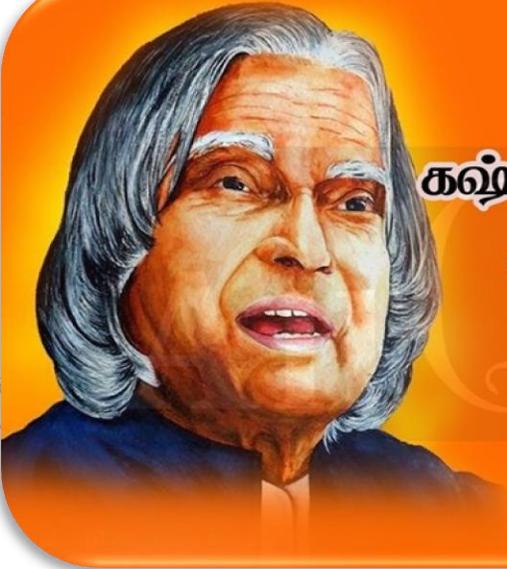


JAYARAJ NADAR HIGHER SECONDARY SCHOOL

NAGAMALAI PUDUKOTTAI, MADURAI – 625 019



வெற்றி உன்னிடம்

கஷ்டம் வரும்போது கண்ணை முடாதே

அது உன்னை கொன்றுவிடும்.

கண்ணை திறந்து பார்,

நீ அதை வென்று விடலாம்.

- டாக்டர் அப்துல் கலாம்

X STD SCIENCE

ONE MARK QUESTION & ANSWER

BIOLOGY

1. The theory of Natural selection was proposed by -----
(Charles Darwin) M-12, O -13,15, M-14.
2. ----- worked out the first scientific experimental study on heredity.
(Gregor Johann Mendel) Oct-12
3. Primitive man evolved in ----- **(Africa) Mar-13,15**
4. Which of the following is inheritable? **(An altered gene in sperm) Jun-13**
5. Mendel observed 7 pairs of contrasting characters in pisum sativum. One of the following is not a part of that find out **(Smooth and rough stem) Jun-14,15**
6. A gradual development of more complex species from pre-existing simpler forms is defined as ----- **(Evolution)**
7. ----- are used for treatment of cancer **(Mono clonal anti bodies)**
8. Mono clonal antibodies are now used for treatment of ----- **(cancer)**
9. The most serious form of malaria is caused by -----
(Plasmodium Falciparum) Mar-12, Oct-13,15
10. An example for protozoan infecting our intestine is -----
(Entamoeba histolytica) Mar-12,Jun-13
11. The viral disease is ---- **(Rabies) Oct-12**
12. Pick out the bacterial disease ----- **(Tetanus) Mar-13**
13. One of the following is transmitted through air. Find out **(Tuberculosis) Mar-14**
14. Pick out a non – antigen. Entry of ----- **(Mother's milk) Jun-14**
15. ----- are chemical compounds present in variable minute quantities in natural food stuffs
(Vitamins)
16. Dementia, dermatitis, diarrhoea are the symptoms of ---- disease **(Pellagra)**
17. In sexual reproduction of flowering plants, the first event involved in this is ----
(Pollination) M-12, J-13, J-14
18. The fertilized ovary is a fruit. The fruit develops from a single Flower with multi carpellary, Apocarpous superior ovary is ----- **(Aggregate Fruit) Mar-12,**
19. A seed dispersed by wind is called ---- **(Anemochory) Oct-12**
20. If a water soaked seed is pressed, a small drop of water comes out through -----
(Micropyle) Mar-13,15
21. The mango fruit is called as stone fruit because it has ----- **(Hard endocarp) Oct-13**
22. The product of triple fusion which acts as nutritive tissues for the development of embryo is ---- **(Endosperm) M-14, J-15**
23. The rudimentary root portion is called ----- **(Radicle)**
24. In bean, the embryo is enclosed by the ---- **(Seed coat)**
25. The process in which metabolic wastes are removed is ---- **(Excretion) Mar-12**
26. The Xylem in the plants are responsible for -----
(Transport of water) Mar-12, Mar-13,15, Jun-14
27. In monotropa the special type of root which absorbs nourishment is -----
(Mycorrhizal root) Oct-13
28. The product obtained in the anaerobic respiration of yeast is ----- **(Ethanol) M-14,J-15**
29. What is called as “black gold”? **(Petroleum) Mar-12, Jun-12, Oct-13, Mar-13,15**

30. ---- is alternate expression of same gene (**Alleles**) Mar-12,
31. The autotrophic nutrition requires ----- (**CO₂, Water, chlorophyll, sunlight**) O-12, J-13
32. ---- greenhouse gas which causes climate change and global warming (**CO₂**) Jun-13
33. Example for product of green chemistry is ---- (**Bio-plastics**) Oct-13
34. Example for fossil fuel is ----- (**Coal**) Mar-14, Jun-14
35. The term global village was coined by ----- (**Marshall McLuhan**)
36. The roots of coconut tree are seen away from the plant. Such kind of movement of root for want of water is ----- (**Hydrotropism**) Oct-15
37. One of the means of indirect transmission of a disease is -----
(**Using Utensils of patients**) Mar-15
38. The ----- are decomposers in the pond eco system (**Bacteria**) Jun-15
39. ----- metal is a constituent of blood pigment (hemoglobin) (**Fe**) Jun-15
40. In persons suffering from insulin – dependent diabetes is ---- the cells of pancreas are degenerated (**Beta**)
41. An endocrine gland which is both exocrine and endocrine is the ----- (**Pancreas**)
42. Post – fertilization, the ovule changes in to a ----- (**seed**)
43. In Mendel's Pisum Sativum plant, the genetic materials present is ---- (**DNA**)
44. The method of reproduction in unicellular organism like amoeba and bacteria in which they split into two equal halves and produce new one is called ----- (**Binary fission**)
45. The flower is important to a plant because it helps in ----- (**sexual reproduction**)
46. Anemophily occurs in ----- (**Grass**)
47. Mitral valve is found between ----- (**Left auricle and Left ventricle**)
48. The ---- filter the blood and form the urine (**Nephron**)
49. The special root - like structure of plant parasites in cuscuta and viscum are called – ----- (**Haustoria**)
50. ----- of green plants are called factories of food production (**Chloroplast**)
51. Complete oxidation of a glucose molecule in aerobic respiration produces ----- molecules (**38ATP**)
52. The first vaccine injection in to a just born baby is ----- (**BCG**) Jun-15

CHEMISTRY

1. The mixture of gases used by deep sea divers is ----- (**Helium – Oxygen**) J-12,13, M-15
2. ---- is opaque in nature (**Suspension**) Mar-12,
3. The size of particles in true solution is ----- (**1°A to 10°A**) Oct-12
4. Solution that contains water as the solvent is called aqueous solution. If carbon di sulphide is a solvent in a given solution then the solution is called ----
(**non-aqueous solution**) Mar-13
5. The particle in various forms are visible only under ultra micro scope. A solution containing such particles called ----- (**Colloidal solution**) Jun-14
6. The heterogeneous mixture of small insoluble particles in a solvent are called -----
(**Suspension**)
7. Nitrogen in earth soil is an example for ----- (**Saturated solution**)
8. In ----- process, solubility decreases with increase in temperature (**Exothermic**)

9. $Zn+2HCl \rightarrow ZnCl_2+H_2\uparrow$. The above reaction is an example of ----
(Displacement reaction) Mar-12,
10. For human blood the pH range is ---- to ---- **(7.35 – 7.45) Jun-12,**
11. Vinegar is present in acetic acid. Curd contains ----- **(Lactic acid) Mar-13,15,J-15**
12. $pH=-\log_{10}[H^+]$. The pH of a solution containing hydrogen ion concentration of 0.001M solution is --- **(3) J-13,15.**
13. A process employed for the concentration of sulphide ore is ---
(Froth Flotation) J-13, M-14
14. ----- surface absorbs more heat than any other surface under identical condition
(Black) J-13, J-14, O-15
15. To protect tooth decay we are advised to brush our teeth regularly. The nature of the tooth paste commonly used is ----- in nature **(basic) Oct-13**
16. Gold does not occur in the combined form. It does not react with air (or) water. It is in ----- **(Native state) O-13, M-14**
17. ----- is used in the production of ammonium nitrate which is used as fertilizer in agriculture. **(Acetic acid)**
18. $Metal + Acid \rightarrow salt + \text{----}$ **(Hydrogen) Oct-12**
19. Number of periods in modern periodic table is ----- **(7) Mar-12, 15, Oct-15**
20. The ore of Aluminum is ---- **(Bauxite) Mar-12, Mar-13**
21. First period contains only two elements, one is hydrogen and the other is ----
(Helium) Mar-12,
22. Bauxite is the ore of ---- **(Aluminum) Mar-12,**
23. ----- are called coinage metals **(Copper, Silver and Gold) Oct-12, 15**
24. The molecular formula for Bauxite is ----- **($Al_2O_3 \cdot 2H_2O$) Oct-12**
25. Ore is used for the extraction of metals profitably. Bauxite is used to extract aluminum it can be termed as ----- **(Ore) Mar-13**
26. Any metal mixed with mercury is called amalgam. The amalgam used for dental filling is ---- **(Ag-Sn amalgam) Mar-13,15, Jun-13**
27. An element which is an essential constituent of all organic compounds belongs to ----- group. **(14th group) J-13, 14**
28. The chief ore of copper is ----- **(Copper Pyrite)**
29. Alkanes have the general formula C_2H_{2n+2} . The molecular formula of the first hydrocarbon is --- **(CH_4) M-12**
30. IUPAC name of the first member of alkyne is ----- **(Ethyne) Mar-12, Jun-13, Jun-14**
31. Buckminster Fullerene is the allotropic form of----- **(Carbon) O-12, O-13, M-14**
32. Formula of methane is CH_4 and its succeeding member ethane is expressed in C_2H_6 . The common difference of succession between them is ----- **(CH_2) Mar-13, Oct-15**
33. When sunlight passes through window of the class rooms its path is visible. This is due to --- of light **(Scattering) O-13, 15, M-14**
34. Chemical volcano is an example of ---- **(decomposition reaction) Mar-14, Jun-14**
35. Even though it is a non-metal, graphite conducts electricity. It is due to the presence of ----- **(Free electrons) Mar-15**

36. Earth soil cannot store more nitrogen than it can hold. Hence earth soil is referred to be in a state of ----- (**Saturation**) **J-15**
37. A good conductor among the allotropes of carbon is ----- (**Graphite**) **jun-15**
38. ----- is used in seeding clouds (**Potassium iodide**)
39. The particles in various forms are visible only under and Ultra microscope. A solution containing such particles is called ---- (**coloidal**)
40. Dispersed phase + Dispersion medium → ----- (**Suspension**)
41. ----- is opaque (**Suspension**)
42. What is the percentage of gold present in “Hallmark” ----- (**91.6**)

PHYSICS

1. ----- has been used as rocket fuel. (**Liquid Hydrogen**)
2. The freezing of biotechnology products like vaccines require ----- freezing systems (**Nitrogen**) **M-12, J-12, M-13**
3. The weight of 50kg person at the surface of earth is ---- (**490N**) **O-12, J-13, M-14.**
4. The momentum of a massive object at rest is ----- (**Zero**) **Oct-13,15, Mar-14**
5. The unit of weight is ---- (**Newton**) **Jun-14**
6. The volume of ‘g’ at sea level and at a latitude of ---- is taken as the standard freefall, acceleration is ----- (**45°, 9.8ms⁻²**)
7. Every action have an ---- and equal reaction (**Opposite**)
8. Two equal and opposite force make a ---- in mechanics (**Couple**)
9. The defect hyper metropia can be corrected by using a ----- (**convex lens**) **Mar-13**
10. Kilowatt –hour is the unit of ----- (**Electric energy**) **Mar-12,Mar-13, Oct-13**
11. The main source of bio-mass energy is --- (**Cow dung**) **Jun-12, Mar-14**
12. The atomic number of natural radioactive element is ----- (**greater than 82**) **Mar-13**
13. The potential difference required to pass a current 0.2A in a wire of resistance 20 ohm is --- (Note: $V=IR$) (**4V**) **Mar-12, Jun-13, Jun-14.**
14. The symbol of ammeter is ---- (**A**) **Mar-12,**
15. A device which converts electrical energy into mechanical energy is ---- (**Motor**) **M-12, O-13**
16. The unit of electric current is ----- (**Ampere**) **Oct-12**
17. The energy produced when 1kg of a substance is fully converted into energy is ----- (**9×10^{16}**) **Oct-12, Mar-14**
18. The symbol of voltmeter is ----- (**V**) **Oct-13**
19. The cells in which the electrical energy is derived from the chemical action are called ----- (**Electro chemical cell**)
20. An object is placed 25cm from a convex lens whose focal length is 10cm. the image distance is ----- (**16.66cm**) **M, J-12**
21. An electric current through a metallic conductor produces ----- around it (**Magnetic field**) **M-12,14, O-12, J-13.**
22. The defect myopia can be corrected by using a ----- (**Concave lens**) **Mar-12,**
23. The field of view is maximum for ---- (**Convex mirror**) **Oct-12, Jun-13, 14**
24. The amount of induced emf when the magnetic field linked with the coil changes is ---- (**Magnetic induction**) **M-13**

25. The magnification produced by a mirror is $1/3$, and then the type of mirror is -----
(Concave) O-13, M-14
26. ----- discovered electromagnetic induction **(Faraday) Jun-14**
27. The unit of power of the lens is ----- **(Diopetre)**
28. Chandrayaan operated for ----- days in space **(312) jun-15**
29. The electro motive force (emf) of lechlanche cell is ----- **(1.5) Jun-15**
30. The acceleration due to gravity on the surface of the earth will be maximum at -----
and minimum at -----
(Poles, Equator)
31. Which Part of the human eye helps in changing the focal length of the eye lens ----
(Ciliary muscles)

