



## **BSN-NURSING MCQ'S**

Note: Answers are Bold Letters:

### **Living Organisms**

- Micro-organisms are:  
(a) Very big (b) **Very small** (c) Both a & b (d) none
- Organism means:  
(a) Living or nonliving things (b) **Living**  
(c) **Non-living things** (d) Things dead bodies
- Viruses are considered as dead due to:  
(a) Their reproduction (b) **Their respiration**  
(c) **Their crystallization** (d) Their motion
- Paramecium is example of:  
(a) Virus (b) Multicellular (c) Bacteria (d) **Unicellular**
- Viruses are considered in:  
(a) Multicultural (b) **Between living & non-living things**  
(c) Non-living things (d) Living things
- Why viruses are considered living things?  
(a) Because they move (b) **Because they are found in the form of crystals**  
(c) **Because they reproduce** (d) Because they breath
- Micro means:  
(a) Big (b) Tell (c) Huge (d) **Small**
- Micro-organisms can be seen by:  
(a) Telescope (b) Lens (c) Naked eye (d) **Microscope**
- Viruses are:  
(a) **Non-cellular** (b) Multi-cellular (c) Cellular (d) Unicellular
- Bacteria are:  
(a) Non-Cellular (b) Cellular (c) Multi-cellular (d) **Unicellular**
- Atrophy are the organisms that can:  
(a) Not live on other organisms (b) Live on other organisms  
(c) **Prepare their own food** (d) Live on other organisms
- Some bacteria are:  
(a) Parasites (b) **Autographs** (c) Heterotrophs (d) none of these
- Heterotrophs are the organisms that can:  
(a) Not live on other organisms (b) **Not prepare their food**  
(c) Live on other organisms (d) Prepare their own food
- Parasites are the organisms that  
(a) **Live on other organisms** (b) Prepare their own food  
(c) Do not live other organisms (d) Do not prepare their food
- Viruses can be studies with:  
(a) Microscope (b) Electron Microscope (c) **Both b & d** (d) Biochemical Test
- All bacteria are harmful:  
(a) **No** (b) Yes (c) Cannot say (d) Can say
- All viruses are:  
(a) Autographs (b) **Parasites** (c) Heterotrophs (d) All of these
- All bacteria are:  
(a) Autographs (b) Parasites (c) **None of these** (d) Heterotrophs
- Bacteria are also beneficial:

- (a) All of these (b) Animals (c) Plants (d) Humans
23. Virus consists of proteins (a) 2 (b) 3 (c) 5 (d) 4
24. SARS causes harm Int (a) Animals (b) All (c) Plants (d) Humans
25. SARS is the disease caused by: (a) Bacterin (b) Amoeba (c) Paramecium (d) Virus
26. Viruses are harmful for: (a) Man (b) Plant (c) All (d) Animals
27. T.B. is a disease: (a) Animals (b) Plants (c) Both a & d (d) Humans
28. T.B. is the disease which is caused by: (a) Viruses (b) Amoeba (c) Paramecium (d) Bacteria
29. Bacteria are found in: (a) Land (b) All of these (c) Air (d) Water
30. A group of closely resembling organism that can breed with on another in salivation is called: (a) Community (b) Living organisms (c) Population (d) Species
31. Outer part of a bacterium's body is: (a) Nucleus (b) Cell wall (c) Cell membrane (d) Cytoplasm
32. Bacteria move with the help of: (a) Cytoplasm (b) Flagellum (c) Slime capsule (d) Cell well
33. Those bacteria which cause disease plants and animals are called: (a) Pathogenic bacteria (b) Autotrophic bacteria (c) Hygienic bacteria (d) Parasitic bacteria
34. A disease caused by bacteria is: (A) Aids (b) Small Pox (c) Cholera (d) Measles
35. At what °C Food is heated in sterilization? (a) 120-126 (b) 86-90 (c) 106-110 (d) 96-100
36. Chlorine gas is used in the home water supply system during rainy season to kill the micro-organisms: (a) Virus (b) Bacteria (c) Algae (d) Fungi
37. The micro-organism which is not cellular (a) Bacteria (b) Virus (c) Fungi (d) Algae
38. The disease that can transfer to the next generation is: (a) Influenza (b) Malaria (c) Cholera (d) Hemophilia
39. Bacteria cause "fibre blight" in: (a) Pear and lemon (b) Apple and potato (c) Apple and orange (d) Apple and peach
40. All living and non-living make: (a) Population (b) Environment (c) Habitats (d) Community

## Animal Kingdom

1. Invertebrates are the animals that have (a) Vertebral (b) Some have (c) No vertebral columns (d) Some do have
2. Invertebrate have been divided into groups: (a) 9 (b) 10 (c) 5 (d) 7
3. Vertebral column is: (a) Structure (b) Backbone (c) Skull (d) Spinal
4. Animals have been classified into major groups: (a) 7 (b) 9 (c) 2 (d) 5
5. Animals are classified into groups of sub-groups due to their: (a) Behaviors (b) Characteristic (c) Structure (d) Races
6. Amoeba is the example of: (A) Sponges (b) Worms (c) Shelled animals (d) Unicellular animals
7. Paramecium belongs to the group: (a) Unicellular (b) Shelled animals (c) Sponges (d) Worms
8. Flatworms live in the organs of animals and humans:



9. Sponges have in their bodies:
 

(a) Intestine	(b) Stomach	(c) Liver	(d) Both a & c
(a) Spots	(b) Stings	(c) Pores	(d) Thorns
10. Sponges are:
 

(a) Multicolor	(b) Non-cellular	(c) Cellular	(d) Unicellular
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11. Sponges get food and oxygen through:
 

(a) Pores	(b) Cavities	(c) Flagella	(d) Gills
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12. Majority of sponges are found in:
 

(a) Seas	(b) Ponds	(c) Rivers	(d) Laves
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13. Segmented worms have no special organs for:
 

(a) Respiration	(b) Excretion	(c) Motion	(d) Reproduction
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14. Segmented worms take breath through their:
 

(a) Moist Skin	(b) Head	(c) Mouth	(d) Nose
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15. Animals with jointed legs have pairs of legs:
 

(a) Three	(b) Four	(c) Two	(d) One
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16. Sycon is the example of:
 

(a) Shelled animals	(b) Sponges	(c) Unicellular animals	(d) Worms
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17. The body cells of jelly fishes and corals are arranged into layers:
 

(a) 3	(b) 5	(c) 2	(d) 4
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18. The thread-like structures of jelly fishes are called:
 

(a) Pores	(b) Spines	(c) Tentacles	(d) Flagella
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19. Animals with jointed legs have pairs of wings:
 

(a) Three	(b) Two	(c) One	(d) Four
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20. Shelled animals live in:
 

(a) Water	(b) Shell	(c) Soil	(d) Air
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21. Tentacles are used for:
 

(a) Capturing	(b) Hunting	(c) Berating	(d) Moving
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22. Housefly and butterfly are the example of:
 

(a) Worms	(b) Sponges	(c) Shelled animals	(d) Animals with jointed legs
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23. Snail is an animal of group:
 

(a) Jelly fishes and corals	(b) Spiny animals	(c) Shelled animals	(d) Worms
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24. In corals, skeleton consists of:
 

(a) Fat	(b) Shell	(c) Protein	(d) Calcium
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25. The largest coral reef of the world is in:
 

(a) Argentina	(b) Philippines	(c) Australia	(d) Britain
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26. Muscular, foot in the shelled animals is used for:
 

(a) Reproduction	(b) Respiration	(c) Locomotion	(d) Motion
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27. "Great Barrier" is the largest coral reef of the world Its length is:
 

(a) 2000 Km	(b) 500 Km	(c) 5000 Km	(d) 1000 Km
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28. Most of the worms are:
 

(a) Autographs	(b) Heterotopy	(c) Parasites	(d) None of these
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29. Shell of the shelled animals is made up of:
 

(a) Vitamin	(b) Calcium	(c) Protein	(d) Carbon
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30. Spiny animals have on their bodies:
 

(a) Spots	(b) Spines	(c) Pores	(d) Shells
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31. Star fish is the example of:
 

(a) Shelled animals	(b) Spiny animals	(c) Jelly fish and corals	(d) Animals with jointed Legs
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32. Vertebrates are the animals that have in their bodies:
 

(a) Backbone	(b) Skins	(c) Structure	(d) Skull
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33. Group of animals whose body temperature changes according to the environment are called:
 

(a) Amphibians	(b) Cold blooded	(c) Warm blooded	(d) Reptiles
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34. Groups of animals whose body temperature does not Change according to the environment are called:
 

(a) Cold blooded	(b) Reptiles	(c) Warm blooded	(d) Amphibians
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35. Vertebral are divided into groups:
 

(a) 4	(b) 5	(c) 2	(d) 3
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36. Body of the animals with jointed legs has parts:
 

(a) Three	(b) Four	(c) One	(d) Two
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37. The amphibians can live in:  
(a) Land (b) Water (c) Both (d) a & b
38. Mammals which have pouch are called:  
(a) Egg-laying Mammals (b) Mammals  
(c) **Pouched Mammals** (d) Placental Mammals
39. The fore part of the animals with jointed legs is:  
(a) **Head** (b) Abdomen (c) Mouth (d) Thorax
40. The middle part of the animals with jointed legs is:  
(a) Head (b) **Thorax** (c) Mouth (d) Abdomen
41. The hind (back) part of the animals with jointed legs is:  
(a) Thorax (b) Abdomen (c) Head (d) **Mouth**
42. Which is a unicellular animals:  
(a) Flat worm (b) Round worm (c) **Amoeba** (d) Tape worm
43. A group of warm-blooded animals is:  
(a) Fishes and birds (b) Fishes and mammals  
(c) **Mammals and birds** (d) Fishes and reptiles
44. The body of insects consists of:  
(a) Thorax (b) Head (c) Abdomen (d) **All these**
45. Fishes have parts of their body:  
(a) **3** (b) 5 (c) 1 (d) 2
46. Fishes breath through:  
(a) **Gills** (b) Skin (c) Lungs (d) Nostrils
47. The body of the fishes consists of:  
(a) Tail (b) Head (c) Trunk (d) **All of these**
48. Fins of the fishes help them in:  
(a) **Swimming** (b) Reproduction (c) Eating (d) Moving
49. Amphibians are:  
(a) **Cold blooded animals** (b) Warm blooded animals  
(c) None these (d) Both of these
50. Gills help fishes:  
(a) **Respiration** (b) Moving (c) Hunting (d) Reproduction

## Plant Kingdom.

1. Fungi are:  
(a) Both (b) None (c) Autotrophs (d) **Heterotrophs**
2. Penicillin is obtained from:  
(a) Mosses (b) Conifers (c) Algae (d) **Fungi**
3. Rust and smut diseases are caused by:  
(a) Mosses (b) Ferns (c) Algae (d) **Fungi**
4. Mushroom is the example of:  
(a) Algae (b) **Fungi** (c) Conifers (d) Ferns
5. Vascular tissues are used for conduction of:  
(a) Salt (b) All of these (c) Food (d) **Water**
6. They have well developed roots:  
(a) **Ferns** (b) Mosses (c) Fungi (d) Algae
7. They have strong stems and branches:  
(a) Ferns (b) Fungi (c) **Conifers** (d) Mosses
8. These are called the evergreen plants:  
(a) Ferns (b) Fungi (c) **Conifers** (d) Mosses
9. Flowering plants are the:  
(a) Non-vascular plants (b) **Vascular plants** (c) None of these (d) Both of these
10. Flowers are of types:  
(a) 3 (b) 5 (c) **2** (d) 4
11. The simplest group of plant kingdom is:  
(a) Fungi (b) Mosses (c) Ferns (d) **Algae**
12. Monocots have cotyledons in their seed:  
(a) Three (b) Four (c) **One** (d) Two
13. Algae are structurally:  
(a) Cellular (b) Unicellular (c) Multi-cellular (d) **Both b & c**



14. Dicots have cotyledons in their seeds.  
(A) One (B) Two (C) Three (D) Four
15. Rose is an example of:  
(a) Both (b) **Dicot** (c) Monocot (d) None
16. Algae are:  
(a) Parasites (b) All of these (c) Heterotrophs (d) **Autotrophs**
17. Thread like structures of fungi are called:  
(a) Pores (b) Flagella (c) Tentacles (d) **Hyphae**
18. Wheat, maize and rice are:  
(a) Non- Flowering (b) **Flowering plants** (c) None of these (d) Both of these
19. The organisms that prepare their own food by photosynthesis are called:  
(a) Parasites (b) **Autotrophs** (c) Heterotrophs (d) All of these
20. Organisms which get their food from other living organisms and dead bodies are called:  
(a) Parasites (b) **Heterotrophs** (c) Autotrophs (d) None
21. Photosynthesis is found in:  
(a) Animals (b) **Plants** (c) All of these (d) Non living
22. The group of dicotyledon plants is:  
(a) Apple, pea, maize (b) Rice, apple, sarson (c) Wheat, mango sugar case (d) **Pes, orange**
23. In order to make their own food, plants need:  
(a) Oxygen (b) **Minerals** (c) Rain (d) Sunlight
24. The plants have the green colour due to:  
(a) Cytoplasm (b) Xylem tissue (c) **Colour due to** (d) Chloroplast
25. Organisms responsible for breaking down of dead bodies of plants and animals into simple chemical substances are called:  
(a) Vascular Tissues (b) Mushrooms (c) **Decomposers** (d) Fungi
26. Plants in which seeds are not present in their fruits are called:  
(a) Fungi (b) Ferns (c) **Conifers** (d) Mosses
27. Plants which do not produce fruits and seeds are called:  
(a) Fungi (b) Mosses (c) Conifers (d) **Ferns**
28. Which is included in non-flowering plants:  
(a) Mono cots (b) Dicots (c) **Fungi** (d) Maize
29. In which process plants use carbon dioxide:  
(a) Photosynthesis (b) **Respirations** (c) Movement (d) Circulation
30. Which is not a parasite:  
(a) Non-green plant (b) Hook worm (c) **Mosquito** (d) Fungi

## Continuity of Life

1. Hereditary Characters are transmitted to the offspring from:  
(a) Mother (b) Father (c) **Parents** (d) None of these
2. Differences among members of a family or species are called:  
(a) Heredity (b) Transformations (c) Similarities (d) **Variations**
3. The nucleus of the cell contains thread like structures which are called:  
(a) Cytoplasm (b) **Chromosomes** (c) Genetics (d) Chloroplast
4. The process of transfer of character's from parents to their offspring is called:  
(a) RNA (b) Genetics (c) DNA (d) **Heredity**
5. The characteristics which are inherited are called:  
(a) Genetic Characters (b) **Hereditary Characters**  
(c) Maternal Characteristics (d) Parental Characteristics
6. The characteristics are transmitted to the new generation which determines them:  
(a) RNA (b) **DNA** (c) Proteins (d) Genetics
7. Units controlling Inheritance and expression of characters are called:  
(a) Habits (b) Heredity (c) Behaviors (d) **Genes**
8. Hereditary material of the cell is called:  
(a) RNA (b) **DNA** (c) Heredity (d) Habit
9. The technology using breeding of selected organisms is called:  
(a) Genetic engineering (b) Biotechnology  
(c) **Selective breeding** (d) Genetic breeding
10. The universal code is called:

- (a) Genetics (b) Morse code (c) Genetic code (d) DNA
11. The telegram code is responsible for:  
(a) Symbols (b) Signals (c) Alphabets (d) Motions
12. Manipulation of genes for human welfare:  
(a) Genetic breeding (b) Selective breeding  
(c) Genetic engineering (d) Biotechnology
13. Industrial use of organisms for human welfare is called:  
(a) Selective breeding (b) Genetic engineering  
(c) Biotechnology (d) Hereditary characters
14. Instruction for inheritance of characters are present in the form of:  
(a) Hereditary code (b) Genetic code (c) RNA (d) Morse code
15. The defects inherited by genes and DNA are:  
(a) Thalassemia (b) Hemophilia (c) Both a & b (d) None of these
16. Broiler chickens are developed through the technique:  
(a) Selective breeding (b) Genetic engineering  
(c) Biotechnology (d) Heredity
17. Through selective breeding we have characteristics of our:  
(a) Choice (b) Genes (c) Quality (d) Merit
18. Animals and plants having different characters of two parent varieties are called:  
(a) Hybrids (b) Biotechnology (c) Genesis (d) Biodiversity
19. A substance that protects the body against cancer is:  
(a) Penicillin (b) Interferon (c) Insulin (d) Inferno
20. The process of cross-breeding to get different characters is called:  
(a) Biodiversity (b) Biotechnology (c) Selective breeding (d) Hybridization
21. Shiwal cow, Neely Rave buffalo and Taddy goat are the example of:  
(a) Genetic engineering (b) Hybridization  
(c) Biotechnology (d) Selective breeding
22. The disease-free crop in Pakistan produced is:  
(a) Maize (b) Wheat (c) Gram (d) Sugar cane
23. The organism that receives and incorporates foreign DNA into its DNA is called:  
(a) Harmful organism (b) Transgenic organism  
(c) Micro- organism (d) Hereditary organism
24. Yogurt, breed and cheese are produced by:  
(a) Selective breeding (b) Hybridization process  
(c) Fermentation (d) Biotechnology process
25. Fermentation is a common example of:  
(a) Genetic engineering (b) Biotechnology  
(c) Selective breeding (d) Hybridization
26. Instruction for inheritance is give by:  
(a) Heredity (b) RNA (c) DNA (d) Genesis
27. Unit of inheritance is called:  
(a) RNA (b) DNA (c) Genes (d) Chromosomes
28. Insulin is used to protect and treat the disease:  
(a) T.B. (b) Tetanus (c) Cancer (d) Diabetes
29. Which bacteria cause production of yogurt:  
(a) Multi- cellular (b) Cellular (c) Yeast (d) Unicellular
30. Tissue culture us an example of:  
(a) Genetic engineering (b) Hybridization  
(c) Selective breeding (d) Biotechnology
31. Asexual breeding or vegetative propagation on like stem cutting is called:  
(a) Hybridization (b) Fermentation (c) Biotechnology (d) Tissue culture
32. Sugar cane crop is developed by the technique:  
(a) Biotechnology culture (b) Tissue  
(c) Hybridization (d) Fermentation
33. Broilers and layers are produced by using the technique of:  
(a) Genetic engineering (b) Cloning  
(c) Transformation (d) Selective breeding
34. Chromosomes are chemically composed of DNA and:  
(a) Proteins (b) Fats (c) Vitamins (d) Carbohydrates



35. Offspring possess many characters similar to their parents because of:  
 (a) Variations (b) **Heredity** (c) Mutation (d) Cytoplasm

## Environment

- The production of organisms in an area remains:  
 (a) Static (b) Same (c) Constant (d) **Varying**
- If the birth rate in population of an area is more than the death rate, it shows:  
 (a) Decrease in population (b) **Increase in population**  
 (c) Both of these (d) None of these
- If the birth rate in population of an area is lesser than the death rate, it shows:  
 (a) **Decrease in population** (b) Increase in population  
 (c) Both of these (d) None of these
- Climatic conditions play role in bringing changes in the population:  
 (a) **Important** (b) Unimportant (c) No role (d) All of these
- Diseases and epidemics do with population increase:  
 (a) Eliminate (b) Harm (c) Encourage (d) **Discourage**
- The condition when population exceeds the carrying capacity of an ecosystem is called:  
 (a) Unemployment (b) Rapidity (c) Under control population (d) **Over- population**
- The number of individuals of species whose need can be fulfilled by the ecosystem is called:  
 (a) Biodiversity (b) **Carrying capacity** (c) Diversity (d) Rapidity
- Variety organisms is called:  
 (a) **Biodiversity** (b) Adversity (c) Rapidity (d) Community
- Cutting of trees and destruction of forests due to human activities is named:  
 (a) Flowering (b) Environmentalism (c) **Deforestation** (d) Plantation
- In the fourteenth century, which disease washed half of the population of England within 31 years:  
 (a) AIDS (b) **Plague** (c) Cholera (d) Cancer
- Reusing and rendering of used articles into useful ones is called:  
 (a) Usability (b) **Recycling** (c) Reusability (d) Productivity
- Shifting of population to or from one place is called:  
 (a) Administration (b) Over-population (c) Diversity (d) **Migration**
- Lack and deficiency of eatables in an area; this situation is called:  
 (a) Migration (b) **Famines** (c) Epidemics (d) Diseases
- Plague epidemic washed the % of the total population of Asia and Central Europe:  
 (a) 50% (b) 70% (c) **25%** (d) 60%
- Both health facilities and favorable climatic conditions put effect population increase:  
 (a) **Encouraging** (b) Harmful (c) Discouraging (d) None of these
- All members of a species living in an area is called:  
 (a) Community (b) **Population** (c) Generation (d) Diversity
- Population living and interacting in an area is called:  
 (a) **Community** (b) Diversity (c) Colony (d) Generation
- Affects the population increase:  
 (a) Economy (b) Education (c) **Climate** (d) Unemployment
- In the mid seventeenth century, the population of the world was:  
 (a) **500 million** (b) 700 million (c) 300 million (d) 600 million
- At present, the population of the world has surpassed  
 (a) 8 billion (b) 5.5 billion (c) **6 billion** (d) 7 billion
- The migration of population from villages to the cities is called:  
 (a) Over- population (b) Colonialization (c) Industrialization (d) Urbanization
- Cultivation process of farms is called:  
 (a) Industry (b) Plantation (c) Farming (d) **Urbanization**
- Ozone is to the earth:  
 (a) **Beneficial** (b) Harmful (c) None of these (d) Both of these
- A resource that does not regenerate quickly is called:  
 (a) Recycling resource (b) Reusable resource  
 (c) Renewable resource (d) **Non-renewable resource**
- Environmental pollution reacts layer:  
 (a) **Harmfully** (b) Beneficially (c) None of these (d) Both of these
- The setting up of Industries is called:

- (a) **Industrialization** (b) Urbanizations (c) Forestation (d) Resource depletion
27. Ozone is protecting the earth from:  
(a) Sunlight (b) Starlight  
(c) Moonlight (d) **Ultra-violet radiations**
28. The adverse conditions of environment which cause harmful effects on the life the earth is called:  
(a) Deforestation (b) Ozone depletion  
(c) Environmental pollution (d) **Environmental degradation**
29. Ultra-violet radiations are released from:  
(a) Planets (b) **Sun** (c) Moon (d) Stars
30. Mechanized farming is done in the countries:  
(a) **Developed and advanced** (b) Third world  
(c) Backward (d) Under- developed
31. Ultra-violet radiations are harmful for:  
(a) Plants (b) Animals (c) **Humans** (d) All of these
32. Ultra-violet radiations cause diseases:  
(a) Cholera (b) AIDS (c) T.B. (d) **Cancer**
33. Cutting and getting destroyed land in called:  
(a) Farming (b) Water-logging (c) **Soil erosion** (d) Deforestation
34. According to experts, on how much area of a country should be forests:  
(a) 20 (b) **25** (c) 10 (d) 15
35. The phenomenon in which temperature affects environment is called:  
(a) **Greenhouse effect** (b) Urbanization (c) Globalization (d) Industrialization
36. Pollution is caused by oxides of:  
(a) Florin (b) **Sulphur** (c) Sodium (d) Hydrogen
37. The depletion of ozone layer happening in the atmosphere due to:  
(a) Less industrialization (b) **Excessive of pesticide**  
(c) Excessive plantation (d) Excessive industrialization
38. Rising of temperature of the earth due to the greenhouse effect is called:  
(a) Environmental pollution (b) Globalization  
(c) **Global warming** (d) Industrialization
39. Ozone is a:  
(a) Liquid (b) Solid (c) Layer (d) **Gas**
40. The presence of excessive mixture different gases in the air creates:  
(a) Weather degradation (b) Environmental changes  
(c) **Global warming** (d) Greenhouse effect
41. The basic cause of environmental degradation are:  
(a) Water pollution (b) **Human activities** (c) Forestation (d) Floods

## Thermal Expansion

1. The device which is used to measure temperature:  
(a) Decimeter (b) Richter scale (c) Galvanometer (d) **Thermometer**
2. The temperature of a substance at which It changes its state from solid to liquid is called:  
(a) Freezing point (b) Spreading point (c) **Melting point** (d) Boiling point
3. The length of metallic objects ----- is heating:  
(a) Moderates (b) Decreases (c) Remains same (d) **Increases**
4. Gaps are left between railway tracks. If it is not done so, it may:  
(a) **Twist** (b) Example (c) Contract (d) Melt
5. The volume of a given mass of gas ----- by heating:  
(a) Remains same (b) Keeps on changing (c) Decreases (d) **Increases**
6. The temperature of a substance at which it changes its state from liquid to gas called:  
(a) Spreading point (b) **Boiling point** (c) Melting point (d) Freezing point
7. The volume of gas, by cooling:  
(a) **Decreases** (b) Increases (c) Keeps on changing (d) Does not change
8. The temperature of a substance at which it reverses its shape from liquid to solid is called:  
(a) Expansion point (b) Boiling point (c) Melting point (d) **Freezing point**
9. When water is cooled down, its volume decreases. This continues up to:  
(a) 2°C (b) -2°C (c) **4°C** (d) -4°C
10. The temperature of the center of the sun is estimated of the sun estimated about:  
(a) 6x 10<sub>3</sub>K (b) 6x 10<sub>3</sub>K (c) **10<sub>2</sub>K** (d) 10<sub>3</sub>K



11. The density and volume of ice is ----- than water:  
(a) Greater (b) Same (c) Lesser (d) Equal
12. It is estimated that the temperature of the outer surface of the sun is:  
(a)  $6 \times 10_3 K$  (b)  $6 \times 10_3 K$  (c)  $10_2 K$  (d)  $10_3 K$
13. The temperature of the inner surface of the sun is ----- than outer surface:  
(a) Greater (b) Same (c) Lesser (d) Equal
14. Ice floats on the surface of water because:  
(a) Its density is lesser than water (b) Its density is equal to water  
(c) Its density is greater than water (d) None of these
15. Total temperature measuring scales are:  
(a) 3 (b) 5 (c) 2 (d) 4
16. The temperature of the outer surface of the earth is ----- than its inner surface:  
(a) Greater (b) Same (c) Lesser (d) Equal
17. The volume of metallic objects increases on:  
(a) Compressing (b) Cooling (c) Expanding (d) Heating
18. Normal human body temperature is:  
(a)  $99^\circ$  (b)  $101^\circ C$  (c)  $98^\circ C$  (d)  $100^\circ C$
19. The melting point of ice is denoted as:  
(a)  $-10^\circ C$  (b)  $-2^\circ C$  (c)  $-1^\circ C$  (d)  $0^\circ C$
20. If temperature of a body is  $40^\circ C$ , then its value in  $^\circ F$  will be:  
(a) 102 (b) 98 (c) 104 (d) 100
21. The thermometer that shows the boiling of water in a pan is:  
(a) Fahrenheit (b) Keeling (c) Celsius (d) None
22. If  $20^\circ C$  temperature is a thing, its value in Kelvin scale be:  
(a) 273 (b) 313K (c) 253K (d) 293K
23. The boiling point of water is denoted as:  
(a)  $150^\circ C$  (b)  $160^\circ C$  (c)  $100^\circ C$  (d)  $110^\circ C$
24. If temperature of a place is  $60^\circ C$ . Find its value in Kelvin:  
(a) 473 (b) 132 (c) 333 (d) 273

## Chemical Change and Chemical Bonds

1. The forces of attraction which hold the atoms together by mutual sharing of electrons is called:  
(a) Chemical bond (b) Ionic bond (c) Covalent bond (d) None of these
2. A pure chemical compound obtained from different sources always has a constant ratio of masses of different elements present in ; this is called:  
(a) Law constant of proportion (b) Law of conservation of mass  
(c) Both of the above (d) None of the above
3. When two or more elements or compounds combine to form only one new compound, the reaction is called:  
(a) Synthesis (b) Chemical change (c) Physical change (d) Chemical equation
4. A permanent change in which substance undergoes change in its shape as well as composition is called:  
(a) Chemical equation (b) Chemical bond (c) Physical change (d) Chemical change
5. A temporary change in which a substance undergoes a change in its shape but not in its composition is called:  
(a) Physical change (b) Chemical bond (c) Chemical Change (d) Chemical equation
6. The conversion of compounds on heating to smaller compounds or elements is called:  
(a) Chemical equation (b) Simple decomposition  
(c) Simple composition (d) Composition
7. A short and comprehensive method to express a chemical reaction is called:  
(a) Synthesis (b) Chemical change  
(c) Chemical equation (d) Chemical bond
8. Matter can neither be created nor destroyed during a chemical reaction but it may change its shape and composition. This is called:  
(a) Law of constant proportion (b) Law of conservation of mass  
(c) None of these (d) Both of these
9. The bond formed by transference of one or more electrons from one atom to another atom is called:  
(a) Covalent bond (b) Ionic bond (c) Chemical bond (d) All of these

10. The changes are of two types:  
(a) Physical (b) Chemical (c) Both a & b (d) None of these
11. The forces of attraction which hold the atoms together in elements compounds is called:  
(a) **Chemical bond** (b) Ionic bond (c) Covalent bond (d) All off these
12. Melting of ice is a:  
(a) **Physical change** (b) Chemical change (c) Permanent change (d) None of the above
13. The conversion of milk into yogurt is a:  
(a) Physical change (b) Temporary change (c) **Chemical change** (d) None of these
14. Burning of candle is a:  
(a) Physical change (b) Temporary change (c) **Chemical change** (d) All of these
15. When elements and compounds combine together, occurs:  
(a) **Chemical reaction** (b) Chemical equation (c) Physical change (d) Chemical change
16. Carbon dioxide is prepared in industrial scale by heating lime stone in:  
(a) Room (b) Furnace (c) Air (d) **Kiln**
17. The number of electrons and protons in an atom is:  
(a) Different (b) Constant (c) Same (d) **Equal**
18. The fundamental particles of atom are number;  
(a) 4 (b) 5 (c) 2 (d) **3**
19. Electrons have charge on them:  
(a) Neutral (b) Positive (c) **Negative** (d) None of these
20. Protons have charge on them:  
(a) Neutral (b) Negative (c) **Positive** (d) None of these
21. The chemical combination of carbon and oxygen produces:  
(a) Carbon (b) Hydrogen (c) **Carbon dioxide** (d) Water
22. Neutrons have charge:  
(a) **Neutral** (b) Positive (c) Negative (d) None of these
23. A chemical equation represents:  
(a) Chemical formula (b) Chemical change (c) **Chemical reaction** (d) Physical change
24. Same charges each other:  
(a) Do nothing (b) Attract (c) **Repulse** (d) None of these
25. When two or more elements or compounds combine to form only a single new compound, this reaction is called:  
(a) **Synthesis or combination** (b) Physical combination (c) Chemical change (d) Chemical equation
26. Opposite charges each other:  
(a) **Attract** (b) Repulse (c) Do nothing (d) All of these
27. Ionic compounds are soluble in:  
(a) **Water** (b) Oil (c) Lubricants (d) Petrol
28. In the process of decomposition, are decomposed:  
(a) Bases (b) Acids (c) Elements (d) **Compounds**
29. Oxygen is prepared in laboratory by the decomposition of:  
(a) **Potassium chlorate** (b) Hydrochloric acid (c) Potassium nitrate (d) Calcium soleplate
30. Ionic compounds in solid form are:  
(a) Good conductors of electricity (b) **Bad conductors of electricity** (c) Semi- conductors of electricity (d) None of these
31. Covalent bonds exist in:  
(a) Gas (b) Solid (c) Liquid (d) **All of these**
32. Pure covalent compounds are:  
(a) Good conductors of electricity (b) **Bad conductors of electricity** (c) Semi- conductors of electricity (d) None of these
33. Covalent compounds have melting points:  
(a) Low (b) High (c) Moderate (d) **Both a & b**
34. Covalent compounds are easily converted into:  
(a) **Vapors** (b) Liquids (c) Gases (d) Solids
35. The certain laws followed by chemical changes are called:  
(a) **Law Chemical combination** (b) Law of conservation of mass (c) Law of constant proportion (d) All of these
36. A chemical change is:



- (a) Boiling of milk (b) Melting of ice (c) Boiling of egg (d) Boiling of water  
 37. The particles of anion with the same mass as an electron and opposite charge are called:  
 (a) Neutrons (b) Positrons (c) Electrons (d) Protons

## Acids – Bases & Salts

- The acids that are obtained from minerals are called;  
 (a) Salty acids (b) **Mineral acids** (c) Chemical acids (d) Natural acids
- The acids that are obtained from animals and plants are called;  
 (a) **Organic acids** (b) Mineral acids (c) Natural acids (d) Salty acids
- Formic acid is found in:  
 (a) Apples (b) **Ants** (c) Vinegar (d) Yogurt
- Lactic acid is found in:  
 (a) Orange (b) **Curd** (c) Citrus fruit (d) Apples
- Tartaric acid is found in:  
 (a) Vinegar (b) Curd (c) Apples (d) **Grapes**
- Acetic acid is found in:  
 (a) **Vinegar** (b) Ants (c) Curd (d) Apples
- Apples are the source of:  
 (a) Formic acid (b) Tartaric acid (c) Lactic acid (d) **Malice acid**
- Oxalic acid is obtained from:  
 (a) Apples (b) Tomatoes (c) Yogurt (d) **Grapes**
- Citrus fruit is the source of:  
 (a) **Citric acid** (b) Acetic acid (c) Tartaric acid (d) Formic acid
- Word 'acid' is derived from:  
 (a) **Latin** (b) Roman (c) English (d) Greek
- The taste of acids is:  
 (a) Harsh (b) Bitter (c) Salty (d) **Sour**
- Acids turn blue litmus:  
 (a) Green (b) Yellow (c) **Red** (d) Orange
- Acid means:  
 (a) Salty (b) Harsh (c) Bitter (d) **Sour**
- The acids are found in:  
 (a) Animals (b) Minerals (c) Plants (d) **All of these**
- Acids turn methyl orange solution:  
 (a) **Red** (b) Black (c) Blue (d) Yellow
- when acids and bases react with each other, they form:  
 (a) Alkali (b) Salt (c) Water (d) **Both b & c**
- Bases turn colorless phenolphthalein:  
 (a) Black (b) Red (c) **Pink** (d) Blue
- The compound which is formed by the neutralization between an acid and a base is called:  
 (a) Element (b) Alkali (c) **Salt** (d) Mixture
- The process in which acids and bases react with each other is called:  
 (a) Hydration (b) Evaporation (c) **Neutralization** (d) Dehydration
- The rust on the surface of metals is cleaned by:  
 (a) **Acids** (b) Bases (c) Alkali (d) All of these
- Some acids are for digestion:  
 (a) Disastrous (b) Harmful (c) **Beneficial** (d) None of these
- HCL is used as  
 (a) Antigenic (b) Antibiotic (c) **Antiseptic** (d) All of these
- Salts are prepared by methods:  
 (a) 4 (b) 2 (c) **3** (d) 5
- Hemoglobin present in blood consists compounds of:  
 (a) Protein (b) Lead (c) Carbon (d) **Iron**
- It is called the "king of chemicals":  
 (a) **Sulfuric acid** (b) Formic acid (c) Acetic acid (d) Nitric acid
- A group of compounds that have sour taste is called:  
 (a) **Acid** (b) Slat (c) Alkali (d) Base
- A compound whose molecule is made up of one or more hydroxyl (OH) group attached to the atom of the metal called:

- (a) Alkali (b) Base (c) Acid (d) Salt
28. Aqueous solution of which has (a) Hard touch (b) Slimy touch (c) Soft touch (d) Soapy touch
29. Salts play role in human body: (a) Insignificant (b) Somewhat (c) Important (d) Miner
30. Salt which are needed of the proper functioning of muscles and nervous system: (a) Calcium (b) Sodium (c) Potassium (d) Both b & c
31. Salts which make bones strong and Prevent heart attack is: (a) Calcium (b) Iodine (c) Sodium (d) Potassium
32. The salt which prevents blood from wounds and coagulates it is: (a) Potassium chloride (b) Potash alum (c) Sodium chloride (d) Potassium nitrate
33. The salts which treat goiter: (a) Iodine (b) Magnesium (c) Calcium (d) Sodium
34. Bases turn red litmus: (a) Black (b) Blue (c) Orange (d) Yellow
35. Bases turn methyl orange: (a) Yellow (b) Pink (c) Red (d) Blue
36. Bases turn turmeric paper: (a) Pink (b) White (c) Red (d) Brown
37. Which salt is used for washing clothes? (a) Potassium nitrate (b) Washing soda (c) Copper soleplate (d) Potash alum
38. The metal which liberates hydrogen by reacting with acids is: (a) Mercury (b) Magnesium (c) Silver (d) Gold
39. Water solutions of acids are normally: (a) Semi-conductor (b) Super conductor (c) Conductor (d) non-conductor
40. Salt that is used for the treatment of goiter disease is: (a) Potassium (b) Sodium (c) Iodine (d) Magnesium
41. Solid's ionic compound behaves at normal temperature as: (a) Semi-conductor (b) Super conductor (c) Conductor (d) Insulator
42. You are eating tomatoes, the acid which you are taking is: (a) Formic acid (b) Oxalic acid (c) Acetic acid (d) Citric acid
43. When calcium carbonate is mixed with sulphuric acid: (a) Reaction starts and continues (b) Reaction starts after sometime (c) Reaction starts and then stops (d) Reaction does not start
44. The chemical used for the preparation of detergents are: (a) Hydrochloric acid, Naphtha, Baking soda (b) Naphtha, Sulphuric acid, Baking soda (c) Naphtha, Sulphuric acid, washing soda (d) Nitric acid, naphtha, Baking soda
45. What is produced in the process of neutralization? (a) O (b) O and H<sub>2</sub>O (c) Salt and water (d) CO<sub>2</sub>

## Liquid Pressure

1. The perpendicular force acting on one unit area of a surface is called: (a) Pascal (b) Weight (c) Pressure (d) Force
2. The unit of pressure is: (a) Pascal (b) watt (c) Ampere (d) Volt
3. If you dipped your finger inside a liquid, the pressure exerted by the liquid on the finger would be: (a) Maximum on upper part (b) Different at all parts (c) Minimum at lower part (d) Same at all parts
4. On a unit area, the pressure is affected by: (a) Slant force (b) Indirect force (c) Perpendicular force (d) Direct force
5. Water flows from: (a) Low to high (b) High to low (c) Both of these (d) None of these
6. Pressure is related with: (a) Force (b) Reaction (c) Direction (d) Weight
7. With depth, the pressure of the liquid: (a) Remains (b) Increases (c) Decreases (d) Keep on changing
8. The pressure of the liquid increases with its: (a) Weight (b) Depth (c) Height (d) Force
9. Pressure of the liquid is normal at the surface of the:



- (a) Liquid (b) Container (c) Place (d) All of these
10. Liquid pressure acts in: (a) Left angle (b) Right angle (c) Scantly (d) Horizontally
11. In state of rest, liquid exerts pressure: (a) Same (b) Different (c) Variable (d) All of these
12. The liquid especially water keeps its: (a) Force (b) Weight (c) Direction (d) Level
13. liquid, in state of rest, exerts pressure in all: (a) Directions (b) Situations (c) Surfaces (d) Conditions
14. A liquid exerts same pressure in all directions in state of: (a) Flow (b) Stagnation (c) Motion (d) Rest
15. In state of rest, the level of every part of the free surface of a liquid is: (a) Same (b) Keep on changing (c) Different (d) Variable
16. Best possible answer to; "current is flow of" (a) Proton (b) Electron (c) Charge (d) Neutron
17. Atoms is one molecule of water ( $H_2O$ ) are in ratio of: (a) 2:1 (b) 4:1 (c) 1:2 (d) 1:4
18. When water boils: (a) Liquid becomes gas (b) Solid becomes liquid (c) Gas becomes solid (d) Liquid becomes solid
19. If the perpendicular force acting on an area of one meter square is, Newton: (a) 2 (b) 4 (c) 1 (d) 3
20. 1 Newton is equal to: (a) 300 grams weight (b) 500 grams weight (c) 100 grams weight (d) 200 grams weight

## Light

1. The center point of the lens is called: (a) Optical center (b) Focal length (c) Principal axis (d) Principle focus
2. Organ for watching things is: (a) Eye (b) Optic (c) Camera (d) Lens
3. The device which is used to obtain image on sensitive film is: (a) Lens (b) Optic (c) Eye (d) Camera
4. The center of sphere of which lens surface is a part: (a) Optical center (b) Center of curvature (c) Principal focus (d) Principal axis
5. A straight-line joining centers of curvatures of lens is called: (a) Principal axis (b) Focal length (c) Principal focus (d) Center of curvature
6. A point where parallel rays meet or appear to come from after refraction through lens is called: (a) Optical center (b) Principal axis (c) Principal focus (d) Center of curvature
7. Distance of principal focus from optical center is: (a) Principal axis (b) Focal length (c) Optical center (d) Principal focus
8. A piece of transparent material bounded by two spherical surfaces is called: (a) Lens (b) Camera (c) Image (d) Eye
9. A lens which thick at the middle and thinner at the edges is called: (a) Circular lens (b) Convex lens (c) Spherical lens (d) Concave lens
10. A lens thin at the middle and thicker at the edges is called: (a) Convex lens (b) Concave lens (c) Spherical lens (d) Circular lens
11. The image that can be obtained on screen is called: (a) Real image (b) Special image (c) Virtual image (d) Ordinary image
12. Image that cannot be obtained on screen is called: (a) Real image (b) Virtual image (c) Special image (d) Ordinary image
13. The complexion of Sadie's elder and younger sisters is less dark. The complexion of Sadie will be: (a) Fair (b) More fair (c) Dark (d) Less dark
14. The height of Acid's whole family is tall and complexion is black. Height and complexion of Acid will be: (a) Tall with dark complexion (b) dark complexion (c) Medium height and dark complexion (d) Short height and dark complexion
15. Can form virtual image:

- (a) Concave lens (b) All lenses (c) Convex lens (d) Contact lens
16. Method to trace image formed by lens is called:  
(a) Eye (b) Camera (c) Ray diagram (d) Focus
17. The image obtained on screen by convex lens is:  
(a) Imaginary (b) Ideal (c) Virtual (d) Real
18. The image formed by a lens can be found very easily through a ray diagram:  
(a) Nature of image (b) Location of image (c) Both a & b (d) None
19. The diaphragm of camera works like:  
(a) Pupil (b) Cornea (c) Retina (d) Iris
20. The center of iris in the eye is pupil and it works like camera's:  
(a) Aperture (b) Lens (c) Diaphragm (d) Sensitive film
21. Both eye and camera have lens:  
(a) Contact (b) Connecting (c) Concave (d) Convex
22. In a dim light, iris:  
(a) Spreads (b) Expands (c) Closes (d) Contracts
23. The hard and thick layer of human eye is:  
(a) Cornea (b) Iris (c) Sclera (d) Pupil
24. If an object is placed between F and 2F in front of a convex lens, the image formed will be:  
(a) Real and small (b) Virtual and large (c) Inverted and large (d) Inverted and small

## Symbols and Formulae

1. The short name of the element is called:  
(a) Radical (b) Valency (c) Formula (d) Symbol
2. The symbols of some elements are taken from their names:  
(a) Roman (b) English (c) Latin (d) Greek
3. Symbolic representation of an element or compound which is the collection of symbols is called:  
(a) Symbolic formula (b) Valency (c) Radical (d) Chemical formula
4. The Latin name of sodium is:  
(a) Argentums (b) Aurum (c) Cuprum (d) Natrium
5. The Latin name of gold is:  
(a) Aurum (b) Natrium (c) Stannum (d) Cuprum
6. A compound is denoted by:  
(a) Valency (b) Composition (c) Chemical formula (d) Symbol
7. Cuprum is the Latin name of:  
(a) Silver (b) Gold (c) Copper (d) Lead
8. The plural of formula is:  
(a) Formulas (b) Formulae (c) Formula (d) All off these
9. Ferrum is the Latin name of:  
(a) Copper (b) Gold (c) Silver (d) Iron
10. An atom or group of atoms which keep its identity during chemical reaction is called:  
(a) Symbol (b) Chemical (c) Radical (d) Valency
11. Stannum is the Latin name of:  
(a) Tin (b) Potassium (c) Magnesium (d) Sodium
12. Kalium is the Latin name of:  
(a) Lead (b) Potassium (c) Iron (d) Mercury
13. The compound which is formed by the chemical combination positive and negative ions is called:  
(a) Chemical compound (b) Radical (c) Ionic compound (d) Valency
14. Plumbum is the other name of:  
(a) Iron (b) Copper (c) Lead (d) Zinc
15. The capacity of an element to chemically combine with the number of hydrogen or chlorine atoms or the number of those electrons which an element uses is called:  
(a) Compound (b) Ion (c) Radical (d) Valency
16. The Latin name of silver is:  
(a) Argentums (b) Stannum (c) Kalium (d) Ferrum
17. Hydrargyrum is the Latin name of:  
(a) Potassium (b) Silver (c) Mercury (d) Lead



18. A radical has a charge:  
(a) Negative (b) Positive (c) Neutral (d) Both a & b
19. Another name of air is:  
(a) **Oxygen** (b) Carbon (c) Hydrogen (d) Calcium
20. Natrium is another name of:  
(a) Potassium (b) Hydrogen (c) **Sodium** (d) Nitrogen
21. The symbol of an element may consists of letters:  
(a) Last (b) First (c) Middle (d) **All of these**
22. The symbol of gold is:  
(a) Ag (b) Mg (c) **An** (d) Ne
23. The symbol of an element represents its:  
(a) Radical (b) Valency (c) Molecule (d) **Atom**
24. Carbon is shown by the symbol:  
(a) H (b) **C** (c) Ca (d) Co
25. The symbol of silver is:  
(a) S (b) Zn (c) Sn (d) **Ag**
26. Na is the symbol of:  
(a) **Sodium** (b) Nickel (c) Nitrogen (d) Neon
27. The symbol of oxygen is:  
(a) N (b) Co (c) P (d) **O**
28. The digit which is usually not written is a chemical formula:  
(a) 2 (b) 4 (c) **1** (d) 3
29. If the number of compound radical is more than one, it is written in:  
(a) **Brackets** (b) Dashes (c) Signs (d) Dots
30. The valency of an atom is its capacity to combine with the number of atoms:  
(a) Chlorine (b) Hydrogen (c) Oxygen (d) **Both a & b**
31. Symbol of cobalt is:  
(a) **Co** (b) Ca (c) C (d) Cl
32. Which one is not related to compound radicals?  
(a)  $\text{Ca}^{2+}$  (b)  **$\text{NO}_3^-$**  (c)  $\text{SO}_4^{2-}$  (d)  $\text{PO}_4^{3-}$
33. Phosphorus is denoted by the symbol:  
(a) Ph (b) S (c) **P** (d) F
34. The chemical formula of water is:  
(a)  **$\text{H}_2\text{O}$**  (b)  $\text{CO}_2$  (c)  $\text{O}_2$  (d) Ca
35. Which one radical carry variable charge:  
(a)  $\text{Mg}_2^+$  (b)  **$\text{Na}^+$**  (c)  $\text{Zn}_2^+$  (d)  $\text{Fe}_3^+$
36. Chemical formula oxygen is:  
(a)  $\text{CO}_3$  (b)  $\text{CO}_2$  (c) **O** (d)  $\text{H}_2$
37. How many element exist naturally in liquid state:  
(a) Six (b) Seven (c) Four (d) **Five**
38. Chemical formula of carbon dioxide is:  
(a) Ca (b) Na (c)  $\text{CO}_3$  (d)  **$\text{CO}_2$**
39. The symbol of cobalt is:  
(a) Ca (b) Cr (c) **Co** (d) Co
40. Chemical formula of sodium chloride:  
(a)  $\text{CO}_2$  (b)  $\text{NO}_3$  (c) **NaCl** (d)  $\text{H}_2\text{O}$
41. Sodium chloride is a & n:  
(a) **Salt** (b) Alkali (c) Base (d) Acid
42. The number of elements present in the compound  $\text{Ca}_3(\text{PO}_4)_2$  are:  
(a) 4 (b) **6** (c) 3 (d) 5
43. The salt we use in our food is;  
(a) Hydrogen carbonate (b) **Sodium chloride**  
(c) Calcium chloride (d) Potassium sulphate
44. Symbol for metallic element commonly used in electric wiring at domestic level is:  
(a) Au (b) Ag (c) Fe (d) **Cu**
45. Chemical formula of calcium chloride is:  
(a)  $\text{H}_2\text{O}$  (b)  $\text{Ca}_3(\text{PO}_4)_2$  (c) NaCl (d)  **$\text{CaCl}_2$**
46. Indicate the group of elements showing variable charges:  
(a) Calcium and potassium (b) **Iron and potassium**

- (c) Aluminum and sodium (d) Copper and Iron
47. The metal which liberates more hydrogen by reacting with acids: [Perfect24u.com](http://www.Perfect24u.com)  
 (a) Silver (b) Gold (c) Mercury (d) Magnesium
48. In a chemical reaction  $\text{CaCO}_3 + \text{H}_2\text{SO}_4$ , the products are:  
 (a)  $\text{H}_2\text{O} + \text{CO}_2 + \text{CaSO}_4$  (b)  $\text{CaCO}_3 + \text{CaSO}_4$  (c)  $\text{CaCO}_3 + \text{CO}_2$  (d)  $\text{H}_2\text{SO}_4 + \text{CO}_2$
49. Mercury is an element which is found in forms:  
 (a) Gas-liquid (b) Solid (c) Liquid (d) Gas

## Carbon & Its Compounds

- The existence of an element in more than one crystalline forms is called;  
 (a) Biochemistry (b) Crystallization (c) Allotropy (d) Catenation
- The ability of carbon to form linkage with other carbon atoms is called:  
 (a) Allotropy (b) Catenation (c) Neutralization (d) Crystallization
- About 80% of all compounds contain:  
 (a) Iron (b) Carbon (c) Protein (d) Calcium
- The crystalline forms of carbon are:  
 (a) 3 (b) 4 (c) 1 (d) 2
- The crystalline carbon is:  
 (a) Graphite (b) Becky ball (c) Diamond (d) All of these
- The most precious and costly carbon is:  
 (a) Coke (b) Lamp black (c) Graphite (d) Diamond
- Diamond is measured in:  
 (a) Carats (b) Kilos (c) Grams (d) None of these
- In its pure form, diamond is:  
 (a) Black (b) Colorless (c) White (d) Blue
- It does not react with:  
 (a) Alkalis (b) Acids (c) Bases (d) Both a & b
- Also used for cutting glass:  
 (a) Coal (b) Coke (c) Diamond (d) Graphite
- Diamond is of ----- heat and electricity:  
 (a) Good conductor (b) Semi-conductor (c) Bad conductor (d) None of these
- It is slippery to touch:  
 (a) Diamond (b) Graphite (c) Becky balls (d) Coke
- By the dehydration of sugar with concentrated sulphuric acid is obtained:  
 (a) Sugar charcoal (b) Wood charcoal (c) Animals (d) Graphite
- Graphite is a ----- of electricity:  
 (a) Bad conductor (b) Good conductor (c) Semi-conductor (d) All of these
- Graphite is used in:  
 (a) Lead pencil (b) Nib of ball point (c) Ink (d) All of these
- When burning kerosene or oil or vegetable oil in limited supply of air, the soot is called:  
 (a) Coal (b) Lamp black (c) Coke (d) Charcoal
- In atomic reactors, graphite rods are used to reduce the speed of:  
 (a) Neutrons (b) Protons (c) Electrons (d) All of these
- It is estimated that a man exhales carbon dioxide gas in a day:  
 (a)  $40 \text{ dm}^3$  (b)  $100 \text{ dm}^3$  (c)  $40 \text{ dm}^3$  (d)  $60 \text{ dm}^3$
- The non-crystalline forms of carbon are:  
 (a) 2 (b) 4 (c) 1 (d) 3
- It is the non-crystalline form of carbon:  
 (a) Charcoal (b) Coal (c) Coke (d) All the above
- Carbon dioxide acts on fire:  
 (a) Does nothing (b) Inflames (c) Extinguishes (d) All of these
- Formula of carbon dioxide is:  
 (a)  $\text{CO}_2$  (b)  $\text{CO}_3$  (c)  $\text{CO}_4$  (d) CO
- Coal had been formed by decaying ----- under the surface of the earth because of high pressure and temperature:  
 (a) Fossils (b) Minerals (c) Plants (d) Animals
- The color of carbon dioxide is:  
 (a) Colorless (b) Thick green (c) Light yellow (d) Sky blue



5. The fraction of crude oil is used for:
  - (a) Soda
  - (b) Salts
  - (c) Soaps
  - (d) Powders
6. These can remove more sticky stains than soaps:
  - (a) Soda
  - (b) Soap
  - (c) Potash
  - (d) Naphtha
7. ----- agents are added to the detergents for protecting the washing machines from rusting:
  - (a) Bleaches
  - (b) Powders
  - (c) Soda
  - (d) Detergents
8. ----- agents are added to the detergents for protecting the washing machines from rusting:
  - (a) Metallic
  - (b) Anti-stains
  - (c) Bleaching
  - (d) Anti-rusting
9. To promote the growth of plants, are used:
  - (a) Salts
  - (b) Fertilizers
  - (c) Chemicals
  - (d) Minerals
10. Carbon is obtained from ----- by the plant.
  - (a) Hydrogen
  - (b) Soil
  - (c) Carbon dioxide
  - (d) Water
11. Urea is a fertilizer:
  - (a) Nitrogenous
  - (b) Phosphorous
  - (c) Both of these
  - (d) None of these
12. In manufacturing urea, are used:
  - (a) Methane of the natural gas
  - (b) Nitrogen of the air
  - (c) Both a & b
  - (d) None of these
13. The fertilizer which helps in greatest production:
  - (a) Calcium soleplate
  - (b) Phosphorus
  - (c) Ammonium nitrate
  - (d) Hydrogen
14. Hydrogen is obtained by the plant from:
  - (a) Water
  - (b) Sunlight
  - (c) Soil
  - (d) Air
15. Cement is made by the mixture of:
  - (a) Gypsum
  - (b) Clay
  - (c) Lime stone
  - (d) All of these
16. Nitrogen is needed by the plants for making:
  - (a) Chlorophyll
  - (b) Minerals
  - (c) Carbohydrates
  - (d) Proteins
17. Nitrogen helps the plant for the development of:
  - (a) Branches
  - (b) Leaves
  - (c) Stem
  - (d) Both b & c
18. What element plants get naturally for their growth:
  - (a) Hydrogen
  - (b) Carbon dioxide
  - (c) Oxygen
  - (d) All of these
19. In the manufacturing of caustic soda, washing soda, baking soda and choirs gas, is used:
  - (a) Compounds
  - (b) Bases
  - (c) Common salt
  - (d) Common acid
20. You are visiting a soap factory, the most probable base which may be present in will be:
  - (a) Lime water
  - (b) Aluminum hydroxide
  - (c) Calcium hydroxide
  - (d) Sodium hydroxide
21. Phosphorus helps the plants in:
  - (a) Production of seeds
  - (b) Rapid growth
  - (c) Production of fruits
  - (d) All of these
22. Potassium help the plants in:
  - (a) Protecting from diseases
  - (b) Development of fibers
  - (c) Controlling the rate of photosynthesis
  - (d) All of these
23. Fertilizers are manufactured by using common raw materials like:
  - (a) Air
  - (b) Natural gas
  - (c) Nitrogen
  - (d) Both a & b
24. The suitable area for the installation of cement industry is:
  - (a) Plain
  - (b) Rock
  - (c) Coast
  - (d) Desert
25. The compounds necessary for the preparation of soap:
  - (a) Vegetable
  - (b) Sodium hydroxide
  - (c) Fats
  - (d) Both a & b
26. The compounds necessary for the manufacturing of detergents:
  - (a) Sulfuric acid
  - (b) Naphtha
  - (c) Washing soda
  - (d) All of these

## Electricity & Magnetism

1. Every consumed by one coulomb charge is called:
  - (a) Potential difference
  - (b) Electric power
  - (c) Volt
  - (d) Kilowatt- hour
2. S.I. unit for potential difference is:
  - (a) Watt
  - (b) Ohm
  - (c) Volt
  - (d) Ampere
3. The instrument which is used to detect electric current is:
  - (a) Thermometer
  - (b) Kilometer
  - (c) Galvanometer
  - (d) Lactometer
4. The production of electricity through flowing water is called:
  - (a) Hydal power
  - (b) Nuclear power
  - (c) Thermal power
  - (d) Wind power
5. S.I. unit for electric energy is:

25. It is prepared by heating coal in absence of air:  
(a) Lamp black (b) Nores (c) Noir com (d) **Coke**
26. It is obtained by heating wood and other organic compounds at high temperature in absence of air:  
(a) **Charcoal** (b) Lamp black (c) Coal (d) Coke
27. Carbon dioxide is:  
(a) Light than air (b) Heavier than water (c) **Heavier than air** (d) None of these
28. Humans and animals ----- carbon dioxide gas:  
(a) Inhale (b) **Exhale** (c) Both of these (d) None
29. It is obtained by heating wood in a limiter supply of air:  
(a) **Wood charcoal** (b) Animal charcoal (c) Coal (d) Sugar charcoal
30. Plants ----- carbon dioxide gas:  
(a) Inhale (b) **Exhale** (c) Both of these (d) None
31. When bones are heated in absence of air, the residue is called:  
(a) **Animal charcoal** (b) Ash of bones (c) Wood charcoal (d) Sugar charcoal
32. Plants produce food due to:  
(a) **Carbon dioxide** (b) Chlorine (c) Hydrogen (d) Carbon
33. For the preservation of fruits, these a stored in an atmosphere enriched with:  
(a) Carbon (b) **Carbon dioxide** (c) Oxygen (d) Hydrogen
34. As an artificial respiration, gas is used:  
(a) Carbon dioxide (b) Nitrogen (c) Carbonate (d) **Cryogen**
35. When we pass carbon dioxide through lime water, milky ness appears due to formation of:  
(a) Sodium carbonate (b) **Calcium carbonate**  
(c) Sodium hydroxide (d) Magnesium carbonate
36. Which one is the example of crystalline form of carbon?  
(a) **Graphite** (b) Charcoal (c) Cell (d) Coal
37. Candle flam has parts:  
(a) 3 (b) 5 (c) 2 (d) **4**
38. Outer most part of the candle flame is:  
(a) Luminous zone (b) **Non-luminous zone** (c) Dark zone (d) Blue zone
39. The bottom party of the candle flame is:  
(a) Non- luminous zone (b) **Blue zone**  
(c) Dark zone (d) Luminous zone
40. No combustion occurs in the zone:  
(a) Non-luminous zone (b) **Dark zone**  
(c) Blue zone (d) Luminous zone
41. Complete combustion occurs in:  
(a) Luminous zone (b) Dark zone  
(c) **Blue zone** (d) Non-luminous zone
42. Branch of chemistry which deals with carbon compounds is called:  
(a) Bio-chemistry (b) Physical chemistry  
(c) **Organic chemistry** (d) Inorganic chemistry
43. Which is called the king of chemicals?  
(a) **H<sub>2</sub>SO<sub>4</sub>** (b) CH<sub>3</sub>COOH (c) HCL (d) NHO<sub>3</sub>
44. Which is the gas used for making corroborated beverages:  
(a) **CO<sub>2</sub>** (b) O<sub>2</sub> (c) H<sub>2</sub>S (d) H<sub>2</sub>-
45. When two hydrogen atoms and one oxygen atom combines chemically, they form:  
(a) Ion (b) Mixture (c) **Element** (d) Compound

## Manufacture of Useful Products from Common Raw Materials

1. How many processes are commonly adopted to convert raw materials into useful products?  
(a) **3** (b) 2 (c) 4 (d) 1
2. About 90% of organic chemicals used as raw material are obtained from:  
(a) Minerals (b) Natural Gas (c) Metals (d) **Petroleum**
3. The computer revolution is based on the element:  
(a) **Silicon** (b) Nickel (c) Aluminum (d) Copper
4. Sodium hydroxide with vegetable oil makes:



- (a) Watt (b) Volt (c) Amphere (d) Kilowatt-hour
6. Production of electricity through hydro power is called:  
(a) Solar power (b) Hydal power (c) Wind power (d) Nuclear power
7. Production of electricity by using kinetic energy of wind is called:  
(a) Hydal power (b) Thermal power (c) Solar power (d) Wind power
8. Negative terminal of battery is at potential:  
(a) Lower (b) Weak (c) Higher (d) Bottom
9. If a body is lifted to a higher position, and then allowed to fall freely, it comes back to its:  
(a) Lower position (b) New position (c) Higher position (d) Normal position
10. Energy consumed in one second is called:  
(a) Kinetic power (b) Solar power (c) Wind power (d) Electric power
11. Heat flows from a body at a higher temperature to a body at:  
(a) Normal temperature (b) Lower temperature (c) Higher temperature (d) Average temperature
12. Water always flows from higher level to:  
(a) Lower level (b) Bottom (c) Higher level (d) Straight
13. Water always keeps its:  
(a) Level (b) Pressure (c) Position (d) Weight
14. Production of energy by nuclear fission is called:  
(a) Nuclear power (b) Thermal power (c) Wind power (d) Solar power
15. Generation of current due to relative motion between magnet and coil called:  
(a) Electromagnetic induction (b) Electric induction (c) Induction (d) Magnetic induction
16. As much as is the potential difference across a conductor, the current through the conductor will be:  
(a) Lower (b) Weaker (c) Greater (d) Slower
17. Current can flow through:  
(a) Repulse (b) Conductor (c) Resistor (d) All of these
18. Potential difference pushes in a conductor:  
(a) Electrons (b) Protons (c) Neutrons (d) None of these
19. Positive terminal of battery is at potential:  
(a) Higher (b) Moderate (c) Lower (d) Bottom
20. The carbon rod at the center of the cell acts as a:  
(a) Positive-negative electrode (b) Positive electrodes (c) Negative electrode (d) Neutral electrode
21. A cell changes chemical energy into:  
(a) Nuclear energy (b) Electrical energy (c) Solar energy (d) Wind energy
22. The zinc container of the cell acts as a:  
(a) Negative electrode (b) Positive-negative electrode (c) Positive electrode (d) Neutral electrode
23. A mixture of manganese dioxide and carbon powder is packed around the carbon electrode why?  
(a) To keep cell dry (b) To keep cell long working (c) To keep cell moist (d) Both b & c
24. Wind power is possible only in:  
(a) Plain areas (b) Mountainous areas (c) Coal areas (d) Coastal areas
25. The fuel used in a nuclear power plant is:  
(a) Uranium and plutonium (b) Water and wind (c) Oil and gas (d) Coal and gas
26. Voltage of a dry cell is:  
(a) 1.5 volts (b) 12 volts (c) 2 volt (d) 10 volts
27. The electricity we use in our homes comes from:  
(a) Solar rays (b) Coal mines (c) Power plant (d) Nuclear station
28. Galvanometer is used for:  
(a) Producing current (b) Controlling current (c) Protecting current (d) Detecting current
29. Hydal power energy is:  
(a) Difficult (b) Easy (c) Costly (d) Cheap
30. A magnet has in it:  
(a) Power (b) Force (c) Current (d) Heat
31. Hydal power is preferable to thermal power because:  
(a) It produces no pollution (b) It is easy to be provided

- (c) It is costly (d) It pollutes environment
32. Electric charge on protons is: (a) 0 (b) +1 (c) -1 (d) +2
33. Potential difference is measured by: (a) Volt (b) Joule (c) Ampere (d) Watt
34. The largest hydal power plant is: (a) Wassak (b) Ghazi Brotha (c) Mangla (d) Tarbela
35. Thermal energy is ----- than to hydal power: (a) Equal (b) Preferable (c) Cheaper (d) Costly
36. For producing wind power, are used: (a) Steam (b) Generators (c) Windmills (d) Fuels
37. For producing wind energy, is essential: (a) Generator (b) Air/wind (c) Windmill (d) Turbine
38. Wind-mills work at least wind speed: (a) 20 km/h (b) 15 km/h (c) 10 km/h (d) 50 km/h
39. It is also important for wind power generation: (a) Windmill (b) Height of windmill (c) Generator (d) Turbine
40. Galvanometer detects current when the magnet is: (a) Moving in the coil (b) Bellow near the coil (c) Far away from the coil (d) High above the coil
41. An oven uses 1.5 kilo watt-hour energy in one hour. Its power consumption in circuit will be: (a) Decreased (b) Become zero (c) Increased (d) Remained same

## Rocks & Minerals

1. The solid materials making the crust of the earth are called: (a) Minerals (b) Metals (c) Fossils (d) Rocks
2. The natural materials found on the earth are called: (a) Fossils (b) Compounds (c) Metals (d) Minerals
3. The remains or sings of dead animals or plants of ancient times present in some rocks are called: (a) Structures (b) Metals (c) Fossils (d) Minerals
4. Fossils are not found in rocks: (a) Volcanic (b) Metamorphic (c) Sedimentary (d) Igneous
5. The process in which rocks are broken is called: (a) Climatic (b) Breakage (c) Seasoning (d) Wreathing
6. Coal, Gypsum, Rock salt and Gravel are types of rocks: (a) Metamorphic (b) Volcanic (c) Sedimentary (d) Igneous
7. The rocks which formed by the cooling of magma or lava are called: (a) Mineral rocks (b) Metamorphic rocks (c) Igneous rocks (d) Sedimentary rocks
8. Rocks formed by deposition of sediments layer upon are known as: (a) Metamorphic rocks (b) Mineral rocks (c) Igneous rocks (d) Sedimentary rocks
9. Such rocks take centuries for formation: (a) Volcanic (b) Metamorphic (c) Igneous (d) Sedimentary
10. Fossils are present in rocks: (a) Volcanic (b) Metamorphic (c) Igneous (d) Sedimentary
11. "Metamorphic" is a word of: (a) Roman (b) English (c) Latin (d) Greek
12. "Metamorphic" means: (a) Hot rock (b) Very hard (c) Changing form (d) Volcano
13. Rocks are of types: (a) 4 (b) 5 (c) 2 (d) 3
14. Rocks formed between the earth due to extreme pressure and temperature: (a) Metamorphic rocks (b) Mineral rocks (c) Igneous rocks (d) Sedimentary rocks
15. Graphite, Quartzite Marble and Slate are types of rocks: (a) Volcanic (b) Igneous (c) Sedimentary (d) Metamorphic
16. "Ignis" is a word derived from the language: (a) English (b) Latin (c) Greek (d) French
17. "Ignis" mens: (a) Volcano (b) Poison (c) Fire (d) Lava



18. Most of the rocks found on earth are:  
(a) Volcanic rocks (b) Sedimentary rocks (c) Metamorphic rocks (d) **Igneous rocks**
19. Basalt and granite are the types of rocks:  
(a) Sedimentary (b) Metamorphic (c) **Igneous** (d) Volcanic
20. It is estimated that the age of our earth is about:  
(a) **4.6 billion years** (b) 4.5 billion year (c) 2 billion 50 million years (d) 3.5 million years
21. Geology is the branch of science in which studied:  
(a) **Evolution and age of earth** (b) Rock on earth (c) Changes on earth (d) Knowledge of earth
22. Paleontology is the branch of geology in which studied:  
(a) Earth (b) Oceans (c) Rocks (d) **Fossils**
23. A person who studies fossils is called:  
(a) Specialist (b) Archeologist (c) **Paleontologist** (d) Psychotherapist
24. Chemical name of natural halite is:  
(a) **Rock salt** (b) Sculpture (c) Gypsum (d) Chalk
25. The age of the most ancient fossils of the world is:  
(a) 5.4 billion years (b) 5.5 billion years (c) **3.3 billion years** (d) 2.25 billion years
26. The salt we use in our food is called:  
(a) **Sodium chloride** (b) Sodium oxide (c) Sodium hydroxide (d) Sodium bicarbonate
27. Dinosaur were present on earth years ago:  
(a) **2.25 billion** (b) 3.6 billion (c) 3.2 billion (d) 2.2 billion
28. "Gypsum" is a word from the language:  
(a) Greek (b) French (c) Latin (d) **English**
29. Dinosaur remained alive for about:  
(a) 1.8 billion years (b) 2 billion years (c) 1.5 billion years (d) **1.6 billion years**
30. "Gypsum" means:  
(a) Rock (b) Compound (c) Salt (d) **Chalk**
31. Sculpture is used in the preparation of:  
(a) Nitric acid (b) Formic acid (c) **Sculpture acid** (d) Hydrochloric acid
32. Man appeared on earth years ago:  
(a) 4 million (b) 6 million (c) **2 million** (d) 3 million
33. According to the geologists, the age of the most ancient rock present on earth is about:  
(a) 4 billion 500 million years (b) 4 billion years (c) **3 billion 500 million years** (d) 3 billion 600 million years
34. Nuclear energy is obtained from the fission of:  
(a) **Uranium** (b) Hellum (c) Aluminum (d) Barium
35. Uranium is used in making:  
(a) Aluminum plates (b) Crude oil refinery (c) **Atom bomb** (d) Carbon particles
36. Gemstones are used for:  
(a) Cutting glass (b) Cutting iron (c) **Decoration** (d) Medicines
37. Chromate is an ore of:  
(a) Chromium (b) Copper (c) Gypsum (d) **Iron**
38. The example of sedimentary rocks is:  
(a) **Gypsum** (b) Marble (c) Clay (d) Basalt
39. Marble and Quartzite are the example of rocks:  
(a) **Metamorphic** (b) Sedimentary (c) Igneous and sedimentary (d) Igneous
40. Hematite is a famous are of:  
(a) Chromium (b) Gypsum (c) **Iron** (d) Copper
41. Iron is used to make:  
(a) Nickel plates (b) Aluminum plates (c) **Steel** (d) Alloys
42. Copper is used in:  
(a) Steel making (b) Aluminum plates (c) **Electrical appliances** (d) Electronic

## Structure of Living Things

Choose the correct answers:

1. Plants and animals are made up of:

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- (a) Black Hole (b) Galaxy (c) Nebula (d) Constellation
8. Comets revolve around the: (a) Sun (b) Star (c) Earth (d) Moon
9. Families of stars in nebula is called: (a) Galaxy (b) Black Hole (c) Comet (d) Constellation
10. In the beginning of the universe, a tremendous explosion due to which whole condensed matter scattered far away in space was: (a) Big bang (b) Red giant (c) Supernova (d) Black hole
11. Such a galaxy containing our solar system is known as: (a) Supernova (b) Big Bang (c) Milky way (d) Nebula
12. Innumerable piece of rocks revolving around the sun in a belt between Mars and Jupiter are: (a) Asteroids (b) Meteoroids (c) Red wharfs (d) Comets
13. The bodies in space which can shield the sunlight on earth and may cause the end of life on earth are: (a) Black hole (b) Asteroids (c) Comets (d) Meteoroids
14. Shining objects of gases in nebula which have their own light are: (a) Stars (b) Comets (c) Meteoroids (d) Asteroids
15. Shining objects of gases which emit no light of their own are called: (a) Meteoroids (b) Stars (c) Asteroids (d) Planets
16. Cluster of stars is called: (a) Nebula (b) Meteoroid (c) Galaxy (d) Constellation
17. In the universe, in term of size, how many time smaller and bigger starts than the sun are found? (a) 300 times smaller to 1100 times bigger (b) 450 times smaller to 1000 time bigger (c) 400 times smaller to 900 times bigger (d) 350 times smaller to 1200 times bigger
18. A star whose core contains neutrons only (a) White Dwarf (b) Supernova (c) Neutron star (d) Red Giant
19. An astronomical object of immense density and gravity is called: (a) Black Hole (b) Galaxy (c) Supernova (d) Star
20. Fragments of rocks revolving around the sun between Mars and Jupiter are called: (a) Comets (b) Meteoroids (c) Neutron Stars (d) Asteroids
21. Nebula means: (a) Clouds (b) Univar's (c) Sky (d) Galaxy
22. A ball consisting of rocks, ice, dust and gases revolving around the sun in an elliptical orbit is called: (a) Meteorit (b) Comet (c) Meteoroid (d) Asteroid
23. The galaxy of our earth is called: (a) Black Hole (b) Nebula (c) Supernova (d) Milky way
24. Light year is a distance covered by light in: (a) 20 years (b) 100 years (c) One year (d) 10 years
25. Maximum temperature of stars is: (a) 50,000°C (b) 100,000°C (c) 30,000°C (d) 40,000°C
26. Rocks or fragments of rocks and Iron traveling in space are called: (a) Meteoroids (b) Asteroid (c) Comets (d) Meteorit
27. Fragments of rocks which strike the surface of the earth are called: (a) Comets (b) Meteorites (c) Asteroids (d) Meteoroids
28. Our earth in the universe is like a: (a) Sun (b) Prominent body (c) Moon (d) Particle
29. Air, soil, stars, planets and all other objects present in space are called: (a) Big Bang (b) World (c) Universe (d) Solar System
30. The minimum of stars' temperature is: (a) 10,000°C (b) 6000°C (c) 3000°C (d) 15000°C
31. Leo, Ursa Major, Great Bear, Orion and Mighty Hunter are the names of: (a) Galaxies (b) Constellations (c) Stars (d) Planets
32. Diameter of Milky way is: (a) 600,000 Light years (b) 10,00,000 Light years (c) 100,000 Light years (d) 50,000 Light years
33. The theory which states that the universe came into being as a result of a tremendous explosion is called: (a) Big Bang Theory (b) Universal Theory (c) Theory of mass conservation (d) Theory of constant proportion
34. Andromeda is the name of a:



- (a) Organisms (b) Cytoplasm (c) Nucleus (d) Cells
2. The Jelly-like substance which is present in the cell is called: (a) Plasma (b) Cytoplasm (c) Chloroplast (d) Nucleoplasm
3. Lungs and hearts are present in ----- organisms such as frogs and rabbits. (a) Multicellular (b) Non-living (c) Unicellular (d) Living
4. Amoeba and bacteria are both single celled: (a) Plants (b) Reptiles (c) Animals (d) Insects
5. Amoeba is different from other unicellular organisms because it is: (a) Shoe shaped (b) Irregular shaped (c) Regular shaped (d) Oval shaped
6. Vacuole in unicellular organisms, stores the food material and removes the ---- material. (a) Useful (b) Food (c) Organic (d) Waste
7. Which is the controlling center of the cell? (a) Nucleus (b) Cytoplasm (c) Cell membrane (d) Nucleolus
8. ----- plays an important role in cell division. (a) Vacuole (b) Cell wall (c) Cell (d) Nucleus
9. In plants, the cell membrane is surrounded by a thick: (a) Cell cover (b) Body (c) Cell wall (d) Membrane
10. Chloroplasts are absent in -----cells. (a) Blood (b) Body (c) Animal (d) Plant
11. A cell consists of ----- main parts. (a) Three (b) Five (c) Two (d) Four
12. Unicellular organisms are formed by only ----- cell(s). (a) Ten (b) Five (c) One (d) Two
13. The cell is a unit which is present in al ----- organisms. (a) Kind of (b) Unicellular (c) Non-living (d) Living
14. The thin layer which encloses the nucleus is: (a) Nuclear membrane (b) Cell wall (c) Cell membrane (d) Membrane
15. The exchange of gases (oxygen and carbon dioxide) is possible through: (a) Circulatory system (b) Respiratory system (c) Digestive system (d) Environment
16. The heart ----- blood to all parts of our body. (a) Flows (b) Pumps (c) Takes (d) Provide
17. The outermost boundary of plant cells is: (a) Cell wall (b) Nuclear membrane (c) Solid wall (d) Cell membrane
18. The ----- produced in body is used by us to work, to move and to grow. (a) Energy (b) Oxygen (c) Food (d) Power
19. What is the correct sequence? (a) Zygote-Embryo- Sperm-Egg (b) Embryo-Zygote- Egg-Sperm (c) Sperm-Egg-Zygote- Embryo (d) Sperm-Zygote- Egg-Embryo
20. The thin layer which encloses the nucleus is called: (a) Nucleus membrane (b) None of these (c) Cell membrane (d) Vacuole

## Galaxies & Stars

1. Movement of earth in its orbit caused: (a) Days and night (b) Seasons (c) Stars (d) Moon phases
2. The field of gases and dust around the nucleus of the comet is called: (a) Black hole (b) Nebula (c) Core (d) Coma
3. Temperature of the outer surface of the sun is: (a) 6000°C (b) 3000°C (c) 15000°C (d) 12000°C
4. When the core of a super-giant suddenly collapses, it creates a huge explosion light than all other stars of the galaxy. This huge explosion is called: (a) Black Hole (b) Supernova (c) Red Dwarf (d) Black Dwarf
5. A tremendous explosion on the beginning of the universe is known as; (a) Black Hole (b) Supernova (c) Nebula (d) Big Bang
6. In how many seconds light reaches from the sun to the earth? (a) 400 (b) 300 (c) 600 (d) 500
7. Gigantic clouds of dust and gases in space is called:

- (a) Planet (b) Star (c) Constellation (d) Galaxy
35. Deneb is the name of a star. (a) White Dwarf (b) Black Dwarf (c) Red Giant (d) Blue Giant
36. Bernard Star is a: (a) Blue Giant (b) Red Giant (c) Black Dwarf (d) White Dwarf
37. The universe had come into being years ago: (a) 25 billion (b) 30 billion (c) 15 billion (d) 20 billion
38. Nebula is a word of the language: (a) Roman (b) German (c) Latin (d) Greek
39. A star whose temperature is greater than  $15000^{\circ}\text{C}$  is called: (a) Yellow Star (b) White Dwarf (c) Blue Giant (d) Red Giant
40. A star whose temperature is less than  $15000^{\circ}\text{C}$  is called: (a) Red Giant (b) White Dwarf (c) Blue Giant (d) Black Dwarf
41. The core of neutron star contains only: (a) Positrons (b) Electrons (c) Protons (d) Neutrons
42. Diameter of a neutron star is usually: (a) 500 Kilometer (b) 1000 Kilometer (c) 10 Kilometer (d) 100 Kilometer
43. The width of the belt of an asteroid is: (a) 20,00,000 Kilometers (b) 25,00,000 Kilometers (c) 10,00,000 Kilometers (d) 1500,000 Kilometers
44. The biggest meteoroid fallen in 1920 in: (a) Kenya (b) Namibia (c) USA (d) UK
45. Ceres is the biggest asteroid of the world, Its diameter is: (a) 5000 Kilometers (b) 6000 Kilometers (c) 1000 Kilometers (d) 3000 Kilometers

## Reproduction

Pick the correct answer:

1. In flowers, the main purpose of the ----- is to protect the inner parts. (a) Stamens (b) Sepals (c) Petals (d) Ovary
2. During pollination, the ----- of a flower receives pollen grains. (a) Carpel (b) Style (c) Stigma (d) Ovary
3. New plants develop from runners when roots and ----- form at joints. (a) Stem (b) Branches (c) Leaves (d) Shoots
4. Which one of the following is not a process involved in asexual reproduction of plants: (a) Grafting (b) Cutting (c) Budding (d) Fertilization
5. Select from the following that reproduce both sexually and asexually: (a) Amoeba (b) Bacteria (c) Frog (d) Hydra
6. In animals, fertilization of an egg takes place in the: (a) Ovary (b) Oviduct (c) Testes (d) Tubule
7. Which one of the following is the correct sequence: (a) Embryo-Zygote-Sex cells-Baby (b) Sex cells-Zygote-Embryo-Baby (c) Zygote-Embryo-Sex cells-Baby (d) None of these
8. ----- is the process by which all organisms produce next generation members of their own kind. (a) Reproduction (b) Transmission (c) Development (d) Growth
9. When organisms reproduce by ----- methods, sex cells are not involved in the reproductive process. (a) Reproduction (b) Bisexual (c) Asexual (d) Sexual
10. Suppose you read that a particular plant can form gametes. Which one of the following must be true: (a) The plant has several ovules (b) The plant is self-pollinating (c) The plant can produce nectar (d) The plant can reproduce sexually
11. A fertilized egg divides and re-divides to form the: (a) Baby (b) Zygote (c) Embryo (d) Gamete
12. When a seed germinates, the ----- emerges first and this grows into the stem of the new plant. (a) Radicle (b) Plumule (c) Root (d) Leaf
13. The three primary conditions for the germination of a seed are a supply of water, the presence of ----- and a suitable temperature. (a) Hydrogen (b) Carbon (c) Nitrogen (d) Oxygen
14. The transfer of pollen grains from the anther to the stigma of the flower is called (a) Pollination (b) Germination (c) Fertilization (d) Reproduction



15. Fruit is sometimes defined as a:  
 (a) Ripened ovary (b) None of these (c) Ripened ovule (d) Ripened flower
16. When the pollen grains of a flower are transferred to the stigma of the same flower, it is called:  
 (a) Self-pollination (b) Germination (c) Pollination (d) Cross-pollination
17. During respiration and growth, ----- reactions take place.  
 (a) Reverse (b) Slow (c) Physical (d) Chemical
18. Asexual reproduction in plants is also known as ----- reproduction.  
 (a) Sexual (b) Bisexual (c) Rapid (d) Vegetative
19. The insoluble substance contained in a seed is called:  
 (a) Starch (b) None of these (c) Membrane (d) Pollen
20. To mature the human embryo takes:  
 (a) Four months (b) Nine months (c) Six months (d) One year
21. Sperm and egg cells fuse to form a -----.  
 (a) Zygote (b) Baby (c) Embryo (d) Individual
22. The sperms and eggs are together given the name of:  
 (a) Pollen (b) Gamete (c) Cell (d) Granule
23. The fusion of male and female cells is known as:  
 (a) Reproduction (b) Combination (c) Fertilization (d) Pollination
24. A flower is the ----- organ of plants.  
 (a) Vegetative (b) Central (c) Reproductive (d) Sex
25. Each stamen consists of a filament and a/an:  
 (a) Stalk (b) Anther (c) Stigma (d) Carpel
26. The sepals and petals are regarded as ----- parts of a flower.  
 (a) Important (b) Non-essential (c) Necessary (d) Essential
27. The ----- grows up to form the fruit.  
 (a) Flower (b) Carpel (c) Ovary (d) Ovule

## Matter

Choose the correct word which best completes each statement:

1. All things which occupy space and have weight are called:  
 (a) Substances (b) None of these (c) Matter (d) Compounds
2. Matter is made up of:  
 (a) Vapours (b) Particles (c) Crystals (d) Drops
3. The ----- energy of the particles of solids is not great enough.  
 (a) Magnetic (b) Kinetic (c) Potential (d) Electric
4. In gases, the binding force between particles is:  
 (a) Strong (b) Weak (c) Negligible (d) None of these
5. The smallest particle of water retains its properties is called ----- a of water.  
 (a) Atom (b) Drop (c) Compound (d) Molecule
6. A molecule of a compound is formed of two or more than two:  
 (a) Particles (b) Grains (c) Atoms (d) Parts
7. The smallest indivisible particle of matter is called:  
 (a) Drop (b) Nucleus (c) Atom (d) Molecule
8. The chemical change of rust is -----  
 (a) Iron hydride (b) Iron sulphide (c) Iron chloride (d) Iron oxide
9. Helium gas has:  
 (a) Three protons (b) Four protons (c) One proton (d) Two protons
10. On heating, the kinetic energy of molecules:  
 (a) Remains constant (b) May increase or decrease (c) Increases (d) Decreases
11. Atoms are made up of protons, neutrons and:  
 (a) Isotopes (b) Particles (c) Positrons (d) Electrons
12. The sum of protons and neutrons in the nucleus of an atom is called its:  
 (a) Atomic mass (b) Atomic number (c) Molecular mass (d) Molecular weight
13. Three of the following substances are alike in an important way. Select the one that is different.  
 (a) Common Salt (b) Air (c) Water (d) Sugar
14. The number of protons in an atom is called its:  
 (a) Molecular mass (b) Molecular number (c) Atomic number (d) Atomic mass
15. Atomic number of Helium is:

- (a) 3 (b) 4 (c) 1 (d) 2
16. Atomic number of Nitrogen is  
(a) 2 (b) 0 (c) 1 (d) 3
17. Water is being heated from 30°C to 60°C. During this process, the average kinetic energy of the molecules of water:  
(a) Varies (b) **Is increasing** (c) Is constant (d) Is decreasing
18. Steam is being cooled into water. The inter-molecular attractions between the molecules of the water:  
(a) Are equal to those in steam (b) May be higher or lower than those in steam  
(c) **Are higher than those in steam** (d) Are lower than those in steam
19. The change in which new substances are formed is called a:  
(a) **Chemical change** (b) New change (c) Physical change (d) Permanent change
20. In a molecule, the atoms of elements are always present in a ----- proportion.  
(a) Indefinite (b) Equal (c) **Definite** (d) Proper
21. The atoms of elements combined in fixed a proportion is a:  
(a) **Compound** (b) Solution (c) Mixture (d) None of these
22. The formation of ice-cream involves:  
(a) Chemical change (b) Physical change (c) **Both A and B** (d) None of these
23. Burning is a ----- process, during burning new substances are formed.  
(a) Slow (b) Physical (c) Permanent (d) **Chemical**
24. The space around the nucleus is called the ----- nuclear space of the atom.  
(a) **Extra** (b) Excess (c) Super (d) Magnetic
25. Molecules are made up of:  
(a) **Atoms** (b) Protons (c) Electrons (d) Neutrons
26. In a -----, none of the component retains its original properties.  
(a) Solution (b) Syrup (c) Mixture (d) **Compound**
27. A molecule of sugar, for example, glucose, is formed of atoms of Hydrogen, Oxygen and:  
(a) **Carbon** (b) Sodium (c) Nitrogen (d) Helium
28. ----- is a pure substance that cannot be broken down into simpler substances by ordinary chemical processes.  
(a) Mixture (b) **Element** (c) Matter (d) Compound
29. Calcium Oxide is a:  
(a) **Stone** (b) Liquid (c) Metal (d) Pearl
30. Calcium Oxide + Water -----.  
(a) Hydride (b) Oxygen and Hydrogen (c) **Calcium** (d) Calcium Hydroxide

## Electricity and Magnetism

Select the best suitable answer from A, B, C and D.

1. A body which is short of electrons has a ----- charge on it.  
(a) **Positive** (b) Positive and Negative (c) Negative (d) Neutral
2. Metals which allow an electric current to flow through them easily are called:  
(a) Transmitters (b) Electromagnetics (c) **Conductors** (d) Radiators
3. Electromagnetics are sometimes called conductor magnetics and have a:  
(a) **Soft iron core** (b) Hard iron core (c) Soft magnetic core (d) Soft zinc core
4. The filament of light bulb is usually made of:  
(a) Silver (b) **Nichrome** (c) iron (d) Copper
5. Nichrome is a metal which ----- the flow of electricity.  
(a) Decreases (b) Allows (c) Increases (d) **Resists**
6. The area around the magnet is called a:  
(a) Electric field (b) Positive field (c) **Magnetic field** (d) Magnetic cloud
7. As the distance from the magnet increases, the strength of magnetic field:  
(a) Remains the same (b) May increase or decrease (c) Increases (d) **Decreases**
8. The complete name for the north pole of a magnet is the:  
(a) South seeking pole (b) **North seeking pole** (c) Repelling pole (d) Attracting pole
9. The north poles of two magnets ----- each other.  
(a) Stroke (b) Pull (c) Attract (d) **Repel**
10. North pole of one magnet ----- the south pole of another magnet.  
(a) Pulls (b) Repels (c) **Attracts** (d) Pushes
11. A circuit which allows several paths for the flow of electricity is called:  
(a) Series circuit (b) Open circuit (c) Complete circuit (d) **Parallel circuit**



13. A black surface is a better ----- and absorber of heat than a white surface.  
(a) Evaporator (b) **Insulator** (c) Conductor (d) Radiator
14. On heating, the kinetic energy of molecules:  
(a) Remains constant (b) May increase or decrease (c) **Increases** (d) Decreases
15. All metals are good:  
(a) Radiators (b) **Insulators** (c) Conductors (d) Absorbers
16. Ice point on Celsius Scale is taken as:  
(a) 100 degrees (b) 212 degrees (c) 32 degrees (d) **Zero degree**
17. Substances which do not allow heat to pass through them are called:  
(a) Absorbers (b) Radiators (c) Conductors (d) **Insulators**
18. The boiling point of water on Centigrade Scale is:  
(a) **100°C** (b) 90°C (c) 212°C (d) 150°C
19. ----- is the transmission of heat by waves emitted by hot substances.  
(a) **Radiation** (b) Conduction (c) Convection (d) None of these
20. Melting point of ice on Fahrenheit Scale is taken as:  
(a) 212 degrees (b) 12 degrees (c) Zero degree (d) **32 degrees**
21. The normal temperature of a healthy person's body is about:  
(a) 96.4° F (b) **98.4° F** (c) 97.4° F (d) 98.6° F
22. Mercury is a good thermometric material because:  
(a) **Its thermal expansion is constant** (b) It is transparent  
(c) It is opaque (d) It is shining
23. A vacuum flask minimizes:  
(a) Radiation (b) Conduction (c) Convection (d) **All of these**
24. Heat and temperature are:  
(a) **Not the same thing** (b) The same thing  
(c) The new thing (d) None of these
25. Different objects expand at:  
(a) Noon (b) **Different rates** (c) Same rates (d) Night

## Earth

Choose the correct answer from the given choices:

1. Oceans and seas cover about ----- of the Earth's surface.  
(a) 60% (b) **70%** (c) 80% (d) 90%
2. Rocks are of:  
(a) Two types (b) **Three types** (c) Four types (d) Five types
3. When a glacier reaches the sea, large pieces of ice break off from:  
(a) **Icebergs** (b) Ice (c) Snow (d) Glaciers
4. Gemstone is used for making:  
(a) Utensils (b) Glass (c) Cement (d) **Jewellery**
5. Fuel is a substance which stores:  
(a) Bitter (b) Normal (c) **Energy** (d) Minerals
6. Rocks are ----- parts of the Earth's  
(a) Essential (b) Useless (c) **Solid** (d) Ancient
7. Pakistan has ----- mineral resources.  
(a) Few (b) **Rich** (c) Costly (d) No
8. Minerals are chemical:  
(a) **Elements** (b) Mixtures (c) Ores (d) Metals
9. The molten material of the Earth is called:  
(a) Crust (b) Loam (c) Clay (d) **Magma**
10. Extrusive and intrusive rocks are:  
(a) **Igneous rocks** (b) Sedimentary rocks (c) Metamorphic rocks (d) Natural rocks
11. Basalt is common example of:  
(a) Intrusive rocks (b) **Extrusive rocks** (c) Sedimentary rocks (d) Metamorphic rocks
12. Igneous rocks are of:  
(a) **Two types** (b) Several types (c) Three types (d) Only one kind
13. "Rock Oil" means:  
(a) Natural gas (b) **Petroleum** (c) Gypsum (d) Coal
14. The taste of sea-water is:  
(a) Sweet (b) Normal (c) Bitter (d) **Salty**

12. Magnets made by using electric current are called:  
 (a) Magneto-electrics (b) Electromagnets (c) Electromagnets (d) Magnetics
13. An electromagnet loses its magnetism when:  
 (a) Current is increased (b) **Current is stopped**  
 (c) Current is decreased (d) Current is supplied
14. ----- magnets are used in loud-speakers and electric meters.  
 (a) Dynamos (b) **Permanent** (c) Electro (d) None of these
15. When an electromagnet is switched on, there is a current:  
 (a) In both the coil and the core (b) Only in the coil  
 (c) **Only in the core** (d) In one of them but which it does not matter
16. Nichrome is a high resistance:  
 (a) Material (b) **Metal** (c) Solid (d) Element
17. Electricity is a form of:  
 (a) **Energy** (b) Power (c) Heat (d) Light
18. An electric current is flow of:  
 (a) **Electrons** (b) Particles (c) Protons (d) Neutrons
19. Electricity can flow through:  
 (a) Wood (b) **Copper** (c) Plastic (d) Rubber
20. Electricity can be converted into:  
 (a) Light energy (b) **All of these** (c) Mechanical energy (d) Sound energy
21. Electricity flows easily through some ----- like copper and aluminum.  
 (a) Metals (b) Radiators (c) Solids (d) **Conductors**
22. If the path is incomplete and the current cannot flow the circuit is called:  
 (a) **An open circuit** (b) A parallel circuit (c) A close circuit (d) A series circuit
23. A circuit which allows only one path for the flow of electricity is called:  
 (a) Parallel circuit (b) Open circuit (c) Close circuit (d) **Series circuit**
24. An unbroken path for the flow of electricity is called a:  
 (a) Series circuit (b) **Complete circuit** (c) Parallel circuit (d) Open circuit
25. Electricity ----- easily through brass, nichrome and tungsten.  
 (a) Flows (b) Does not flow (c) Passes (d) **Does not resist**

## Heat

Mark with a (✓) the right answer in each of the following questions:

1. The Sun is a major source of:  
 (a) Power (b) **Heat** (c) Light (d) Energy
2. Heat is a form of:  
 (a) **Energy** (b) Temperature (c) Light (d) Power
3. Heat from the Sun reaches Earth by:  
 (a) **Radiation** (b) Vaporization (c) Conduction (d) Convection
4. When the air in a car tyre becomes hot, it expands causing the pressure it exerts to:  
 (a) Contract (b) Expand (c) **Increase** (d) Decreases
5. A sea breeze occurs during the day when the air over the land is -----than the air over the sea.  
 (a) Lighter (b) Heavier (c) **Hotter** (d) Cooler
6. There are 100 Celsius degrees between the freezing point of water and the ----- point of water.  
 (a) **Boiling** (b) Evaporating (c) Heating (d) Cooling
7. Heat energy is because of the movement of:  
 (a) **Molecules** (b) Electricity (c) Atoms (d) Particles
8. Heat is transmitted through solids by a process called:  
 (a) **Conduction** (b) Diffusion (c) Radiation (d) Convection
9. On heating, solids expand in all:  
 (a) **Directions** (b) Parts (c) Spaces (d) None of these
10. Temperature of human body is measure by:  
 (a) Minimum thermometer (b) Maximum thermometer  
 (c) **Clinical thermometer** (d) Fahrenheit thermometer
11. A thermometer is the instrument used for measuring:  
 (a) **Temperature** (b) Length (c) Heat (d) Energy
12. Liquids expand ----- than solids.  
 (a) **More** (b) Less (c) Better (d) None of these



15. Select one from the following which emits light:  
 (a) Stars (b) Moon (c) Sun (d) Mirror
16. The Sun is approximately million ..... kilometers away from the Earth.  
 (a) 50 (b) 600 (c) 300 (d) 150

## Major Life Process-I

Select the right answer:

- Proteins form about ..... by weight of human body.  
 (a) 30-40% (b) **12-18%** (c) 12-16% (d) 10-12%
- To regulate functions of thyroid glands, we need:  
 (a) Iron (b) **Iodine** (c) Phosphorous (d) Calcium
- Iron is necessary for the formation of blood:  
 (a) Plasma (b) **Hemoglobin** (c) Red blood cells (d) White blood cells
- ..... are chemical substances needed by the body in very small quantities.  
 (a) **Vitamins** (b) Starch (c) Minerals (d) Proteins
- Calcium, Sodium and Iron are:  
 (a) **Minerals** (b) Vitamins (c) Salts (d) Proteins
- ..... are very often represented by English alphabets.  
 (a) **Vitamins** (b) Carbohydrates (c) Fats (d) Minerals
- The process of getting energy from food is called:  
 (a) Breathing (b) **Nutrition** (c) Digestion (d) Respiration
- Deficiency of Vitamin ..... causes night blindness.  
 (a) K (b) C (c) B (d) **A**
- The food we eat is known as:  
 (a) Meal (b) Starch (c) Material (d) **Nutrient**
- Deficiency of Iodine causes:  
 (a) Weakness (b) Rickets (c) Beri Beri (d) **Goitre**
- Things like glucose, cane sugar and starch are known as:  
 (a) Proteins (b) Inorganic material (c) **Carbohydrates** (d) Fats
- Deficiency of Vitamin A causes:  
 (a) Beri Beri (b) Tuberculosis (c) Malaria (d) **Night Blindness**
- Fats and oils are also very high ..... food.  
 (a) Value (b) Lubricant (c) Power (d) **Energy**
- ..... is present in potatoes, rice, corn and wheat.  
 (a) **Starch** (b) Oils (c) Sugar (d) Fat
- ..... is processed to make cream, butter and ghee.  
 (a) Starch (b) Protein (c) Oil (d) **Milk**
- Deficiency of Vitamin D causes:  
 (a) Pellagra (b) Beri Beri (c) **Rickets** (d) Scurvy
- Carbohydrates consist of:  
 (a) **Carbon-Hydrogen- Nitrogen** (b) Carbon-Hydrogen- Oxygen  
 (c) Oxygen- Hydrogen-Nitrogen (d) Carbon-Nitrogen-Oxygen
- ..... are the small pores present on the surface of leaves.  
 (a) Fungus (b) Sacs (c) **Stomata** (d) Spots
- Saliva is secreted by three ..... situated above, below and back of the tongue.  
 (a) Organs (b) **Glands** (c) Tissues (d) Bodies
- The human kidney collects urea from ..... and passes it to the bladder as urine.  
 (a) Intestines (b) Water (c) Stomach (d) **Blood**
- Iodine solution is used for testing the presence of ..... in potato.  
 (a) Oil (b) Vitamins (c) **Starch** (d) Fats
- Chyme is a thick liquid form of food present in the:  
 (a) Pancreas (b) **Stomach** (c) Esophagus (d) Liver
- Removal of ..... and other waste products is essential in healthy bodies.  
 (a) Fats (b) Oxygen (c) **Carbon dioxide** (d) Water
- Kidneys contain many small microscopic tubes called:  
 (a) Tracheas (b) Capillaries (c) **Nephrons** (d) Veins
- The removal of carbon dioxide, urine and sweat is a process of:  
 (a) Breathing (b) Excretion (c) Digestion (d) **Respiration**
- The juices secreted by the walls of stomach are called:

15. Potash is used for making:  
(a) Cement (b) **Paint powder** (c) **Plaster** (d) Utensils
16. The product of the decomposition is called:  
(a) Fossils (b) Minerals (c) **Humus** (d) Crust
17. Granite is a common example of:  
(a) Extrusive rocks (b) Metamorphic rocks (c) **Intrusive Rocks** (d) Sedimentary rocks
18. Remains of plants and animals that lived long ago on our Earth are known as:  
(a) Fuels (b) Rocks (c) Minerals (d) **Fossils**
19. Sand, clay and loam are the main types of:  
(a) **Soil** (b) Rocks (c) Minerals (d) Fossils
20. Coal is an organic:  
(a) Soil (b) Metamorphic (c) Igneous rock (d) **Sedimentary rock**
21. All organic materials contain the elements of:  
(a) Carbon and Nitrogen (b) Nitrogen and Oxygen (c) **Carbon and Hydrogen** (d) Oxygen and Hydrogen
22. We get pearls from sea animals called:  
(a) **Pearl oysters** (b) Pearl shrimps (c) Pearl marine (d) Pearl crabs
23. Glacier is nothing but tonnes of:  
(a) **Snow** (b) Water (c) Ice (d) Soil
24. Water in oceans warms up and cools down ----- than land.  
(a) **More slowly** (b) Fastly (c) More rapidly (d) None of these
25. Marble is formed from:  
(a) Gemstone (b) **Limestone** (c) Silica (d) Gypsum
26. Broken blocks of glacier which happen to float in the sea are called:  
(a) Seaborg's (b) Snowbergs (c) **Iceberg** (d) Glacierbergs
27. Soil consists of about ----- rock material.  
(a) 60% (b) 70% (c) 80% (d) **90%**

## Light

Pick the correct answer:

1. Light is a form of:  
(a) Electricity (b) Power (c) **Energy** (d) Force
2. Light travels in:  
(a) **Straight lines** (b) Perpendicular lines (c) Vertical lines (d) Zigzag lines
3. Speed of light is approximately ----- kilometers per second.  
(a) **30,00,000** (b) 3,000 (c) 3,00,00,000 (d) 3,00,000
4. With respect to light, materials have be divided into:  
(a) Five kinds (b) Four kinds (c) Two kinds (d) **Three kinds**
5. Light from the Sun reaches the Earth in about:  
(a) 18 minutes (b) 15 minutes (c) **8 minutes** (d) 2 minutes
6. Materials which do not allow the light to pass through them are called:  
(a) **Opaque** (b) Thick (c) Transparent (d) Translucent
7. Transparent materials make no ----- when placed in the path of light.  
(a) Figures (b) Ways (c) **Shadows** (d) Images
8. Light is able to pass partially through:  
(a) Liquid materials (b) Transparent' materials (c) Opaque materials (d) **Translucent materials**
9. A solar eclipse occurs when the moon comes in between the Sun and:  
(a) The clouds (b) The air (c) **The Earth** (d) The stars
10. ----- occurs when the Earth moves in between the Sun and the Moon.  
(a) Eclipse (b) Sun eclipse (c) Solar eclipse (d) **Lunar eclipse**
11. When the light falls on a cricket bat, a shadow is formed because the bat is:  
(a) Translucent (b) **Opaque** (c) Transparent (d) Solid
12. In a candle, ----- energy is changed into light energy.  
(a) Potential (b) Heat (c) Electrical (d) **Chemical**
13. How long after an explosion on the Moon would we first see its light on Earth?  
(a) About 1 min (b) About  $\frac{1}{10}$  sec (c) About 10 sec (d) **About 1 sec**
14. Select one from the following which do not emit light:  
(a) Sun (b) Star (c) **Moon** (d) Satellite



- (a) Gastric juices (b) Saliva (c) Bile (d) Pancreatic juices
27. The juice secreted by the stomach is called: (a) Fats (b) **Proteins** (c) Carbohydrates (d) Salts
28. Saliva helps the digestion of: (a) **Carbohydrates** (b) Fats (c) Proteins (d) Minerals
29. Water and mineral salts are absorbed by: (a) Stomach (b) **Large intestine** (c) Small intestine (d) None of these
30. Which one of the following contains the greatest proportion of fat? (a) Tomatoes (b) Pulses (c) **Milk** (d) Spinach
31. Sun flower seeds are used in manufacturing: (a) Butter (b) Cooking Oil (c) **Ghee** (d) Cheese
32. The basic unit for preparation of food in green plants is: (a) Cytoplasm (b) Protoplasm (c) Leaves (d) **Chloroplast**
33. The first product prepared by the process of photosynthesis is: (a) **Sugar** (b) Fat (c) Oil (d) Protein
34. The process during which energy is produced in the body from food is: (a) **Respiration** (b) Excretion (c) Breathing (d) Digestion

## Major Life Process-II

Mark with a (✓) the right answer in each of the following questions:

1. The temperature of plant is regulated by a process called: (a) Respiration (b) Walking (c) **Transportation** (d) Breathing
2. In the blood circulatory system, the ----- works as pump. (a) Vein (b) Lung (c) Heart (d) **Capillary**
3. The messages, we receive from the environment are sent as signals to the spinal cord by sensory: (a) **Nerves** (b) Cords (c) Cells (d) Muscles
4. A neuron is a long ----- cell. (a) Muscle (b) **Branched** (c) Nerve (d) Divided
5. The Aorta is ----- which applies oxygenated blood to all parts of the body (a) **An artery** (b) A tube (c) A vein (d) A muscle
6. The pores present on the surface of ----- are called stomata. (a) Body (b) **Leaves** (c) Skin (d) Plants
7. The amount of blood in the circulatory system of a 25 years old person of an average size is: (a) Between 6 and 10 liters (b) **Between 4 and 6 liters** (c) Less than 2 liters (d) Between 2 and 4 liters
8. Which one of the following causes blood to exit from the heart? (a) A ventricle relaxes (b) **An auricle contracts** (c) An auricle relaxes (d) An auricle contracts
9. Which one of the following contain mostly deoxygenated blood? (a) **Veins** (b) Pulmonary artery (c) Aorta (d) Arteries
10. A reflex action is a ----- response to a stimulus. (a) **Sudden** (b) Quick (c) Fast (d) Slow
11. Human heart has: (a) Two chambers (b) **Four chambers** (c) One chamber (d) Three chambers
12. Which one of the following carries message through the body: (a) Tissues (b) **Nerves** (c) Muscles (d) Blood
13. A reflex action is the sudden response to a: (a) **Stimulus** (b) Human needs (c) Brain order (d) None of these
14. Which one of the following is not true for arteries? (a) Carry blood away from heart (b) Pulse rate is measured from them (c) They have many valves (d) **They have thick walls**
15. The vessels which take blood away from heart to various organs are called: (a) Capillaries (b) Tubes (c) **Arteries** (d) Veins
16. The brain consists of: (a) Four major parts (b) Five major parts (c) Two major parts (d) **Three major parts**
17. Which one of the following part of a plant absorbs water, minerals and salts? (a) Leaf (b) Flower (c) **Root** (d) Stem

12. An object falls towards the Earth due to the force of:  
(a) Earth (b) Air (c) Gravity (d) Friction
13. The propeller of a small plane pushes the ----- to make the plane move forward.  
(a) Force (b) Air (c) Plane (d) Space
14. The motion of boats and ships on water due to the force of:  
(a) Push (b) Water (c) Reaction (d) Pull
15. A rocket is used to carry men a equipment in:  
(a) Air (b) Universe (c) Environment (d) Space
16. Tension is the force produced in a be when it is -----.  
(a) Stretched (b) Strengthened (c) Pressed (d) Pushed
17. Friction is the force that resists or tries to resist the ----- of one material over another material.  
(a) Movement (b) Pressure (c) Work (d) Force
18. An Inclined plane is also a simple:  
(a) Wedge (b) Plank (c) Machine (d) Mechanism
19. To stop moving vehicles, we use:  
(a) Shaft (b) Paddle (c) Brakes (d) Clutches
20. A is ----- a sort of double Inclined plane.  
(a) Machine (b) Pulley (c) Wedge (d) Axle
21. ----- is often performed with the help of machines.  
(a) Sliding (b) Work (c) Function (d) Movement
22. ----- is an agent which changes the state of an object.  
(a) Power (b) Force (c) Work (d) Energy
23. A pulley or wooden planks are termed as:  
(a) Machines (b) Equipments (c) Instruments (d) Tools
24. Simple machines are usually grouped into:  
(a) Four categories (b) Seven categories (c) Five categories (d) Six categories
25. ----- is the simplest of all the machines.  
(a) Lever (b) Screw (c) Pulley (d) Wedge
26. Levers are usually of:  
(a) Four types (b) Three types (c) Two types (d) One type
27. A ----- is one of the most important inventions of man.  
(a) Pulley (b) Computer (c) Wheel (d) Engine
28. A ----- is a wheel with a groove made along its circumference so that a rope can move around it.  
(a) Fulcrum (b) Pulley (c) Circle (d) Lever
29. There are two types of pulley ----- fixed pulley and:  
(a) Open pulley (b) Unmovable pulley (c) Closed pulley (d) Movable pulley
30. Movable pulleys have wide use in heavy industries for lifting and moving:  
(a) Delicate machinery (b) Heavy machinery (c) Important machinery (d) Light machinery



18. Blood is a mixture of cells suspended in a liquid called:  
**(a) Plasma** (b) Mucus (c) Mixture (d) Saliva
19. Which one of the following carries messages through the body?  
 (a) Blood (b) Muscles (c) Tissues **(d) Nerves**
20. Evaporation of water from the surface of the plant is known as:  
**(a) Transportation** (b) Photosynthesis (c) Diffusion (d) Osmosis
21. Select one of the following organs which is protected by ribs:  
 (a) Brain (b) Kidney **(c) Heart** (d) Stomach
22. Water absorbed by the roots, rises up the stem through:  
 (a) Tubules (b) Phloem vessels (c) Vessels **(d) Xylem vessels**
23. The pulling force of transportation is known as the -----.  
**(a) transportational pull** (b) Pressure (c) Sucking pull (d) Absorption
24. Blood from the body first enters the of heart.  
**(a) Left auricle** (b) Left ventricle (c) Right auricle (d) Right ventricle
25. Transportation provides water to the plants for the -----  
**(a) Photosynthesis** (b) Evaporation (c) Life activity (d) Respiration
26. A human skeleton consists of ----- bones.  
**(a) 206** (b) 406 (c) 106 (d) 306
27. Human bones have been divided into -----types.  
 (a) Three (b) Five **(c) Four** (d) Two
28. Flat bones are found in skull and -----.  
**(a) Shoulders** (b) Ankle (c) Legs (d) Chest
29. ----- bones are found in legs, arms and chest.  
 (a) Round **(b) Long** (c) Flat (d) Small
30. Small bones are found in wrist and -----.  
 (a) Arms (b) Legs **(c) Ankle** (d) Skull
31. Vertebrae and hip bones are the examples of ----- bones.  
**(a) Irregular** (b) Small (c) Long (d) Flat
32. ----- directs and determines human activities.  
 (a) Blood (b) Head (c) Heart **(d) Brain**
33. The brain, the spinal cord and the nerves form the ----- nervous system.  
 (a) Whole **(b) Central** (c) Total (d) Complete

## Force and Work

Choose the correct answer:

1. A wheel only becomes a ----- when it is combined with an axle.  
**(a) Machine** (b) Cart (c) Pulley (d) Gear
2. When a force moves a body, the force does ----- on the body.  
**(a) Work** (b) Play (c) Move (d) Act
3. A fixed pulley changes the:  
**(a) Direction of load** (b) Efficiency of machine (c) Function of machine (d) None of these
4. When a surface slides over another, the force of friction between them acts:  
**(a) Opposite to the direction of sliding surface** (b) In the direction of sliding surface (c) Perpendicular to the direction of sliding surface (d) In all directions
5. When a force is applied in one direction this is called:  
 (a) Work (b) Reaction (c) Push **(d) Action**
6. A body will remain at rest until a ----- acts on it.  
**(a) Force** (b) Pressure (c) Man (d) Boy
7. A ----- pulley changes the direction the load.  
 (a) Strong (b) Fixed **(c) Movable** (d) Both A and B
8. Push and pull are both words used in place of -----.  
**(a) Force** (b) Axle (c) Work (d) Pulley
9. Friction can be ----- by using oil or grease.  
 (a) Balanced **(b) Reduced** (c) Removed (d) Increased
10. To every action, there is an equal and ----- reaction.  
 (a) Forceful **(b) Opposite** (c) Balanced (d) Same
11. A swimmer pushes the water in backward direction to move:  
 (a) Fast (b) Slow (c) Backward **(d) Forward**