

## PHYSICS

1. X-rays carry:
  - (a) Positive charge
  - (b) Negative charge
  - (c) No charge
  - (d) Positive and negative charge
2. Which one of the following is the poorest insulator?
  - (a) Bakelite
  - (b) Rubber
  - (c) Lucite
  - (d) Polythene
3. The frequency of ultrasound wave is typically:
  - (a) Above 20 kHz
  - (b) Above 20,000 kHz
  - (c) Below 20 kHz
  - (d) Below 02 kHz
4. Which is used as a magnifying glass?
  - (a) Plane mirror
  - (b) Concave mirror
  - (c) Converging lens
  - (d) Diverging lens
5. Process in a nuclear reactors is:
  - (a) Uncontrolled nuclear fission
  - (b) Controlled nuclear fission
  - (c) Uncontrolled nuclear fusion
  - (d) Controlled nuclear fusion
6. Coal is a source of --- energy.
  - (a) Conventional
  - (b) Unconventional
  - (c) Replaceable
  - (d) None of these
7. One nautical mile is equal to:
  - (a) 2.5 km
  - (b) 1.8 km
  - (c) 1.5 km
  - (d) 1.6 km
8. An echo is produced by the --- of sound waves.
  - (a) Refraction
  - (b) Absorption
  - (c) Reflection
  - (d) Diffraction
9. 'Fax' is an abbreviation for:
  - (a) Full Access Xerox
  - (b) Facsimile Transmission
  - (c) Facsimile Access Xerox
  - (d) Fact Access Xerox
10. Dioptr is a unit of:
  - (a) Microscope
  - (b) Telescope
  - (c) Eye sight
  - (d) Power of lens
11. The specific heat capacity of water is:
  - (a) 4200 J/kg°C
  - (b) 2300 J/kg°C
  - (c) 4.2 J/kg°C
  - (d) 42000 J/kg°C
12. Which colour is seen on the outer edge of the rainbow?
  - (a) Violet
  - (b) Red
  - (c) Indigo
  - (d) Orange
13. Pencil lead is made up of:
  - (a) Graphite
  - (b) Charcoal
  - (c) Lead oxide
  - (d) Sugar charcoal
14. Who is the physicist who came close to predicting the presence of black holes?
  - (a) Robert Brown
  - (b) Copper Nickas
  - (c) Chandrasekhar
  - (d) Big Bang
15. Fuse wire is made of:
  - (a) 63% lead and 37% tin
  - (b) 63% tin and 37% lead
  - (c) 63% tin and 37% zinc
  - (d) 63% zinc and 37% tin
16. The absorption of ink by blotting paper is due to:
  - (a) Surface tension
  - (b) Capillary action
  - (c) Adhesion
  - (d) Cohesion
17. Which element was used in Pokhran atomic explosion?
  - (a) Thorium
  - (b) Plutonium
  - (c) Uranium
  - (d) Neptunium
18. The principle of solar cell is:
  - (a) Photo electric effect
  - (b) Photo-voltaic effect
  - (c) Magnetic effect
19. Friction can be reduced by changing over from:
  - (a) Potential to kinetic energy
  - (b) Dynamic to static
  - (c) Sliding to rolling
  - (d) Rolling to sliding
20. Mechanical energy is converted into electrical energy by:
  - (a) A motor
  - (b) A bulb
  - (c) An electric bell
  - (d) A dynamo
21. Hydraulic lift works on the principle of:
  - (a) Newton's law of gravitation
  - (b) Pascal's law
  - (c) Faraday's law
  - (d) Archimedes principle
22. A safety fuse introduced in the circuit with:
  - (a) Parallel
  - (b) Series
  - (c) Series-parallel
  - (d) None of these
23. How much time it takes light to reach us from Sun?
  - (a) 1 day
  - (b) 1 hour
  - (c) 8 minutes
  - (d) 1.2 minutes
24. Tape recorder records sound as --- energy.
  - (a) Electrical
  - (b) Magnetic
  - (c) Physical
  - (d) Chemical
25. Which cannot be included in fossil fuels?
  - (a) Petroleum
  - (b) Natural gas
  - (c) Wood charcoal
  - (d) Coal

## Answers

- 1.(c), 2.(a), 3.(e), 4.(c), 5.(b), 6.(a), 7.(b), 8.(c), 9.(b), 10.(d), 11.(a), 12.(b), 13.(a), 14.(e), 15.(b), 16.(b), 17.(b), 18.(b), 19.(c), 20.(d), 21.(b), 22.(b), 23.(c), 24.(b), 25.(c)

## CHEMISTRY

1. What is laughing gas?
  - (a)  $N_2O$
  - (b)  $HCl$
  - (c)  $CO$
  - (d)  $SO_2$
2. What is the commonly used name of dilute acetic acid?
  - (a) Turpentine
  - (b) Vaseline
  - (c) Vinegar
  - (d) None of these
3. The process of conversion of a solid directly into its vapor is known as:
  - (a) Evaporation
  - (b) Melting
  - (c) Fusion
  - (d) Sublimation
4. Sodium Chloride is usually called as:
  - (a) Salt
  - (b) Carbon
  - (c) Soda
  - (d) Tea
5. Marble is a form of:
  - (a) Calcium oxide
  - (b) Calcium silicate
  - (c) Calcium hydroxide
  - (d) Calcium carbonate
6. Which of the following forms colloidal solution in water?
  - (a) Glucose
  - (b)  $NaCl$
  - (c) Urea
  - (d) Starch
7. LPG consists of mainly:
  - (a) Methane, Ethane and Hexane
  - (b) Ethane, Hexane and Nonane
  - (c) Methane, Butane and Propane
  - (d) Ethane, Nonane and Methane
8. The most abundant metal in the earth's crust is:
  - (a) Aluminium
  - (b) Iron
  - (c) Magnesium
  - (d) Sodium
9. Temporary hardness of water is due to?
  - (a) Calcium chloride

## Answers

- 1.(a), 2.(c), 3.(d), 4.(a), 5.(d), 6.(d), 7.(c), 8.(a), 9.(d), 10.(e), 11.(d), 12.(c), 13.(d), 14.(d), 15.(d), 16.(b), 17.(c), 18.(c), 19.(a), 20.(d), 21.(b), 22.(c), 23.(a), 24.(a), 25.(c)

## BOTANY

1. Which is an example of drupes?

- (a) Pea (b) Mango  
 (c) Tomato (d) Pineapple
2. To which category does onion belong?  
 (a) Stem tuber  
 (b) Corn  
 (c) Bulb  
 (d) Rhizome
3. Which plant does brown hopper affect most?  
 (a) Vegetables  
 (b) Rice  
 (c) Pepper  
 (d) Coconut
4. Which plant that uses insects as food?  
 (a) Pitcher plant  
 (b) Zoranthus  
 (c) Lotus  
 (d) Orchid
5. The hormone helps to ripen fruits:  
 (a) Cytokinins  
 (b) Gibberellins  
 (c) Florigens  
 (d) Ethylene
6. Leaves are green due to the presence of:  
 (a) Chlorophyll  
 (b) Melanin  
 (c) Haemoglobin  
 (d) All the above
7. Cocosnucifera is the scientific name of:  
 (a) Coconut  
 (b) Cocoa plant  
 (c) Coffee tree  
 (d) Plantain
8. The art of gardening is known as:  
 (a) Agriculture  
 (b) Horticulture  
 (c) Sericulture  
 (d) None of these
9. Which of the following is not a plant product?  
 (a) Lac (b) Rubber  
 (c) Cotton (d) Sugar
10. Carrots are rich in:  
 (a) Vit A (b) Vit K  
 (c) Vit D (d) Starch
11. What is the average life of coconut tree?  
 (a) 5 years  
 (b) 50 years  
 (c) 100 years  
 (d) 25 years
12. Nodules with nitrogen-fixing bacteria are present in the roots of---  
 (a) Gram (b) Mustard  
 (c) Cotton (d) Paddy
13. Arto carpus integrifolia is the scientific name of:  
 (a) Mango  
 (b) Lemon  
 (c) Jack fruit  
 (d) Apple
14. A concentrated source of Protein for vegetarian is:  
 (a) Wheat  
 (b) Potato  
 (c) Soyabean  
 (d) Blackgram dhal
15. Which of the following crops helps in nitrogen fixation:  
 (a) Rice (b) Wheat  
 (c) Maize (d) Beans
16. 'Opium' is a plant product obtained from:  
 (a) Dried leaves (b) Dried latex  
 (c) Root (d) Stem bark
17. What is the byproduct of Photo synthesis?  
 (a) Nitrogen (b) Oxygen  
 (c) Hydrogen (d) Ammonia
18. The plants growing on acidic soil:  
 (a) Lithophytes  
 (b) Tropophytes  
 (c) Xerophytes  
 (d) Oxylophytes
19. The first fungicide discovered for plant disease was:  
 (a) Bordeaux Mixture (b) DDT  
 (c) Suramin (d) Kerosine
20. The main cellular fuel is:  
 (a) Glucose  
 (b) Fructose

- (c) Lactose  
 (d) Glactose
21. Which of the food contains rich source of iron:  
 (a) Eggs  
 (b) Green vegetables  
 (c) Pulses  
 (d) Milk
22. The roots of the plants absorb food from the soil on the principle of:  
 (a) Attraction  
 (b) Osmosis  
 (c) Liquid flow  
 (d) Capillary action
23. The total number of amino acids in plants is:  
 (a) 10  
 (b) 20  
 (c) 30  
 (d) Plenty
24. The science dealing with disease of plant is called:  
 (a) Plant anatomy  
 (b) Plant ecology  
 (c) Plant pathology  
 (d) Plant morphology
25. In plants water is carried upward by the:  
 (a) Phloem  
 (b) Parenchyma  
 (c) Xylem  
 (d) Meristem

- (c) Flesh  
 (d) Skin
11. Genes are located in---  
 (a) Blood  
 (b) Tissues  
 (c) Chromosomes  
 (d) Spleen
12. The seat of memory in human brain is located in the:  
 (a) Medulla oblongata  
 (b) Cerebrum  
 (c) Cortex  
 (d) Cerebellum

13. The study of animal behaviour is called:  
 (a) Ethics  
 (b) Ethology  
 (c) Calligraphy  
 (d) Cytology
14. The world's 1st cloned buffalo calf and India's first cloned animal is:  
 (a) Garima  
 (b) Samrupa  
 (c) Dolly  
 (d) Garima II

15. First successful heart transplantation was done by:  
 (a) C.N. Barnard  
 (b) D.S. Paintal  
 (c) D. Shetty  
 (d) P.K. Sen
16. In the eye, colour vision is effected by the presence of:  
 (a) Choroid coat  
 (b) Sclerotic coat  
 (c) Rods  
 (d) Cones

17. Malaria can be cured with a drug extracted from:  
 (a) Oak tree  
 (b) Belladonna tree  
 (c) Neem tree  
 (d) Cinchona tree
18. The number of chromosomes in human being is:  
 (a) 44  
 (b) 45  
 (c) 46  
 (d) 48

19. Which one of the following is known as 'Silent Killer'?  
 (a) Blood pressure  
 (b) Tuberculosis  
 (c) Cholera  
 (d) Malaria
20. The animal which can tolerate more summer heat is:  
 (a) Buffalo  
 (b) Cow  
 (c) Goat  
 (d) Donkey

21. The first human disease proved to have a viral cause was:  
 (a) Small pox  
 (b) Rabies  
 (c) Hepatitis  
 (d) Yellow fever
22. Alpha keratin is a protein present in:  
 (a) Skin  
 (b) Nail  
 (c) Wool  
 (d) Tooth

23. Arteries supplying blood to the heart are called:  
 (a) Hepatic arteries  
 (b) Pulmonary arteries  
 (c) Coronary arteries  
 (d) Cartoid arteries
24. DPT denotes:  
 (a) Tripple antigen  
 (b) Polio vaccine  
 (c) Rabies vaccine  
 (d) None of these

25. Diphtheria affects the:  
 (a) Throat  
 (b) Liver  
 (c) Blood  
 (d) Brain

### Answers

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

## ZOOLOGY

1. Heart burn refers to an uneasy burning sensation in the:  
 (a) Liver  
 (b) Lungs  
 (c) Heart  
 (d) Stomach
2. The disease transmit only on regular contact:  
 (a) T.B.  
 (b) Cholera  
 (c) Leprosy  
 (d) Typhoid

3. The most important organ of the human body is:  
 (a) Brain  
 (b) Heart  
 (c) Lungs  
 (d) Liver
4. Which of the creature has heaviest liver?  
 (a) Elephant  
 (b) Giraffe  
 (c) Man  
 (d) Pig

5. Study of cancer is known as:  
 (a) Cardiology  
 (b) Dermatology  
 (c) Oncology  
 (d) Psychology
6. Insects belong to:  
 (a) Annelida  
 (b) Arthropods  
 (c) Crustaceans  
 (d) Coelenterata

7. Animal that eat flesh are:  
 (a) Cannibals  
 (b) Herbivorous  
 (c) Carnivorous  
 (d) Quadruped
8. What does Mycology study?  
 (a) Minerals  
 (b) Sound  
 (c) Insects  
 (d) Fungus

9. The master gland of human body?  
 (a) Pituitary gland  
 (b) Pancreas  
 (c) Spleen  
 (d) Liver
10. Basically, the horn of Rhino is:  
 (a) Hair  
 (b) Bone

### Answers

- 1.(d), 2.(c), 3.(b), 4.(d), 5.(c), 6.(b),  
 7.(e), 8.(d), 9.(a), 10.(a), 11.(c),  
 12.(b), 13.(b), 14.(b), 15.(a), 16.(d),  
 17.(d), 18.(c), 19.(a), 20.(c), 21.(a),  
 22.(b), 23.(b), 24.(a), 25.(a)