

Question bank

1. Name two salts that are used in black and white photography .
2. List two observation that are noticed when a iron nail is put inside copper sulphate solution .
3. Write a balance equation for a chemical equation that can be characterised as precipitation.
4. Name the law which is kept in mind while balancing a chemical equation.
5. Why do we store silver chloride in dark coloured bottles.
6. What is meant by thermal decomposition reaction? Explain with an example.
7. Why does copper not evolve hydrogen on reacting with dilute sulphuric acid.
8. What happens when carbon dioxide gas is bubbled through lime water.
 - a) In small amount
 - b) In excess
9. Which out of distilled water, tap water and sea water is the best conductor of electricity
10. A few drops of sulphuric acid are added to water before electrolysis. Why?
11. What are antacids ? name two compounds which are used as antacids
12. What is bleaching powder chemically called
13. Why are some salt called hydrated salt
14. What are all factory indicators
15. What is tooth enamel chemically ?
16. Write the name given to the basics that are highly soluble. Give an example.
17. Define pH scale. draw a figure showing variation of pH with change in concentration of hydrogen and hydroxide ions .
18. What is an action of litmus on
 - a) Dry ammonia gas
 - b) Solution of ammonia gas in water
19. During the preparation of hydrogen chloride gas on a humid day ,the gas is usually passed through the guard tube containing anhydrous calcium chloride . the role of calcium chloride taken in a guard tube is to
 - a) Absorb the evolve gas
 - b) Moisten the gas
 - c) Absorb moisture from the gas
 - d) Absorb chloride ion from the evolved gas
20. Sodium carbonate is a basic salt because it is a salt of
 - a) Strong acid and strong base
 - b) Weak acid and weak base
 - c) Strong acid and weak base
 - d) Weak acid and strong base
21. Which of the following is acidic in nature
 - a) Lime juice
 - b) Human blood
 - c) Lime water
 - d) Antacid
22. Name a non metal which reacts with very dilute nitric acid to evolve hydrogen
23. Why does not stainless steel get rusted easily ?
24. Why can we use gold and platinum in jewellery ?
25. Give chemical name of two salts belonging to sodium family
26. Why do we apply paint on iron grills?
27. Why do ionic compound conduct electricity only in the molten state and not in solid state.
28. Name the following
 - a) A metal which is preserved in kerosene
 - b) A lustrous coloured non metal
 - c) A metal which can melt when kept on palm
 - d) A metal which is poor conductor of heat

29. During electrolytic refining of copper it gets
 - a) Deposited on cathode
 - b) Deposited on anode
 - c) Deposited on cathode as well as anode
 - d) Remains in the solution
30. Which among the following alloys contain mercury as one of its constituent
 - a) Stainless steel
 - b) German silver
 - c) Solder
 - d) Zinc amalgam
31. Write the next homolog of the following
 - a) C_3H_6
 - b) C_5H_8
32. Draw the structure of simplest ketone
33. Write the structural formula of hexanal
34. Why carbon forms only covalent bonds
35. What is meant by "the hydrogenation of vegetable oil"?
36. Write one advantage and disadvantage of using ethanol ?
37. Chlorine reacts with saturated hydro carbons at room temperature in the
 - a) Absence of sunlight
 - b) Presence of sunlight
 - c) Presence of water
 - d) Presence of hydrochloride acid
38. Vinegar is a solution of
 - a) 30%-40% acetic acid in alcohol
 - b) 5%-8% acetic acid in alcohol
 - c) 5%-8% acetic acid in water
 - d) 15%-20% acetic acid in water
39. Ethanol reacts with sodium and forms two products .these are
 - a) Sodium ethanoate and hydrogen
 - b) Sodium ethanoate and oxygen
 - c) Sodium ethoxide and hydrogen
 - d) Sodium ethoxide and oxygen
40. Write the formula and electron dot structure of carbon tetrachloride.
41. Out of the elements H [1] , Be[4], Na[11] , Mg[12] – write the pair of element having similar chemical property
42. The atomic number of element is 19 write the formula of the oxide of the element.
43. Upto which element , the law of octave was found to be applicable
 - a) Oxygen
 - b) Calcium
 - c) Cobalt
 - d) Potassium
44. The elements A,B,C,D and E have atomic numbers 9,11,17,12 and 13 respectively . which pair of element belong to the same group ?
 - a) A and B
 - b) B and D
 - c) A and C
 - d) D and E
45. Which of the following elements does not lose an electron easily ?
 - a) Na
 - b) F
 - c) Mg
 - d) Al
46. Which of the following gives the correct increasing order of the atomic radii of O,F,N?
 - a) O,F,N

- b) N,F,O
 - c) O,N,F
 - d) F,O,N
47. Which among the following elements has the largest atomic radius?
- a) Na
 - b) Mg
 - c) K
 - d) Ca
48. On moving from left to right in a periodic table the size of the atom
- a) Increase
 - b) Decreases
 - c) Does not change
 - d) First decrease the increases
49. Which of the following does not increase while moving down the group
- a) Atomic radius
 - b) Metallic character
 - c) Valance
 - d) Number of shells in an element
50. Which of the element will form an acidic oxide ?
- a) An element with atomic number 7
 - b) An element with atomic number 3
 - c) An element with atomic number 12
 - d) An element with atomic number 19

Lion's DAV
IMPORTANT QUESTIONS
SESSION 2019-2020
CLASS- X

SUBJECT- SCIENCE

MARKS:50

- Q1. Where is DNA found in a cell?
- Q2. Name the tissue present in the brain.
- Q3. Name the process by which bio-gas is prepared.
- Q4. Give one word for bio-diversity hot spots.
- Q5. Which tissue protects the entire body?
- Q6. What is the formula of baking soda?
- Q7. Write one source of oxalic acid.
- Q8. What type of bonds are present in water molecule?
- Q9. Write the electron dot structure of NaCl.
- Q10. Find the atomic number of the element whose electronic configuration is 2,8,7.
- Q11. What is the S.I. unit of electric potential?
- Q12. On which part image are formed in human eye.
- a) cornea b) iris c) pupil d) retina
- Q13. Ganga cleanliness scheme was started in the year.
- a) 1985 b) 1970 c) 2000 d) 1995
- Q14. What were the criteria used by Mendeleev in creating his periodic table?
- Q15. A spherical mirror and a thin spherical lens have each a focal length of -15cm. the mirror and lens are likely to be.
- a) both concave
 - b) both convex
 - c) the mirror is concave and the lens is convex

- d) the mirror is convex, but the lens is concave
- Q16. The most important safety device method used for protecting electrical appliances from short circuiting or overloading is.
- a) earthing b) use of stabilizers
c) use of electric meter d) use of fuse.
- Q17. Fuel used in thermal power plants is.
- a) water b) uranium c) biomass d) fossil fuels
- Q18. Which is the ultimate source of energy?
- a) water b) sun c) uranium d) fossil fuels
- Q19. The atomic size of this element is very small.
- a) chlorine b) lithium c) aluminium d) sodium
- Q20. The number of covalent bonds present in pentane is.
- a) 12 b) 11 c) 16 d) 17
- Q21. A covalent molecule having a double bond between its atom is:
- a) hydrogen b) oxygen c) water d) ammonia
- Q22. The removal of oxygen from a substance is called.
- a) oxidation b) corrosion c) rancidity d) reduction
- Q23. Which of the following can be decomposed by the action of light?
- a) NaCl b) KCl c) AgCl d) CuCl
- Q24. An ecosystem consists of:
- a) biotic factor b) biotic and abiotic c) consumers d) producers
- Q25. The 'chipko Andolan' is associated with:
- a) tigers b) turtles c) plants d) tomatoes
- Q26. Which of the following is omnivores?
- a) lion b) cow c) rabbit d) man
- Q27. Environment day is celebrated on
- a) 28 jan b) 20 march c) 25 nov d) 5 june
- Q28. The major programme started to replenish the damaged forests is called.
- a) horticulture b) tissue culture c) agriculture d) silviculture
- Q29. The commercial unit of energy is:
- a) watt b) watt-hour c) kilowatt-hour d) kilo-joule
- Q30. The nearest point upto which the eye can see an object clearly without any strain is called.
- a) near point b) far point
c) vision point d) none of these
- Q31. What is biological magnification?
- Q32. What is heating effect of electric current?
- Q33. Define electric energy?
- Q34. What is the principle of electric motor?
- Q35. Amylase is first secreted by which gland?
- Q36. Name the rear view mirror used in vehicle?
- Q37. Which Group of periodic table represent as noble gases?
- Q38. Name the process by which unsaturated fats are changed to saturated fats.
- Q39. Why the sun appears white at noon?
- Q40. How are we able to see nearby and also the distant object clearly?
- Q41. Which one is the renewable resources- natural gas or ground water or petroleum or coal?
- Q42. What is meant by scattering of light?
- Q43. Name a device that helps to maintain a potential difference across a conductor.

- Q44 Name the pigment which is present in urine?
 Q45 Define electric power?
 Q46 What is frequency of AC in India?
 Q47 Write the chemical name of the coating that forms on silver and copper articles when these are left exposed to moist air.
 Q48 What type of reaction is represented by the digestion of food in our body?
 Q49 What is the PH of neutral solution?
 Q50 Give one example of a molecule containing a double covalent bond?

DAV PUBLIC SCHOOL , GEVRA PROJECT
Question Bank 2019-20

Class : X
SCIENCE

BIOLOGY

Q.1- Which one of the following green house gases is a contributor of incomplete combustion of coal and petroleum .

- 1) Oxide of nitrogen
 2)Methane
 3) Carbon monoxide
 4) carbon dioxide

Q.2 When is environment day is celebrated .?

Q.3 Name of the medicines which is used for treating indigestion.

Q.4 Which of the following is not a natural resources.

- 1) Water
 2) electricity
 3)Coal
 4) Petroleum

Q.4 Name the enzyme. Which initiates the protein digestion in infants.

Q.5 What is the primary requirement for pancreatic enzymes to act.?

Q.6 What are the biocatalysts. We enhance the rate of metabolic activities .

Q.7 State the role and function of the following .

- 1)Blood
 2)WBC

Q.8 State the method used for growing rose plants.

Q.9 List two function of ovary of female reproductive system .

Q.10 The number of pairs of sex chromosome in the zygote of humans is

- 1)one
 2)two
 3)three
 4) four

Q.11 Name an endocrine gland that help in the process of digestion.

Q.12 Which fossil fuel is mainly used in the thermal power station.

Q.13 Name two tissues ,which provide control and coordination in animals .

Q.14 What is the fluid present in between the meninges .

Q.15 What is the cause of variation in asexually reproducing organisms.

CHEMISTRY

Q.1 Name the process by which unsaturated fats are changed to saturated fats.

Q.2 Define catenation.

Q.3 How does the valency of an element vary across the period?

Q.4 Atomic number of an element is 16.Find its valency.

Q.5 Write molecular formula of butane.

Q.6What is reactivity series of metals?

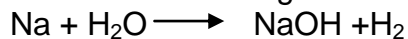
Q.7 Write electron dot structure of ethane?

Q.8 Why is sodium kept in kerosene?

Q.9 Show the formation of Na₂O and MgO by electron transfer method.

Q.10 Why should magnesium ribbon be cleaned before burning?

Q.11 Balance the following reaction –



Q.12 What is displacement reaction? Give example.

Q.13 Write the formula of Plastr of Paris.

Q.14 Why do we use gold and silver to make jewellery?

Q.15 Why do alkanes burn with blue flame?

PHYSICS

Q1 On which part images are formed in human eye?

- a) Cornea
- b) Iris
- c) Pupil
- d) Retina

Q2 The device used for producing electric current is called a

- a) Generator
- b) Galvanometer
- c) Ammeter
- d) Motor

Q3 A rectangular coil of copper wires is rotated in a magnetic field. The direction of the induced current changes once in each.

- a) Two revolutions
- b) One revolution
- c) Half revolution
- d) One-fourth revolution.

Q4 In a Myopic eye, image of distant object is formed.

- a) In front of the retina
- b) On the retina
- c) Behind the retina
- d) None of these.

Q5 A torch bulb is rated 2.5 V and 700mA. The power of bulb will be

- a) 1.75W
- b) 1.5W
- c) 2.5W
- d) 2.0W

Q6 Element used for making solar cell is

- a) Carbon
- b) Phosphorus
- c) Gold
- d) Silicon

Q7 When 3 ohm and 6 ohm resistors are connected in parallel with 2 ohm in series, the total resistance is

- a) 2 ohm
- b) 4 ohm
- c) 8 ohm
- d) 10 ohm

Q8 Energy possessed by flowing water is

- a) Kinetic energy
- b) Potential energy
- c) Nuclear energy
- d) Heat energy

Q9 The nearest point up to which a normal eye can see an object clearly without any strain is called

- a) Far point
- b) Near point

- c) Vision point
d) None of these
- Q10 Splitting of white light into seven colours is called
a) Reflection
b) Refraction
c) Dispersion
d) None of these.
- Q11 Refractive index of glass with respect to air is $\frac{3}{2}$, then refractive index of air with respect to glass
Will be
a) $\frac{3}{2}$
b) $\frac{4}{9}$
c) $\frac{9}{4}$
d) $\frac{2}{3}$
- Q12 When the ciliary muscles are relaxed ,focal length of eye lens is
a) Maximum
b) Minimum
c) Neither maximum nor minimum
d) Equal to least distance of distinct vision.
- Q13 At the time of short circuit,the current in the circuit
a) Vary continuously
b) Increases heavily
c) Decreases heavily
d) Remain same
- Q14 The blue colour of water in deep sea is due to
a) The presence of some plants found in water
b) Reflection of sky in water
c) Scattering of light
d) Due to absorption of blue colour of light
- Q15 Twinkling of stars is due to atmospheric
a) Scattering of light by dust particles
b) Total internal reflection by clouds
c) Dispersion of light by water droplets
d) Refraction of light by different layers of varying refractive indices

DAV PS, Jamul
OBJECTIVE QUESTIONS- CLASS X
SUBJECT- SCIENCE

- Q1.Name the plant hormone commonly known as stress hormone.
(a) Auxin (b) thyroxine (c) Abscissic acid (d) Ethylene
- Q2. An element which form an acidic Oxide
(a) Magnesium, (b) sulphur, (c) potassium (d) sodium
- Q3.Baking soda is
(a)brine solution, (b) sodium carbonate (c) sodium hydrogen carbonate (d) sodium chloride
- Q4. Which of the following has pH less than 7
(a) lime water, (b) lemon juice, (c) antacid, (d) human blood
- Q5.The second largest part of human brain is _____
- Q6. Oily and fatty food become rancid because of of
(a) hydrogenation, (b) corrosion (c) reduction (d) oxidation
- Q7. The most common method of reproduction in filamentous algae is
(a) spore formation, (b) fragmentation, (c) regeneration, (d) vegetative propagation
- Q8.Which of the following is a natural indicator?
(a) Litmus, (b) methyl orange, (c) phenolphthalein (d) all of these
- Q9.Match the following

- (a) Lipase - secreted by small intestine
- (b) Succus entericus - pancreas
- (c) Pepsin - liver
- (d) Bile - digestion of protein

Q10. The first organic compound prepared from an inorganic compound is?

- (a) urea (b) glucose (c) ethyl alcohol (d) acetic acid

Q11. Homologous organs are

- (a) Organs with similar function and different structure
- (b) Organs with similar structure and different function
- (c) Organs with similar structure and function
- (d) None of these

Q12. Xylem transport depends on

- (a) Turgor variation of guard cell and subsidiary cells
- (b) Turgor variation of mesophyll cells and xylem vessel
- (c) Turgor variation of stomatal pore
- (d) None of these

Q13. What do you mean by coleoptiles?

Q14. The longest cell in human body is

- (a) Liver cell
- (b) Nerve cell
- (c) Reproductive cell
- (d) Blood cell

Q15. Number of spinal nerves in human is

- (a) 31
- (b) 32
- (c) 33
- (d) 10

Q16. Assertion: all ores are minerals but all minerals are not ores.

Reason: the minerals from which metals can be extracted profitably are ores.

- (a) Both assertion and reason are correct
- (b) Assertion is correct but reason is not the correct explanation of the assertion
- (c) Both assertion and reason are wrong
- (d) Assertion is incorrect but reason is correct

Q17. Sodium reacts explosively even with cold water. Say whether the statement is true or false.

Q18. Define reflex actions.

Q19. Decomposition of ferrous sulphate is exothermic or endothermic?

Q20. Name the respiratory organ of mosquito.

Q21. Write the chemical formula of bleaching powder.

Q22. The site for fertilization in human are

- (a) Ovary
- (b) Fallopian tube
- (c) Vasdeferens
- (d) Uterus

Q23. Regeneration is not possible in higher organism as

- (a) they have highly differentiated tissues
- (b) it is a function of special body cells
- (c) both (a) and (b)
- (d) none of these

Q24. Which of the following does not increase while moving down the group of the periodic table

- (a) atomic radius
- (b) metallic character
- (c) valence electrons
- (e) Number of shells in an element

Q25.Modern periodic law was given by

- (a) Bohr
- (b) Mendeleev
- (c) Lothar Meyer
- (d) Moseley

Q26.Name the book written by Charles Darwin

- (a)Origin of species
- (b)speciation
- (c)Species origin
- (d)genera plantarum

Q27.Aluminium articles and containers do not get corroded because

- (a) Aluminium is least reactive
- (b) Aluminium is passive to the attack of water ,acid etc
- (c) A layer of aluminium oxide is formed its surface
- (d) None of these

Q28.Amalgams are alloys which always contain a metal

- (a)carbon
- (b)iron
- (c)mercury
- (d)sodium

29. The solution of one of the following compound conduct electricity

- (a)methane
- (b)magnesium chloride
- (c)carbon tetra chloride
- (d)ethane

30.Biomass is a renewable form of energy. True or false?

31. The purpose of a rheostat is:

- (a) Increase the magnitude of current only
- (b) Decrease the magnitude of current only
- (c) Increase or decrease the magnitude of current
- (d) None of these

32. A fuse wire is inserted in a?

- (a) . Live wire
- (b) . In the neutral wire
- (c) . In the earth wire
- (d) . May be connected in any line.

33 The resistance of a conductor is directly proportional to:

- (a) Its area of cross-section
- (b) density
- (c) melting point
- (d) length

34. Focal length of plane mirror is

- a. At infinity
- b. Zero
- c. Negative
- d. None of these

35. The radius of curvature of a mirror is 20cm the focal length is

- a. 20cm
- b. 10cm
- c. 40cm
- d. 5cm

36. Power of the lens is -40, its focal length is

- a. 4m
- b. -40m
- c. -0.25m
- d. -25m

37. Which of the following is a component of bio-gas?

- a. Methane
 - b. LPG
 - c. CNG
 - d. Hydrogen sulphide
38. Which method is used to produce electricity in thermal power plant?
- a. By heating chargeable cells
 - b. By boiling water
 - c. By pushing pistons by heat energy
 - d. Any of above
39. The image formed by retina of human eye is
- a. Virtual and erect
 - b. Real and inverted
 - c. Virtual and inverted
 - d. Real and erect
40. The amount of light entering the human eye is controlled by
- a. Ciliary muscles
 - b. Pupil
 - c. Cornea
 - d. Iris
41. The persistence of vision for human eye is
- a. 1/10th of a second
 - b. 1/16th of a second
 - c. 1/6th of the second
 - d. 1/18th of a second
42. The part of the eyes refracts light entering the eye from external objects?
- a. Lens
 - b. Cornea
 - c. Iris
 - d. Pupil
43. What happens to the current in short circuit?
- a. reduces substantially
 - b. .does not change
 - c. increases heavily
 - d. vary continuously
44. What is electromagnetic induction?
- a. the process of charging a body
 - b. The process of rotating a coil of an electric motor.
 - c. producing induced current in a coil due to relative motion between a magnet and the coil
 - d. The process of generating magnetic field due to a current passing through a coil.
45. Which of the following is normally used in solar cookers for trapping solar energy?
- a. Solar panels
 - b. Silicon cells
 - c. Mirrors
 - d. Any of above

DAV PS, Chhal
Science (086)

- Q1. Which of the following are exothermic processes?
- (i) Reaction of water with quick lime
 - (ii) Dilution of an acid
 - (iii) Evaporation of water
 - (iv) Sublimation of camphor (crystals)
- (a) (i) and (ii) (b) (ii) and (iii)
(c) (i) and (iv) (d) (iii) and (iv)
- Q2. Which of the following is not a physical change?

- (a) Boiling of water to give water vapour
 - (b) Melting of ice to give water
 - (c) Dissolution of salt in water
 - (d) Combustion of Liquefied Petroleum Gas (LPG)
- Q3. Barium chloride on reacting with ammonium sulphate forms barium sulphate and ammonium chloride. Which of the following correctly represents the type of the reaction involved?
- (i) Displacement reaction
 - (ii) Precipitation reaction
 - (iii) Combination reaction
 - (iv) Double displacement reaction
- (a) (i) only (b) (ii) only
(c) (iv) only (d) (ii) and (iv)
- Q4. Which one of the following processes involve chemical reactions?
- (a) Storing of oxygen gas under pressure in a gas cylinder
 - (b) Liquefaction of air
 - (c) Keeping petrol in a china dish in the open
 - (d) Heating copper wire in presence of air at high temperature
- Q5. Which of the following gases can be used for storage of fresh sample of an oil for a long time?
- (a) Carbon dioxide or oxygen
 - (b) Nitrogen or oxygen
 - (c) Carbon dioxide or helium
 - (d) Helium or nitrogen
- Q6. Electrolysis of water is a decomposition reaction. The mole ratio of hydrogen and oxygen gases liberated during electrolysis of water is
- (a) 1:1
 - (b) 2:1
 - (c) 4:1
 - (d) 1:2
- Q7. Sodium carbonate is a basic salt because it is a salt of
- (a) strong acid and strong base
 - (b) weak acid and weak base
 - (c) strong acid and weak base
 - (d) weak acid and strong base
- Q8. Calcium phosphate is present in tooth enamel. Its nature is
- (a) basic
 - (b) acidic
 - (c) neutral
 - (d) amphoteric
- Q9. Which of the following is acidic in nature?
- (a) Lime juice
 - (b) Human blood
 - (c) Lime water
 - (d) Antacid
- Q10. Which of the following is used for dissolution of gold?
- (a) Hydrochloric acid
 - (b) Sulphuric acid
 - (c) Nitric acid
 - (d) Aqua regia
- Q11 Which among the following is not a base?
- (a) NaOH

- (b) KOH
- (c) NH₄OH
- (d) C₂H₅ OH

Q12 Match the chemical substances given in Column (A) with their appropriate application given in Column (B)

Column(A)	column(B)
A. Bleaching powder of glass	i Preparation
B. Backing soda	ii Production of H ₂ and Cl ₂
C. Washing soda	iii. Decolouration
D. Sodium chloride	iv Antacid

- (a) A—(ii), B—(i), C—(iv), D—(iii)
- (b) A—(iii), B—(ii), C—(iv), D—(i)
- (c) A—(iii), B—(iv), C—(i), D—(ii)
- (d) A—(ii), B—(iv), C—(i), D—(iii)

Q13. Which of the following statements is true for acids?

- (a) Bitter and change red litmus to blue
- (b) Sour and change red litmus to blue
- (c) Sour and change blue litmus to red
- (d) Bitter and change blue litmus to red

Q14. Match the acids given in Column (A) with their correct source given in Column (B)

Column (A)	Column (B)
(a) Lactic acid	(i) Tomato
(b) Acetic acid	(ii) Lemon
(c) Citric acid	(iii) Vinegar
(d) Oxalic acid	(iv) Curd

Q15 Match the important chemicals given in Column (A) with the chemical formulae given in Column (B)

Column (A)	Column (B)
(a) Plaster of Paris	(i) Ca(OH) ₂
(b) Gypsum	(ii) CaSO ₄ .1/2 H ₂ O
(c) Bleaching Powder	(iii) CaSO ₄ .2H ₂ O
(d) Slaked Lime	(iv) CaOCl ₂

Q16 The ability of metals to be drawn into thin wire is known as

- (a) ductcility
- (b) malleability
- (c) sonorosity
- (d) conductivity

Q17. Which one of the following metals do not react with cold as well as hot water?

- (a) Na
- (b) Ca
- (c) Mg
- (d) Fe

Q18 Which of the following are not ionic compounds?

- (i) KCl
- (ii) HCl
- (iii) CCl₄
- (iv) NaCl
- (a) (i) and (ii) (b) (ii) and (iii)

- (c) (iii) and (iv) (d) (i) and (iii)
- Q19 Silver articles become black on prolonged exposure to air. This is due to the formation of
- (a) Ag_3N
 - (b) Ag_2O
 - (c) Ag_2S
 - (d) Ag_2S and Ag_3N
- Q20. Which of the following non-metals is a liquid?
- (a) Carbon
 - (b) Bromine
 - (c) Phosphorus
 - (d) Sulphur
- Q21. Give the formulae of the stable binary compounds that would be formed by the combination of following pairs of elements.
- (a) Mg and N_2
 - (b) Li and O_2
 - (c) Al and Cl_2
 - (d) K and O_2
- Q22. Generally, non-metals are not conductors of electricity. Which of the following is a good conductor of electricity?
- (a) Diamond
 - (b) Graphite
 - (c) Sulphur
 - (d) Fullerene
23. A molecule of ammonia (NH_3) has
- (a) only single bonds
 - (b) only double bonds
 - (c) only triple bonds
 - (d) two double bonds and one single bond
24. Buckminsterfullerene is an allotropic form of
- (a) phosphorus
 - (b) sulphur
 - (c) carbon
 - (d) tin
- Q25 The soap molecule has a
- (a) hydrophilic head and a hydrophobic tail
 - (b) hydrophobic head and a hydrophilic tail
 - (c) hydrophobic head and a hydrophobic tail
 - (d) hydrophilic head and a hydrophilic tail
- Q26. Which of the following statements about the Modern Periodic Table is correct:
- (a) It has 18 horizontal rows known as Periods
 - (b) It has 7 vertical columns known as Periods
 - (c) It has 18 vertical columns known as Groups
 - (d) It has 7 horizontal rows known as Groups
- Q27 Which of the following are the characteristics of isotopes of an element?
- (i) Isotopes of an element have same atomic masses
 - (ii) Isotopes of an element have same atomic number
 - (iii) Isotopes of an element show same physical properties
 - (iv) Isotopes of an element show same chemical properties
- (a) (i), (iii) and (iv) (b) (ii), (iii) and (iv)
 - (c) (ii) and (iii) (d) (ii) and (iv)
- Q28 On moving from left to right in a period in the periodic table, the size of the atom.
- (a) increases

- (b) decreases
- (c) does not change appreciably
- (d) first decreases and then increases

- Q29. Name the hormone which protects the spinal cord in the human body?
a) Vertebral Column b) Sternum c) Ribcage d) Bony Box
- Q30. _____ is the hormone which is responsible for dramatic changes in appearance of girls when they approach 10-12 yrs of age?
- Q31. Name the elements which regulate the opening & closing of stomatal pore?
- Q32. Which is not an example of Artificial Ecosystem?
a) Garden b) Pond c) Aquarium d) Crop Field
- Q33. Match the column -
- | | |
|------------------------|--------------------|
| a) Trypsin | i) Pancrease |
| b) Amylase | ii) Liver |
| c) Parasitic Nutrition | iii) Gastric Gland |
| d) Pepsin | iv) Saliva |
- Q34. Pressure in the arteries during ventricular relaxation is called _____
- Q35. The entry of food into the respiratory tract is checked by _____
- Q36. Which is the pacemaker of the heart ?
a) Coronary artery b) Superior vena cava c) Sino-atrial node d) Inferior vena cava.
- Q37. Basic filtration unit of kidney is-
a) Urethra b) Glomerulus c) Ureter d) Collecting tubule.
- Q38. _____ are regarded as complete photosynthesis unit of plants?
- Q39. The centre for regulating body temperature is?
a) Hypothalamus b) Cerebrum c) CNS d) Cerebellum.
- Q40. Receptor are structure which are able to detect _____
- Q41. Co-ordination in plants takes by means of chemical substance called _____.
- Q42. Artificial Ripening of fruits is carried out by-
a) Auxin b) Gibberellins c) ABA c) Ethylene.
- Q43. Name the hormone which controls the Basal metabolic rate in animal.
a) Adrenalline b) Thyroxin c) Aldosterone d) Oxytocin.
- Q44. Name a mirror that can give an erect and enlarged image of an object.
- Q45. You are given water mustard oil glycerine and kerosene. In which of these media, a ray of light incident obliquely at same angle would bend the most .
(a) Kerisene (b) Water (c) Mustared oil (d) Glycerine
- Q46. The change in focal length of eye lens is caused by action of
(a) Pupil (b) retina (c) ciliary muscles (d) iris
- Q47. Which of the following property of a proton can change while it moves freely in a magnetic field?
(a) Mass (b) Speed (c) Velocity (d) Momentum
- Q48. When in the force experienced by a current carrying conductor placed in a magnitic field largest?
- Q49. Which part of solarcooker is responsible for green house effect?

Monnet DAV PS Raigarh

QUESTION BANK

SCIENCE

CLASS-X

1. In electrolytic refining of copper, the electrolyte used is
- | | |
|-------------------------|---------------------------------------|
| i. CuO | iii. Acidified CuSO ₄ (aq) |
| ii. Cu(OH) ₂ | iv. ZnSO ₄ |
2. Which of the following is most reactive
- | | |
|--------|--------|
| i. Li | iii. H |
| ii. Na | iv. K |

3. The filtration unit of kidney is called
 - i. ureter
 - ii. neurons
 - iii. urethra
 - iv. Nephrons
4. Where does fertilization occur
 - i. uterus
 - ii. ovary
 - iii. Fallopian tube
 - iv. Cervix
5. Trophic level in an ecosystem represents
 - i. oxygen level
 - ii. energy level
 - iii. Water level
 - iv. Salt level
6. Depletion of ozone layer is mainly due to.....
- 7..... is known as father of genetics.
- 8..... is non metal which is lustrous.
9. Iodine turns blue black on reacting with.....
10. The Chipko Andolan was originated in.....

3. What is exothermic reaction?
11. What do you mean by rancidity?
12. Name one metal and one non-metal which is liquid at room temperature.
13. Why is carbon tetravalent?
14. Draw the dot structure of ethane molecule.
15. What was the basis of modern periodic law?
16. Name the site of aerobic respiration in cells?
17. Why hormones are known as "chemical messengers"?
18. Name two organisms which reproduced through binary fission?
19. Define syngamy?
20. Write the formulae of plaster of Paris?
21. What is roasting?
22. The focal length of a convex mirror of radius of curvature 35 cm is
 - (a) 70 cm
 - (b) 17.5 cm
 - (c) 35 cm
 - (d) None of these.
23. ----- lens is used as corrective lens in the defect of vision of Myopia.
24. A ----- produces uniform magnetic field inside it. A solenoid or a bar magnet.
25. An electric generator is based on the-----.
26. The energy from the wind is a ----- source of energy.
27. State Fleming's left hand rule.
28. Calculate the amount of work done in moving a charge of 5 mC between two points where the potential difference is 50V.
29. The equivalent of two resistances 5 Ohm and 6 Ohm when joined in parallel is
 - (a) 11/30 Ohm
 - (b) 11 Ohm
 - (c) 30 Ohm
 - (d) 30/11
30. What is the focal length of a plane mirror? Give answer using mirror formula.
31. What is the position & nature of the image of an object placed at the focus of convex lens?
32. The far point of a person suffering from Myopia is-----
33. The most deviated color in dispersion of light is-----.
34. Find the refractive index of the medium in which the speed of light is 1.5×10^8 m/sec.
35. Define the term "solar constant"
36. Define Nuclear Fusion. Give one example.
37. A wire has resistance of 6 Ohm and is carrying a current of 10 ampere. Calculate the potential difference across it.
38. What do you mean by triple fusion?
39. Define biomagnification?
40. What is corrosion?

ANSWERS PHYSICS CLASS X

1. (b) 17.5
2. Concave
3. A Solenoid
4. Electromagnetic Induction

5. Renewable source of energy
6. It states that the forefinger of left hand gives the direction of magnetic field, central finger gives direction of current and the thumb gives the direction of force on current carrying conductor if three are mutually perpendicular.
7. 0.25 J
8. 30 / 11 ohm
9. Infinity by $i/f = 1/v + 1/u$
10. Infinity, real inverted and magnified image.
11. Less than infinity.
12. Violet
13. 2
14. Definition
15. Definition
16. 60 V

ANSWER KEY

Class- X

1. Acidified $\text{CuSO}_4(\text{aq})$
2. K
3. Nephron
4. Fallopian tube
5. Energy level
6. CFCs
7. G. j. Mendel
8. Iodine
9. Starch
10. Uttarakhand, mandal village
11. Heat releasing chemical reaction
12. Smell produced from oily food stuff.
13. Because it share four electrons
14. Refer NCERT Text book
15. Atomic number
16. Mitochondria
17. Because it is directly released in blood
18. Amoeba, leishmania
19. Process of fusion of gamete
20. $\text{CaSO}_4 \cdot 1/2\text{H}_2\text{O}$
21. Heating metal ore in presence of excess air
- 22.
- 23.
- 24.
- 25.
- 26.
- 27.
- 28.
- 29.
- 30.
- 31.
- 32.
- 33.
- 34.
- 35.
- 36.
- 37.
38. 2nd male gamete + polar nuclei = Endosperm.
39. Increasing toxicity by increasing trophic levels.

Short Answer Questions(1 mark Questions)**Session 2019-20****Class 10th - General Science**

1. The following reaction is an example of a $4\text{NH}_3(\text{g}) + 5\text{O}_2(\text{g}) \rightarrow 4\text{NO}(\text{g}) + 6\text{H}_2\text{O}(\text{g})$
1. displacement reaction
 2. combination reaction
 3. redox reaction
 4. neutralisation reaction
- (a) 1 and 4 (b) 2 and 3 (c) 1 and 3 (d) 3 and 4
2. Balance the chemical equation – $\text{Na}(\text{s}) + \text{S}(\text{s}) \rightarrow \text{Na}_2\text{S}(\text{s})$
3. Calcium phosphate is present in tooth enamel. Its nature is
- (a) basic (b) acidic (c) neutral (d) amphoteric
4. The pH of gastric juices released during digestion is
- (a) less than 7 (b) more than 7 (c) equal to 7 (d) equal to 0
5. Which of the following is acidic in nature?
- (a) lime juice (b) Human Blood (c) lime water (d) antacid
6. The ability of metals to be drawn into thin wire is known as
- (a) ductility (b) sonorosity (c) malleability (d) conductivity
7. What happens when (a) Zinc carbonate is heated in the absence of oxygen?
8. An element forms an oxide A_2O_3 which is acidic in nature. Identify A as a metal or non metal
9. A molecule of ammonia (NH_3) has
- (a) only single bond (b) only double bond (c) only triple bond (d) two double bonds and one single bond
10. Pentane has the molecular formula C_5H_{12} . It has
- (a) 5 covalent bonds (b) 6 covalent bonds (c) 12 covalent bonds (d) 17 covalent bonds
11. Up to which element, the law of octaves was found to be applicable?
- (a) Oxygen (b) Calcium (c) Cobalt (d) Potassium
12. An element which is an essential constituent of all organic compounds belongs to
- (a) group 1 (b) group 14 (c) group 15 (d) group 16
13. Arrange the following elements in the order of their decreasing metallic character
Na, Si, Cl, Mg, Al
14. What is the full form of ATP?
15. Which enzyme is used to digest fat in our body?
16. Which chemical is used to detect the presence of starch in food?
17. Electrical impulse travels in a neuron from
- (a) Dendrite → Axon → Axonal end → Cell body
 (b) Cell body → Dendrite → Axon → Axonal end
 (c) Dendrite → Cell body → Axon → Axonal end
 (d) Axonal end → Axon → Cell body → Dendrite
18. Posture and balance of the body is controlled by
- (a) cerebrum (b) medulla (c) pons (d) cerebellum
19. The growth of pollen tubes towards ovules is due to
- (a) hydrotropism (b) chemotropism (c) geotropism (d) phototropism
20. Define reflex action?
21. Name two sexually transmitted diseases.
22. What do you mean by pollination?
23. Define evolution.
24. If a round, green seeded pea plant (RR yy) is crossed with a wrinkled, yellow seeded pea plant (rr YY) the seeds produced in F_1 generation are
- (a) Round and yellow (b) Round and green (c) Wrinkled and green (d) Wrinkled and yellow
25. Name two different types of wild cabbage which are formed by artificial selection.
26. The theory of evolution of species by natural selection was given by

- (a)mendel (b)Darwin (c)Morgan (d)Lamarck
27. Magnification produced by a rear view mirror fitted in vehicles
 (a)is less than 1 (b)is more than 1 (c)is equal to 1 (d)can be more than or less than one depending upon the position of the object in front of it
28. Which of the following can make a parallel beam of light when light from a point source is incident on it ?
 (a)concave mirror as well as convex lens (b)convex mirror as well as concave lens (c)Two plane mirrors placed at 90° to each other (d)concave mirror as well as concave lens
29. The laws of reflection hold good for
 (a)plane mirror only (b)concave mirror only (c)convex mirror only (d)all mirrors irrespective of their shapes
30. A person cannot see distinctly objects kept beyond 2m . This defect can be corrected by using a lens of power
 (a)+0.5D (b)-0.5D (c)+0.2D (d)-0.2D
31. Why does the sun appear white at noon time?
32. What is the reason for twinkling of stars ?
33. Define hypermetropia.
34. On which factor electrical resistivity of a given metallic wire depends upon?
35. A current of 1A is drawn by a filament of an electric bulb . Number of electrons passing through a cross section of the filament is 168 would be roughly
 (a) 10^{20} (b) 10^{60} (c) 10^{18} (d) 10^{23}
36. What is the minimum resistance which can be made using 5 resistors each of $1/5 \Omega$?
37. What is the role of fuse, used in series with any electrical appliance ?
38. What is the reason of acid rain?
39. Define biomagnification.
40. Name two traditional water harvesting systems.

DAV PS, Chirimiri

CLASS X SCIENCE PHYSICS MCQ LIGHT – REFLECTION AND REFRACTION

Question :-

1. Which of the following is not due of refraction?
 (i)The bottom of bucket seems elevated
 (ii) Rainbow Formation
 (iii) Inverted Image Formed in spoon
 (iv)Star appears twinkling
Ans: (iii)
2. How the focal length will vary if the lens is kept in water?
 (i)It will increase
 (ii)It will decrease
 (iii)It will remain same
 (iv)It will no longer work as lens
Ans: (i)
3. Which of the following forms only real inverted image?
 (i)Concave mirror
 (ii)Convex Mirror
 (iii)Convex Lens
 (iv)None of these
Ans: (iv)

4. Which of the following lens will diverge the ray of light more?

(i) 2D

(ii) 1D

(iii) -0.4D

(iv) -0.8D

Ans: (iv)

5. Which of the following thing not happen when a ray of light passes from one transparent medium to another?

(i) It deviates its path

(ii) Its speed is changed

(iii) Frequency of light changes

(iv) Wavelength of light changes

Ans: (iii)

6. The magnification of an object placed at centre of curvature of Concave mirror is?

(i) -1

(ii) -2

(iii) 1

(iv) 2

Ans: (i)

HUMAN EYE AND COLORFUL WORLD

7. The image formed by retina of human eye is

a. Virtual and erect b. Real and inverted

c. Virtual and inverted d. Real and erect

ANS : B

8. The change in the focal length of human eye is caused due to

a. Ciliary muscles b. Pupil c. Cornea d. Iris

ANS : A

9. The least distance of distinct vision for a young adult with normal vision is

a. 25 m b. 20 m c. 25 cm d. 20 cm

ANS : C

10. The persistence of vision for human eye is

a. 1/10th of a second b. 1/16th of a second

c. 1/6th of the second d. 1/18th of a second

ANS : B

11. The light sensitive cell present on retina and is sensitive to the intensity of light is:

a. Cones b. Rods c. Both rods and cones d. None of these

ANS : B

12. The phenomena of light responsible for the working of the human eye is

a. Reflection b. Refraction

c. Power of accommodation d. Persistence of vision

ANS : B

13. Which of the following colours is least scattered by fog, dust or smoke?

a. Violet b. Blue c. Red d. Yellow

ANS : C

14. The colour of light that refracts most while passing through a prism is

a. Yellow b. Violet c. Blue d. Red

ANS : B

15. The amount of light entering the human eye is controlled by

a. Ciliary muscles

b. Pupil

c. Cornea

d. Iris

ANS : B

16. The part of the eyes refracts light entering the eye from external objects?

a. Lens

- b. Cornea
- c. Iris
- d. Pupil

ANS : B

17. By which optical phenomenon does the splitting of white light into seven constituent colours occur?

- [A] Refraction [B] Reflection [C] Dispersion [D] Interference

Ans: (C)

18. In human eye, the image of an object is formed at...

- [A] iris [B] pupil [C] retina [D] cornea

Ans: (C)

19. _____ lens is used to correct the defect of vision termed as presbyopia.

- [A] Convex [B] Concave [C] Bifocal [D] Contact

Ans: (C)

ELECTRICITY

20. The rate of flow of an electric charge is known as :

- (a) Electric potential (b) electric conductance (c) electric current (d) none of these

Ans : (c) electric current

21. The SI unit of electric current is :

- (a) ohm (b) ampere (c) volt (d) faraday

Ans : (b) ampere

22. The instrument used for measuring electric current is :

- (a) ammeter (b) galvanometer (c) voltmeter (d) potentiometer

Ans : (a) ammeter

23. The amount of work done in joules, when one unit electric charge moves from one point to another point in an electric circuit is called :

- (a) electric current (b) electric resistance (c) electric conductance (d) potential difference

Ans : (d) potential difference

24. The unit of potential difference is :

- (a) volt (b) ohm (c) ampere (d) faraday

Ans : (a) volt

25. The obstruction offered by material of conductor to the passage of electric current is known as :

- (a) Resistance (b) Conductance (c) Inductance (d) None of these

Ans : (a) Resistance

26. The SI unit of resistance is :

- (a) Newton (b) Ohm (c) Watt (d) Joule

Ans : (b) Ohm

27. A voltmeter is used to find potential difference in any electrical circuit which of the statement given below is true

- (a) A voltmeter is a high resistance instrument and is connected in series circuit
- (b) A voltmeter is a low resistance instrument and is connected in series circuit
- (c) A voltmeter is a high resistance instrument and is connected in parallel circuit
- (d) A voltmeter is a low resistance instrument and is connected in series circuit

Ans : (c) A voltmeter is a high resistance instrument and is connected in parallel circuit

MAGNETIC EFFECTS OF ELECTRIC CURRENT

28. In all the electrical appliances, the switches are put in the

- a. live wire
- b. earth wire
- c. neutral wire
- d. all of above

ANS : a

29. What is the condition of an electromagnetic induction?

- a. there must be a relative motion between the coil of wire and galvanometer
- b. there must be a relative motion between the galvanometer and a magnet
- c. there must be a relative motion between galvanometer and generator
- d. there must be a relative motion between the coil of wire and a magnet

ANS : D

30. No force acts on a current carrying conductor when it is placed-

- a. perpendicular to the magnetic field
- b. parallel to the magnetic field
- c. inside a magnetic field
- d. none of these

ANS : B

31. What is that instrument which can detect the presence of electric current in a circuit?

- a. galvanometer
- b. motor
- c. generator
- d. none of above

ANS : A

32. Which device produces the electric current?

- a. generator
- b. galvanometer
- c. ammeter
- d. motor e.

ANS : A

33. What is electromagnetic induction?

- a. the process of charging a body
- b. The process of rotating a coil of an electric motor.
- c. producing induced current in a coil due to relative motion between a magnet and the coil
- d. The process of generating magnetic field due to a current passing through a coil.

ANS :c

34. What happens to the current in short circuit?

- a. reduces substantially
- b. .does not change
- c. increases heavily
- d. vary continuously

ANS : C

SOURCES OF ENERGY

Fill in the blanks

- 35 In the wind energy farms, the wind speed should be higher than..... to maintain the required speed of the turbine. (15km/hr)
- 36 The energy produced during the controlled.....reactions is used for generating electricity at nuclear power plants. (nuclear fusion)
- 37 The energy availbale due to the difference in the temperature of water at the surface of the ocean and at deeper levels is called.....(ocean thermal energy)
- 38 Biogas is an excellent fuel as it contains 75%..... (methane)

.....

1. Xylem in plant is responsible for

- a) Transport of water b) Transport of food c) Transport of amino acid d) Transport of oxygen

2. Bowman capsule is present in.

- a) small intestine b) kidneys c) Heart
d) Brain

3. Which is not phytohormones.

- a) Auxin b) Abscisic acid c) Cytokinin
d) Thyroxin

4. Hormone Adrenalin causes:-

- a) The heart to beat faster b) reduce the concentration of muscles
c) increase breathing d) all the above

5. The transfer of pollen grains from anther to stigma is called.

- a) Fertilization b) Double fertilization c) ovulation d) pollination

6. Menstruation period is completed in

- a) 14 days b) 28 days c) 35 days d) 42 days

7. Variation arises due to:-

- a) mutation b) genetic recombination c) genetic drift
d) all the above

8. Which is an example of homologous organs?

- a) fore limb of man and wings of birds b) wings of birds and wings of insects
c) Wings of bat and wings of insects d) wings of bat and wings of birds

9. A food chain comprising birds, green plants, fish and man. The concentration of any harmful chemical entering the food chain will be maximum in.

- a) Fish b) Birds
c) Green plants d) man

10. Biodegradable substance is

- a) Glass bottle b) Iron nail c) Cow
dung d) All the above

11. Amrita Devi Bishnoi National Award is awarded for

- a) Prevention of deforestation b) Wild life conservation c) Social problem
d) None of these

12. Bandhara and Tals are common system of water harvesting in

- a) Maharashtra b) Rajasthan c) Andhra Pradesh d) Himachal Pradesh

13. Assertion:- homologous organs have common ancestry and similar function.

Reason:- Analogous organs have unlike origin and dissimilar function.

- a) Assertion and reason are true and reason is a correct explanation of assertion
- b) Assertion and Reasons are true but reason is not a correct explanation of assertion
- c) Assertion is true but the Reason is false
- d) Assertion and Reason are false
- e) Assertion is false but Reason is true

14. Lipase acts on

- a) Amino acid
- b) fats
- c) carbohydrates
- d) amino acid and fats

15. A patient of diabetes is not producing

- a) Insulin
- b) Oestrogen
- c) Thyroxin
- d) Adrenaline

**ANSWER KEY- (1.A 2.B 3.D 4.D 5.D 6.B 7.D 8.A 9.D 10.C
11.B 12.A 13.D 14.B 15.A)**

DAV PS, BISHRAMPUR
PHYSICS

Q1. Which of the following phenomena contributes significantly to the reddish appearance of the sun at sunrise or sunset?

- (a) Dispersion of light
- (b) Scattering of light
- (c) Total internal reflection of light
- (d) Reflection of light from the earth

Q2. Magnification produced by a rear view mirror fitted in vehicles

- (a) Is less than one
- (b) Is more than one
- (c) Is equal to one
- (d) Can be more than or less than one depending upon the position of the object in front of it

Q3. Where should an object be placed in front of a convex lens to get a real image of the size of the object.

- (a) At the principle focus of the lens
- (b) At twice the focal length
- (c) At infinity
- (d) Between the optical centre and its principle focus

Q4. A person cannot see distinctly object kept beyond 2m. This defect can be corrected by using a lens of power

- (a) +0.5D
- (b) -0.5D
- (c) +0.2D
- (d) -0.2D

Q5. The human eye can focus an object at different distances by adjusting the focal length of the eye lens this is due to

- (a) Presbyopia

- (b) Accommodation
- (c) Near sightedness
- (d) Far sightedness

Q6. The change in focal length of an eye lens is caused by the action of

- (a) Pupil
- (b) Retina
- (c) Ciliary muscles
- (d) Iris

Q7. Electrical resistivity of a given metallic wire depends upon

- (a) Its length
- (b) Its thickness
- (c) Its shape
- (d) Nature of the material

Q8. The phenomenon of electro magnetic induction is

- (a) The process of charging a body
- (b) The process of generating magnetic field due to a current passing through a coil
- (c) producing a induced current in a coil due to relative motion between the magnet and the coil
- (d) The process of rotating a coil of an electric motor

Q9. The strength of magnetic field inside a long current carrying straight solenoid is

- (a) More at the ends than at the centre
- (b) Minimum in the middle
- (c) Same at all the points
- (d) None of these

Q10. Which is the ultimate source of energy

- (a) Water
- (b) Sun
- (c) Uranium
- (d) Fossil fuels

Q11. Ocean thermal energy is due to

- (a) Energy stored by the waves in the ocean
- (b) Temperature difference at different level in the ocean
- (c) Pressure difference at different levels in the ocean
- (d) Tides arising out in the ocean

Assertion and Reasoning type questions

DIRECTIONS:- In each of the following questions a statement of assertion is given followed by corresponding statement of reason just below it .Mark the correct answer as

- (A) If both assertion and reason are true and reason is the correct explanation of assertion
- (B) If both assertion and reason are true but reason is not the correct explanation of assertion
- (C) If assertion is true but reason is false
- (D) If assertion is false but reason is true

Q12. Assertion:- The inside of a solar cooker is painted black

Reason :- Black does not allow heat to escape

- (a) A
- (b) B
- (c) C
- (d) D

Q13. Assertion:- A wire carrying current differ from a wire which carries no current

Reason:- A magnetic field is generated only around the current carrying conductors

- (a) A
- (b) B
- (c) C
- (d) D

Q14. Assertion:- If a wire is stretched such that its area is halved, its resistance would become 4 times

Reason :- The data is insufficient to predict

- (a) A (b) B (c) C (d) D

Q15. Assertion :- The relation $V = IR$ is valid even in the case of devices which do not obey ohm's law

Reason:- $V/I = R$

- (a) A (b) B (c) C (d) D

Q16. Assertion :- The sun appears red during sunrise or sunset

Reason :- Scattering of light is directly propotional to the wave length.

- (a) A (b) B (c) C (d) D

Q17. Assertion:- In a movie ordinarily 24 frames are projected per second from one end to the other of the complete film

Reason:- The image formed in the retina of the eye is sustained upto a second after the removal of stimulus .

- (a) A (b) B (c) C (d) D

CHEMISTRY

1.The electrolytic decomposition of water gives H_2 and O_2 in the ratio of

A.1:2 by volume

B.2:1 by volume

C.8:1 by mass

D. 1:2 by mass

2. In the thermal decomposition of lead (II) nitrate to give lead (II)oxide,

A. SO_2 and SO_3 are evolved with smell of burning sulphur

B. White ppt of $BaSO_4$ is formed

C. Yellow ppt of PbI_2 is formed

D.Brown fumes of NO_2 is evolved

3Fatty foods become rancid due to the process of

A. Oxidation

B. Corrosion

C. Reduction

D. Hydrogenation

4.We store silver chloride in dark coloured bottles because it is

A.White solid

B. It decomposes in presence of sunlight

D. It undergoes corrosion

E. None of the above

5. The reaction of H_2 gas and O_2 gas to form water is an example of

A.Combination reaction

B. Decomposition reaction

C.Displacement reaction

D. Double displacement

6.Which of the following will undergo addition reaction

A. CH_4

B. C_3H_8

C. C_2H_6

D. C_2H_4

7. A soap molecule has

A.Hydrophobic head and hydrophobic tail

B.Hydrophobic head and hydrophilic tail

C.Hydrophilic head and hydrophilic tail

D. Hydrophilic head and hydrophobic tail

8. Cyclohexane has the formula

A. C_6H_6

B. C_6H_{14}

C. C_6H_{12}

D. C_6H_{10}

9. When ethanol reacts with ethanoic acid in presence of an acid catalyst the product formed is

A. Ethene

B. Ethyl ethanoate

C. Chloromethane

D. Sodium ethanoate

10. The compound used for removing permanent hardness of water

A. $NaHCO_3$

B. $CaSO_4 \cdot 2H_2O$

C. $CaOCl_2$

D. $Na_2CO_3 \cdot 10H_2O$

11. When excess base is dissolved in a solution of sodium hydroxide

A. Concentration of H_3O^+ increases

B. Concentration of H_3O^+ remains same

C. Concentration of OH^- increases

D. Concentration of OH^- decreases

12. The acid present in tamarind is

A. Oxalic acid

B. Acetic acid

C. Tartaric acid

D. Methanoic acid

Reasoning Assertion Based Questions

A. If both assertion and reason are true and reason is the correct explanation for the assertion

B. If both assertion and reason are true but reason is not the correct explanation of assertion

C. If assertion is true but reason is false

D. If both assertion and reason are false

13. Assertion- Silicon, Germanium, Arsenic are called metalloids

Reason- They exhibit the properties of metals and non metals

14. Assertion- Soaps do not work well in hard water

Reason- Soaps are prepared by saponification reaction

15. . Assertion- As we move across the period from left to right metallic character increases

Reason – Across the period the effective nuclear charge acting on the valence shell increases and tendency to lose electron will decrease

16. . Assertion- Colour of copper sulphate solution does not change when iron nail is kept in it

Reason – Iron is more reactive than copper and displaces copper from its Salt solution

17. Assertion- Nitrogen is flushed in potato chips to preserve acidity of potato chips

Reason – Nitrogen prevents contact of chips to air and thus prevents Oxidation

BIOLOGY

1. The autotrophic mode of nutrition requires .

a) CO_2 AND H_2O

b) Chlorophyll

c) Sunlight

d) All of these.

Ans- d

2. Name the enzyme present in saliva?

Ans- Salivary amylase

3. What is the biological oxidation of food stuffs in the living cells called?

Ans- Respiration

4. What is the functional unit of lung?

Ans- Alveoli

5. Why do trachea and bronchi not collapse when air is exhaled out during respiration?

Ans- Their wall is supported by C- Shaped cartilaginous rings.

6. Name the tissue concerned with upward movement of water?

Ans- Xylem

7. Which half of human heart has deoxygenated blood?

Ans- Right half

8. What are the pumping chambers of heart called?

Ans- Ventricles

9. Name the structural and functional unit of kidney?

Ans- Nephrons

10. Name the process of artificial removal of nitrogenous waste from blood called?

Ans- Haemodialysis

11. Name the component of blood responsible for transporting oxygen?

Ans- RBC

12. Which plant hormone regulates cell division and differentiation in plants?

Ans- Cytokinins

13. The main function of abscisic acid is:

- a) Increase in length of cells b) Promote cell division
c) Inhibit growth d) Promote growth of stem

ans- c

14. Which part of brain is considered as seat of intelligence and memory?

Ans- Cerebrum.

15. Name the functional unit of nervous system?

Ans- Neuron.

16. Body coordination is exhibited by:

- a) Nervous system b) Endocrine system c) Neuroendocrine system
d) Blood vascular system

ans- c

17. What is a synapse?

Ans- A small gap between a neuron.

18. The use of iodised salt is recommended to prevent?

Ans- Goitre

19. Name the component that stores blue print of next generation?

Ans- DNA- Deoxyribonucleic acid.

20. Name the type of asexual reproduction in which parent organism divides into many organisms?

Ans- Multiple fission

21. What is the attachment of developing embryo with the uterine wall of mother called?

Ans- Placenta.

22. Attainment of sexual maturity is called:

- a) Puberty b) Adolescence c) Growth d) Development

Ans- a

23. What is the function of testis?

Ans- Formation of male germ cells

24. Name the term used for control of fertility?

Ans- Contraception.

25. Who is known as father of genetics?

Ans- Gregor Johann Mendel.

26. Give the genotypic ratio of F₂ generation of monohybrid cross?

Ans- 1:2:1

27. Give one essential function of ozone?

Ans- Protection from UV rays.

28. In a food chain, energy flow is

- a) Unidirectional b) Bidirectional c) Multidirectional d) No definite pattern

ans- a

29, Expand the term GAP

ANS- Ganga Action Plan

30. On which river Sardar Sarovar Dam is built:

Ans- Narmada

DAV PS, PANDAVPARA

OBJECTIVE TYPE QUESTIONS : 2019-20

Class-X

SCIENCE (BIOLOGY)

1. In a village some children have swollen neck _____ is deficient in their diet.

Ans. Iodine

2. _____ hormone regulates carbohydrate, protein and fat metabolism in the body.

Ans. Thyroxin

3. The junction between two nerve cells is _____.

Ans. Synapse

4. The person with blood group _____ doesn't have any antigen.

Ans. 'o'

5. When _____ chromosome of male fuses to _____ chromosome of female, boy child is produced.

Ans. Y and X

6. The entry of food into the respiratory tract is checked by _____.

Ans. Epiglottis

7. In human beings, _____ pigment is present which has a very high affinity for oxygen.

Ans. Haemoglobin

8. The wall of _____ contains an extensive network of blood vessels and provides surface for exchange of gases.

Ans. Alveoli

9. _____ is the intermediate product of both aerobic and anaerobic respiration.

Ans. Pyruvate

10. Air moves in and out of the lungs of human beings as a result of the movement of _____ and _____.

Ans. Ribs and Diaphragm

11. The alimentary canal is a long tube extending from the _____ and _____.

Ans. Mouth and Anus

12. The Bowman's capsule contains a bundle of blood capillaries which is called _____.

Ans. Glomerulus

13. Chipko movement was started from _____ village.

Ans. Reni (Garhwal)

14. _____ dam is built over Narmada river.

Ans. Sardar Sarovar Dam

15. _____ forms a common passage for urine as well as sperm.

Ans. Urethra

16. _____ is the pancreatic enzyme that digests protein in the alimentary canal.

Ans. Trypsin

17. Which of the following pairs of organs help in removal of wastes?

(a) Kidney, heart (b) kidney, stomach

(c) kidney, skin (d) skin, brain

Ans. Kidney, skin

18. Local system of canal irrigation in the Himachal Pradesh is known as

(a) Drip irrigation (b) split irrigation

(c) kulh (d) Bundhis

Ans. Kulh

19. A boy is riding a bicycle, which part of the brain is responsible for this action?

(a) Pons (b) cerebrum

(c) Medulla

(d) Cerebellum

Ans. Cerebellum

20. Study of human evolution comes under

(a) Palaeontology

(b) Anthropology

(c) Anthrology

(d) Mammology

Ans. Anthropology