\sin i}$ **(d)** $\mu = \frac{C_m}{C_a}$

7. An object is placed 25 cm from a convex lens whose focal length is 10 cm. The image distance is ..... cm.

(a) 50 **(b) 16.66** **(c) 6.66** **(d) 10**

8. The splitting up of white light into colours is called .....

(a) reflection **(b) refraction** **(c) scattering** **(d) dispersion**

9. ..... is an important metal to form amalgam.

(a) Ag **(b) Hg** **(c) Mg** **(d) Al**

10. Chemical formula of rust is .....

(a) $FeO.xH_2O$ **(b)** $FeO_4.xH_2O$ **(c)** $Fe_2O_3.xH_2O$ **(d) FeO**

11. ..... group contains the members of halogen family.

(a) 17^{th} **(b)** 15^{th} **(c)** 18^{th} **(d)** 16^{th}

12. Which of the following is the pair of shortest and longest periods in the modern periodic table ? .....

(a) $1^{st}, 2^{nd}$ **(b)** $2^{nd}, 3^{rd}$ **(c)** $5^{th}, 7^{th}$ **(d)** $1^{st}, 6^{th}$

13. The number of neutrons in $_8O^{16}$ is .....

(a) 8 **(b) 16** **(c) 32** **(d) 24**

14. The chief ore of copper is .....

(a) Copper pyrites **(b) Copper glance** **(c) Cyprite** **(d) Rupy copper**

15. When an electron adds on to F atom. It becomes .....

(a) F^- **(b)** F^+ **(c)** F_2 **(d)** F^0

16. Modern periodic table contains .....groups.

(a) 9 **(b) 32** **(c) 18** **(d) 64**

17. The acid which makes iron passive is .....

(a) Conc. HCl **(b) Conc.** H_2SO_4 **(c) Conc.** HNO_3 **(d) Conc. HF**

18. 'Heart of heart' is called .....

(a) SA node **(b) AV node** **(c) Purkinje fibres** **(d) Bundle of His**

19. Root hairs are ..... **(a) cortical cell**
(b) projection of epidermal cell **(c) unicellular** **(d) both b and c**

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20. Which is the sequence of correct blood flow .....

(a) ventricle - atrium - vein - arteries

(b) atrium - ventricle - veins - arteries

(c) atrium - ventricle - arteries - vein

(d) ventricles - vein - atrium - arteries

21. The number of ..... increases during allergy.

(a) Basophil (b) RBC (c) Eosinophil (d) Monocyte

22. Plasma is slightly alkaline, containing non-cellular substances which constitutes about ..... of the blood.

(a) 55% (b) 44% (c) 35% (d) 50%

23. Angiology is the study of .....

(a) heart (b) heart attack (c) blood vessels (d) diseases of blood

24. Node of Ranvier is found in .....

(a) muscles (b) axons (c) dendrites (d) cyton

25. The outer most of the three cranial meninges is ..... .

(a) arachnoid membrance (b) piamater

(c) duramater (d) myelin sheath

26. Bipolar neurons are found in ..... **(a) retina of eye**

(b) cerebral cortex (c) embryo (d) respiratory epithelium

27. The .... has a role in sleep cycle.

(a) cerebrum (b) spinal cord (c) pons (d) hypothalamus

28. The plasma membrane of axon is called .....

(a) axolemma (b) axoplasm (c) myelin sheath (d) schwann cells

29. Peripheral neurons system is formed by the nerves arising from the .....

(a) brain and the spinal cord (b) dorsal or afferent root

(c) ventral or efferent root (d) spinal nerves

9 x 1 = 9

II. Match the following :

30.

1.	Deviation of ray	-	(a) Height / Distance
2.	Blue colour of sea	-	(b) Refraction
3.	Visual angle	-	(c) Scattering of Light

31.

1.	SnO_2	-	(a) Hydraulic washing
2.	Fe_2O_3	-	(b) Forth flotation
3.	ZnS	-	(c) Magnetic separation

32.

1.	Symplastic pathway	-	(a) Pressure gradient
2.	Osmosis	-	(b) Hindbrain
3.	Cerebellum	-	(c) Plasmodesmata

6 x 2 = 12

III. Answer following questions :

33. Fish in shallow water appears to closer than its real position. Give reason.

34. What is Tyndall scattering ?

35. State two conditions necessary for rusting of iron.

36. Among the following pairs, pick out the smallest.

(i) Mg, Ca (ii) Al, Si (c) Cl, Br

37. What is myelin sheath ?

38. How are neurons classified based on function.

X - STD	2019 - 2020	Marks : 50	1.00 : Hr.
ONE MARK	SCIENCE		
TEST NO : 3	Phy : 3. Thermal Physics Che : 9. Solutions Bio : 16. Plant and Animal hormones 17. Reproduction in plants and animals 18. Heredity		

I. Choose the best answer : 29 x 1 = 29

1. The value of Universal gas constant .....

(a) 3.81 $mol^{-1} K^{-1}$ (b) 8.03 $mol^{-1} K^{-1}$

(c) 1.38 $mol^{-1} K^{-1}$ (d) 8.31 $mol^{-1} K^{-1}$

2. SI unit of temperature is .....

(a) Celsius (b) Fahrenheit (c) Kelvin (d) None

3. Thermal expansion at particular temperature is less in .....

(a) Solid (b) Liquid (c) Gas (d) All above

4. At what temperature are Celsius and Fahrenheit equal ? .....

(a) 40^0 (b) -40^0 (c) 0^0 (d) 100^0

5. Linear expansion is the change in ..... when object is heated or cooled.

(a) length (b) area (c) volume (d) density

6. According to Charles's law .....

(a) $P \propto \frac{1}{V}$ (b) $V \propto T$ (c) $V \propto n$ (d) all the above

7. Which of the following is hygroscopic in nature ? .....

(a) ferric chloride (b) copper sulphate pentahydrate

(c) silica gel (d) none of the above

8. Solubility of NaCl in 100 ml water is 36g. If 25g salt is dissolved in 100 ml of water how much more salt is required for saturation ? .....

(a) 12g (b) 11g (c) 16g (d) 20g

9. White vitriol is ..... (a) $CaSO_4.7H_2O$

(b) $MgSO_4.7H_2O$ (c) $K_2SO_4.7H_2O$ (d) $ZnSO_4.7H_2O$

10. Sugar and copper sulphate crystals are dissloved in water. The solution is called as .....

(a) binary (b) trinary (c) ternary (d) quartenary

11. Hygroscopic substances are used as ..... agents.

(a) oxidizing (b) reducing (c) decarbocyleting (d) drying

12. Salt solution containing common salt in water is an example for ...

(a) binary solution (b) trinary solution

(c) suspension (d) colloidal solution

13. Which one is referred as 'Master Gland' ? .....

(a) Pineal gland (b) Pituitary gland

(c) Thyroid gland (d) Adrenal gland

14. Avena coleoptile test was conducted by .....

(a) Darwin (b) N.Smit (c) Paal (d) F.W.Went

15. Auxins were identified by .....

(a) Darwin (b) Kogl (c) Went (d) Funk

16. ..... is a growth inhibitor.

(a) Auxin (b) GA (c) Cytokinin (d) Ethylene

17. Gibberellins are efficient than ..... in inducing the formation of seedless fruit.

(a) Auxin (b) Cytokinin (c) Ethylene (d) Abscisic Acid

18. ..... is the hormone secreted by Thymus. (a) Thymosin

(b) Estrogen (c) Testosterone (d) Progresterone

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19. Which one of the following is an IUCD ? .....

(a) Copper - T (b) Oral pills (c) Diaphragm (d) Tubectomy

20. Male gametes in angiosperms are formed by the division of .....

(a) Generative cell (b) Vegetative cell

(c) Microspore mother cell (d) Microspore

21. Asexual reproduction takes place through budding in .....

(a) Amoeba (b) Yeast (c) Plasmodium (d) Bacteria

22. Pollination with the help of insects like honey bees, flies are called .....

(a) Entomophily (b) Anemophily (c) Hydrophily (d) Zoophily

23. Which is an example of self - pollination.

(a) Hibiscus (b) Grasses (c) Apples (d) Rose

24. The process of spermatogenesis takes place in the .....

(a) Sertoli cells (b) Seminiferous tubules

(c) Leydig cells (d) Centrioles

25. The ..... units form the backbone of the DNA. **(a) 5 carbon sugar**

(b) Phosphate (c) Nitrogenous bases (d) Sugar phosphate

26. The loss of one or more chromosome in a ploidy is called .....

(a) Tetraploidy (b) Aneuploidy (c) Euploidy (d) Polyploidy

27. L shaped chromosomes are described as ..... **(a) acrocentric**

(b) metacentric (c) submetacentric (d) telocentric

28. Choose the correct pair .....

(a) A ≡ T (b) G ≡ A (c) A ≡ C (d) G ≡ C

29. Hydrogen bonds between the nitrogeneous bases make the DNA molecule .....

(a) unstable (b) stable (c) unbalanced (d) disturbed

II. Match the following : **9 x 1 = 9**

30.

1.	Boyle's law	- (a)	V/T = constant
2.	Charle's law	- (b)	PV = RT
3.	Ideal gas equation	- (c)	PV = constant

31.

1.	Blue vitriol	- (a)	CaO
2.	Gypsum	- (b)	$CuSO_4.5H_2O$
3.	Hygroscopic	- (c)	$CaSO_4.2H_2O$

32.

1.	Zeatin	- (a)	Yeast
2.	Budding	- (b)	9 : 3 : 3 : 1
3.	Dihybrid ratio	- (c)	Cell division

III. Answer following questions : **6 x 2 = 12**

33. State Boyle's Law.

34. What is meant by heating ?

35. Why is it bubbling when water is boiled ?

36. Define dissolution.

37. Name the whorls of a flower.

38. What is the significance of fertilization ?

X - STD	2019 - 2020	Marks : 50	1.00 : Hr.
ONE MARK	SCIENCE		
TEST NO : 4	Phy : 4. Electricity Che : 10. Types of Chemical Reactions Bio : 19. Origin and Evolution of Life 20. Breeding and Biotechnology		

I. Choose the best answer : **25 x 1 = 25**

1. In a simple circuit, why does the bulb glow when you close the switch ?.....
   (a) The switch produces electricity
   (b) Closing the switch completes the circuit
   (c) Closing the switch breaks the circuit
   (d) The bulb is getting charged
2. SI unit of resistance is .....
   (a) mho (b) joule (c) ohm (d) ohm meter
3. When one of three series resistors is removed from a circuit and the circuit is reconnected the current .....
   (a) increase by half (b) increases
   (c) decreases by half (d) none of the above
4. The relation between potential difference (V) and current (I) is .....
   (a) $V \alpha I$ (b) $V \alpha I^2$ (c) $V \alpha \frac{I}{1}$ (d) None of the above
5. A 110 W, 220 V bulb draws a current .....
   (a) 2A (b) 440 A (c) 0.5 A (d) 5.5 A
6. The chemical equation $Na_2SO_{4(aq)} + BaCl_{2(aq)} \rightarrow BaSO_{4(a)} + 2NaCl_{(aq)}$ represents which of the following types of reaction ? .....
   (a) Neutralisation (b) Combustion
   (c) Precipitation (d) Single displacement
7. The pH of a solution is 3. Its $[OH^-]$ concentration is .....
   (a) 1×10^{-3} M (b) 3 M (c) 1×10^{-11} M (d) 11 M
8. Photolysis is a decomposition reaction caused by .....
   (a) Heat (b) Electricity (c) Light (d) Mechanical energy
9. $CaCO_{3(s)} \xrightarrow{Heat} Ca_{(s)} + CO_{2(g)}$ The above thermal decomposition reaction is an ..... reaction.
   (a) endothermic (b) exothermic
   (c) both (a) and (c) (d) neither (a) nor (b)
10. When Zinc metal is placed in hydrochloric acid, the gas evolved is .....
    (a) CO (b) CO_2 (c) H_2 (d) H_2O
11. Which of the following reactions is not feasible ? .....
    (a) $Zn + CuSO_4 \rightarrow ZnSO_4 + Cu$ (b) $2Ag + Cu(NO_3)_2 \rightarrow AgNO_3 + Cu$
    (c) $Fe + CuSO_4 \rightarrow FeSO_4 + Cu$ (d) $Mg + 2HCl \rightarrow MgCl_2 + H_2$
12. The value of ionic product of water at 25°C is .....
    (a) 1.00×10^{14} (b) 1.00×10^{-14} (c) 1.00×10^{4} (d) 1.00×10^{-4}
13. The term Ethnobotany was coined by .....
    (a) Khorana (b) J.W. Harsbberger
    (c) Ronald Ross (d) Hugo de Vries
14. Paleontologists deal with .....
    (a) Embryological evidences (b) Fossil evidences
    (c) Vestigial organ evidences (d) All the above
15. ..... is not an example of vestigial organ. (a) Coccyx
    (b) Appendix (c) Thick hair (d) Nictitating membrane

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16. Radioactive Carbon (C^{14}) dating method was discovered by .....

(a) W.F. Libby (b) Niels Bohr

(c) Issac Newton (d) William Harvey

17. The Big Bang theory explains the .....

(a) Origin of Universe (b) Origin of sea

(c) Origin of mountain (d) Origin of water

18. Ancon Sheep is an example of .....

(a) vestigial organ (b) discontinuous variation

(c) acquired character (d) natural selection

19. rDNA is a ..... (a) vector DNA (b) circular DNA

(c) recombinant of vector DNA and desired DNA (d) satellite DNA

20. Pusa Komal is a disease resistant variety of .....

(a) sugarcane (b) rice (c) cow pea (d) maize

21. The rice variety peta was from .....

(a) China (b) Mexico (c) Indonesia (d) India

22. An organism having more than two sets of chromosomes is called .....

(a) Diploid (b) Haploid (c) Monoploid (d) Polyploid

23. In human beings, ... of the DNA base sequences are the same and this is called as bulk genomic DNA.

(a) 99% (b) 50% (c) 90% (d) 70%

24. ..... is an example of auto triploid.

(a) Coffee (b) Banana (c) Potato (d) Peanut

25. We can cut the DNA with the help of .....

(a) Scissors (b) Restriction endonucleases

(c) Knife (d) RNA ase

II. Match the following : 9 x 1 = 9

26.

1.	Potential difference	- (a)	$\frac{Q}{t}$
2.	Electric current	- (b)	$\frac{1}{\rho}$
3.	Conductivity	- (c)	$\frac{W}{Q}$

27.

1.	Egg white	- (a)	pH value 2
2.	Lemon Juice	- (b)	pH value 9
3.	Baking soda	- (c)	pH value 8

28.

1.	W.F. Libby	- (a)	Ground nut
2.	AK - 10	- (b)	Rice
3.	IR 8	(c)	Radio carbon dating

III. Answer following questions : 8 x 2 = 16

29. Name any two devices, which are working on the heating effect of the electriuc current.

30. Why is tungsten metal used in bulbs, but not in fuse wires ?

31. What is activation energy ?

32. What is pH scale ?

33. Explain Biogenesis.

34. Give some examples of vestigial organs in man.

35. What are Mutagens ?

36. Mention the kinds of stem cells.

ONE MARK	Marks : 50	1.00 : Hr.
TEST NO : 5	SCIENCE	
	Phy : 5. Acoustics 6. Nuclear Physics Che : 11. Carbon and its Compounds Bio : 21. Health and Diseases 22. Environmental Management	

I. Choose the best answer : **27 x 1 = 27**

1. If a sound wave travels with a frequency of **1.25 X 10^4** Hz at 344 m s^{-1} the wave length will be .....

(a) 27.52 m (b) 275.2 m (c) 0.02752 m (d) 2.752 m

2. The frequency which is audible to the human ear is .....

(a) 50 KHz (b) 20 KHz (c) 15000 KHz (d) 10000 KHz

3. The velocity of sound is affected by .....

(a) temperature (b) density (c) pressure (d) all the above

4. Velocity of sound in the atmosphere of a planet is 500 ms^{-1}. The minimum distance between the sources of sound and the obstacle to hear the echo, should be .....

(a) 17 m (b) 20 m (c) 25 m (d) 50 m

5. ..... isotope is used for the treatment of cancer.

(a) Radio Iodine (b) Radio Cobalt

(c) Radio Carbon (d) Radio Nickel

6. In the nuclear reaction $_6X^{12}$ α decay $\longrightarrow$ $_zY^A$, the value of A & Z .....

(a) 8, 6 (b) 8, 4 (c) 4,8

(d) Cannot be determined with the given data

7. Unit of radioactivity is .....

(a) roentgen (b) curie (c) becquerel (d) all the above

8. The control rod in a nuclear reactor is made of .....

(a) uranium (b) cadmium (c) graphite (d) plutonium

9. $_4Be^9 + {}_2He^4 \rightarrow {}_6C^{12} + ?$ .....

(a) electron (b) proton (c) neutron (d) hydrogen

10. Which of the following material is normally fissionable ? .....

(a) U^{238} (b) Th^{232} (c) Pu^{240} (d) U^{235}

11. Which of the following pairs can be the successive members of a homologous series ? .....

(a) C_3H_8 and C_4H_{10} (b) C_2H_2 and C_2H_4

(c) CH_4 and C_3H_6 (d) C_2H_5OH and C_6H_5OH

12. Which of the following are used as anaesthetics .....

(a) Carboxylic acids (b) Ethers (c) Esters (d) Aldehydes

13. General molecular formula of alkynes is .....

(a) C_nH_{2n+2} (b) C_nH_{2n} (c) C_nH_{2-n-2} (d) C_nH_{2n+1}

14. The enzymes present in yeast is / are ..... **(a) invertage**

(b) zymase (c) both (a) and (b) (d) neither (a) nor (b)

15. What is the IUPAC name of $CH_3CH_2COCH_2{-}CH_3$? .....

(a) 1 – Pentanone (b) 2 – Pentanone

(c) 3 – Pentanone (d) 4 – Pentaone

16. Hard water contains salts of .....

(a) Ca and Mg (b) Fe and Ca (c) Cu and Fe (d) Cu and Ca

17. Polyphagia is a condition seen in ..... **(a) Obesity**

(b) Diabetes mellitus (c) Diabetes insipidus (d) AIDS

[PTO

18. Which type of cancer affects lymph nodes and spleen ? .....

(a) Carcinoma (b) Sarcoma (c) Leukemia (d) Lymphoma

19. Cancer of the epithelial cells is called .....

(a) Leukemia (b) Sarcoma (c) Carcinoma (d) Lipoma

20. ..... is a symptom of CHD.

(a) Glycosuria (b) Ischemia

(c) Hyperglycemia (d) Polyphagia

21. Obesity is not a risk factor for .....

(a) AIDS (b) diabetes (c) arthritis (d) CHD

22. ..... is not a method of treatment for cancer. **(a) Surgery**

(b) Immunotherapy (c) Vasectomy (d) Radiation therapy

23. What are the steps will you adopt for better waste management ?..

(a) reduce the amount of waste formed (b) reuse the waste

(c) recycle the waste (d) all of the above

24. An inexhaustible resources is ..... **(a) wind power**

(b) soil fertility (c) wild life (d) all of the above

25. Global warming will cause .....

(a) raise in level of oceans (b) melting of glaciers

(c) sinking of islands (d) all of these

26. The first National park to be established in India was.....

(a) Nilgiris (b) Gir forest

(c) Corbett National park (d) Kaziranga sanctuary

27. Forest conservation Act was passed in .....

(a) 1952 (b) 1958 (c) 1978 (d) 1980

II. Match the following : **9 x 1 = 9**

28. 1. Ultrasonic - (a) Heavy water
    2. Moderator - (b) 22 KHz
    3. Coolant - (c) Cadmium rods.

29. 1. Carbo cyclic - (a) C_4H_{10}
    2. Butane - (b) C_3H_4
    3. Propyne - (c) Methane

30. 1. Fatty substances - (a) energy saving
    2. CFL bulbs - (b) CO_2
    3. Bio gas - (c) CHD

III. Answer following questions : **7 x 2 = 14**

30. What is the audible range of frequency ?
31. What is the minimum distance needed for an echo ?
32. Name three animals, which can hear ultrasonic vibrations.
33. What are hydrocarbons ?
34. Name the following organic compounds.

    (i) CH_3COOCH_3 (ii) $C_2H_5 - O - C_2H_5$

35. Mention any two types of cancer.
36. Explain the symptoms of CHD.

X - SAMACHEER - ONE MARK TEST KEYS, 2019 - 2020

SCIENCE - EM / TM

Test No : 1

I. 1. (b) 2. (c) 3. (d) 4. (c) 5. (b) 6. (b) 7. (b) 8. (c) 9. (c)
10. (b) 11. (c) 12. (c) 13. (a) 14. (c) 15. (a) 16. (b) 17. (d) 18. (d)
19. (d) 20. (c) 21. (a) 22. (a) 23. (a) 24. (b) 25. (b) 26. (a) 27. (b)
28. (a) 29. (c) 30. (b) **II. 31.** (1) **c** (2) **d** (3) **b** (4) **a**

Test No : 2

I. 1. (c) 2. (c) 3. (b) 4. (d) 5. (d) 6. (a) 7. (b) 8. (d) 9. (b)
10. (c) 11. (a) 12. (b) 13. (a) 14. (a) 15. (a) 16. (a) 17. (c) 18. (a)
19. (d) 20. (c) 21. (c) 22. (a) 23. (c) 24. (b) 25. (c) 26. (a) 27. (c)
28. (a) 29. (b) **II. 30.** (1) **b** (2) **c** (3) **a** **31.** (1) **c** (2) **a** (3) **b**
32. (1) **c** (b) **a** (c) **b**

Test No : 3

I. 1. (d) 2. (c) 3. (a) 4. (b) 5. (c) 6. (b) 7. (c) 8. (b) 9. (d)
10. (b) 11. (d) 12. (a) 13. (b) 14. (d) 15. (c) 16. (d) 17. (a) 18. (a)
19. (a) 20. (a) 21. (b) 22. (a) 23. (a) 24. (b) 25. (d) 26. (b) 27. (c)
28. (d) 29. (b) **II. 30.** (1) **b** (2) **a** (3) **c** **31.** (1) **b** (2) **c** (3) **a**
32. (1) **c** (2) **b** (3) **a**

Test No : 4

I. 1. (b) 2. (c) 3. (b) 4. (d) 5. (c) 6. (c) 7. (c) 8. (c) 9. (a)
10. (a) 11. (b) 12. (b) 13. (b) 14. (b) 15. (c) 16. (a) 17. (a) 18. (b)
19. (c) 20. (c) 21. (c) 22. (d) 23. (a) 24. (b) 25. (b) **II. 26.** (1) **c**
(2) **a** (3) **b** **27.** (1) **c** (2) **a** (3) **b** **28.** (1) **c** (2) **a** (3) **b**

Test No : 5

I. 1. (c) 2. (b) 3. (d) 4. (c) 5. (b) 6. (c) 7. (d) 8. (b) 9. (c)
10. (d) 11. (a) 12. (b) 13. (c) 14. (c) 15. (c) 16. (a) 17. (b) 18. (d)
19. (c) 20. (b) 21. (a) 22. (c) 23. (d) 24. (a) 25. (d) 26. (c) 27. (d)
II. 28. (1) **b** (2) **c** (3) **a** **29.** (1) **c** (2) **a** (3) **b** **30.** (1) **c** (2) **a** (3) **b**

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