COMPETENCY BASED QUESTIONS

CLASS - VIII

CHAPTER 1: CROP PRODUCTION AND MANAGEMENT

1. Which of the following is not grown by transportation?
   a. Chilies b. Tomatoes c. Peas d. Paddy
2. One of the following crops is not cultivated by sowing its seeds directly into soil. This one is
   a. Wheat b. Gram (Chana) c. Paddy d. Maize (Makka)
3. Is the time and frequency of irrigation same for rice and cotton?
   a. No b. Yes c. None of these
4. In crop rotation method after harvesting wheat crop, we can sow _____?
   a. Cotton b. Pea c. Rice d. Mustard
5. Before sowing, seeds should be heated with _____?
   a. Insecticides b. Pesticides c. Fungicides d. Fertilizers
6. Which of the following crops require standing water?
   a. Wheat b. Rice c. Cotton d. Maize
7. The soil which needs least frequent irrigation is
   a. Sandy b. clayey c. Rocky d. loamy
8. What are the examples of organic manure?
   a. Animal excretes b. Low dump urine and plant waste c. Both (a and b) d. None of these
9. The seeds which sink at the bottom of the bucket are the _____ seeds
   a. Healthy b. Spoiled c. None of these
10. Crop rotation leads to _____ in crop production
    a. Increases b. Decreases c. None of these
11. A farmer visited his crop field. He sees some other plants are also growing with the wheat crop. What are these plants known as-
    a. Weeds b. herbs c. shrubs d. creepers
12. The process of loosening of the soil is called
    a. tilling, b. harvesting, c. spraying, d. weeding
13. Seed drill is used for
    a. harvesting, b. cleaning the seed, c. sowing, d. weeding
14. 2,4 – D is a
    a. Pesticides, b. Insecticides, c. Weedicides, d. Fungicides.
15. Transplantation of seedling is done in
    a. coffee, b. cocoa, c. rice d.mango
16. The system of irrigation where in water is sprinkled by long perpendicular pipes with rotating nozzles fitted on their tops is called:
    a. Pulley –System b. Sprinkler –System c. Drip –System d. Lever – System
17. Large scale storage of grains is done in
    a. Silos b. Granaries c. Metallic bins d. All of these

REASON AND ASSERTION BASED QUESTIONS :

DIRECTIONS: The questions in this section consists of two statements, one is "Assertion A" and the other one is "Reason R". You are to examine these two statements carefully and decide if the Assertion "A" and Reason "R" are individually true. If so whether the reason is a correct explanation of the assertion. Answer the following questions selecting the appropriate options given below

18. **Assertion A:- fertilizers do not provide any humus to the soil.**
Reason R: - fertilizers are rich in plant nutrients like nitrogen, Phosphorus and potassium.
a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false.
d) A is false but R is true.

CASE -STUDY BASED QUESTION:

PASSAGE : Shera is a farmer and wants to know about the good agricultural practices to improve his yield. He also wants to practice crop rotation in his field. Now answer the following questions based on your knowledge to help him solve his queries:

19. **The agricultural practice that helps in the loosening of the soil is:**
a) Irrigation b) Manuring c) Tilling. d) Weeding
20. **Which of the following crops should be shown in the rainy season:**
a) Pea b) Linseed c) Gram d) Maize
21. **Which of the following crops can help him to replenish the soil with nitrogen:**
a) Wheat b) Paddy c) Legumes d) Cotton
22. **2,4-D is an example of :**
a) Fertilizers b)Weedicides c) Manure d)Fungicides
23. Leaving the agricultural land uncultivated for one or more seasons is known as
a) field fallow, b) crop rotation, c) manuring d) threshing

ANSWER:

1.Peas, 2. Paddy, 3. No, 4.Pea, 5. Fungicide, 6. Rice, 7.Clayey, 8. a&b, 9.Healthy,10.Increase 11. Weeds, 12. Tiling, 13. Sowing, 14.Weedicides, 15. Rice, 16. Sprinkler –System, 17. All of these, 18. Both A and R are true but R is not the correct explanation of A, 19. Tilling, 20. Maize, 21. Legumes, 22Weedicide, 23. Field fallow

CLASS - VIII

CHAPTER 2: MICROORGANISMS: FRIEND AND FOE

1. Pathogenic microorganisms present in host cells are killed by medicines called
   a. Pain killer b. Antibodies c. Antibiotics d. Vaccines
2. The gas released during the preparation of bread is
   a. Oxygen b. Carbon dioxide c. Nitrogen d. Sulphur dioxide
3. Which of the following cannot be used as a food preservative?
   a. Sodium metasulphate b. sodium hydroxide c. Sodium benzoate d. Citric acid
4. The disease caused by a protozoan and spread by an insect is
   a. Dengue b. Polio c. Malaria d. Measles
5. Bread dough rises because of
   a. Heat b. Grinding c. Growth of yeast cell d. Kneading
6. Which of the following is not a viral disease?
   a. Dengue b. AIDS c. Typhoid d. Influenza
7. Which of the following is a biological nitrogen fixer?
   a. Lightning b. Bacteria c. Blue-green algae d. Protozoa
8. The vaccine for protection against tuberculosis
   a. BCG b. DPT c. DT d. Polio booster dose
11. The disease which is eradicated from most part of the world
   a. Healthy b. Spoiled c. None of these
12. The first antibiotic called Penicillium was extracted from
   a. A bacteria b. A protozoa c. A fungus d. An algae
11. Tina forgot to put bread in the refrigerator. After three days she found some greyish growth on it. What this growth actually is-
   a. bread mould b. bacteria c. virus d. protozoa
12. Blue green algae fix – – – directly from air and enhance fertility of soil.
   a. oxygen b. carbon dioxide c. methane d. nitrogen
13. Alcohol is produced with the help of
   a. sodium chloride, b. yeast, c. nitrogen, d. carbon dioxide
14. What helps in the rise of bread or dosa dough?
   a. Heat, b. Grinding, c. Growth of yeast cells, d. Low pressure
15. Bacteria present in root nodules of pea
   a. Coli, b. Plasmodium, c. Rhizobium, d. Penicillin
16. Which cannot fix atmospheric nitrogen in the soil?
   a. Rhizobium, b. Clostridium, c. Azotobacter, d. Penicillin

REASON AND ASSERTION BASED QUESTIONS : DIRECTIONS: The questions in this section consists of two statements, one is "Assertion A" and the other one is "Reason R". You are to examine these two statements carefully and decide if the Assertion “A” and Reason “R” are individually true. If so whether the reason is a correct explanation of the assertion. Answer the following questions selecting the appropriate options given below

17. **Assertion A:- Legumes help to retain the soil fertility.**
    Reason R :- Microbes or nitrogen fixing bacteria in the root nodules of leguminous plants fix the atmospheric nitrogen.
    a) Both A and R are true and R is the correct explanation of A.
    b) Both A and R are true but R is not the correct explanation of A.
    c) A is true but R is false.
    d) A is false but R is true.
18. Which of the following insect is a carrier of malarial parasite?
    a. Culex mosquito b. Anopheles mosquito c. House d. Aedes Mosquito
19. Which gas is released during the preparation of bread by using yeast?
    a.Carbon dioxide b Sulphur dioxide c. Oxygen d. Nitrogen

Reasoning and Assertion Type Questions:

20. Assertion - viruses do not have a cell wall, cell membrane and nucleus .
    Reason - viruses may sometimes kill the host cells as they multiply by using the energy of the host cell.
    a) Both A and R are true and R is the correct explanation of A.
    b) Both A and R are true but R is not the correct explanation of A.
    c) A is true but R is false.
    d) A is false but R is true.
21. Assertion - Algae are classified as green algae , brown algae ,blue green algae and red algae
    Reason - The different colours of algae is due to the different coloured pigments
    a) Both A and R are true and R is the correct explanation of A.
    b) Both A and R are true but R is not the correct explanation of A.
    c) A is true but R is false.
    d) A is false but R is true.
22. In order to take precautionary steps to control dengue, we must take measures to stop the breeding of:
    a .Aedes mosquito, b. Fleas, c. Fire ants, d. Anopheles mosquito
23. Lactobacillus is a-
    a. Protozoa b. Bacteria c. Virus d. Fungi
24. Which of the following is an antibiotic?
    a. Penicillin b. Vaccine c. Alcohol d. None of these

ANSWERS:

1.Antibiotics, 2. Carbon dioxide, 3. Sodium hydroxide, 4. Malaria, 5. Growth of Yeast cell, 6. Typhoid, 7. Blue-green algae, 8. BCG, 9. Small pox, 10.A fungus, 11. Bread Mould, 12. Nitrogen, 13. Yeast, 14. Growth of yeast cells, 15. Rhizobium, 16. Penicillin, 17. Both A and R are true and R is the correct explanation of A, 18. Anopheles mosquito, 19. Carbon dioxide, 20. Both A and R are true but R is not the correct explanation of A, 21 Both A and R are true and R is the correct explanation of A, 22. Aedes mosquito, 23. Bacteria, 24. Penicillin

COMPETENCY BASED QUESTIONS

CLASS - VIII

CHAPTER 3: SYNTHETIC FIBRES AND PLASTICS

1. Which of the following in a source of Rayon?
   a. Wool b. PET c. Wood pulp d. Silk
2. Which of the following is not a common property of plastics?
   a. Non-reactive, b. Light in weight c. Durable d. Good conductor of electricity
3. The synthetic material which can be used for making fabrics as well as shatter proof bottles and jars is
   a. Nylon b. Rayon c. Polyester d. Acrylic
4. The non-stick coating on frying pans is that of a plastic called
   a. Polyvinyl chloride b. Melamine c. Bakelite d. Teflon
5. The similarity between artificial silk and cotton is that
   a. Both are non-biodegradable b. both melt on heating c. both are amide polymers d. Both are cellulose polymers
6. Nylon has -------- tensile strength.
   a. very low b. low c. medium d. high
7. One of the following man- made fibre is not prepare from raw materials obtained from petrochemical
   a. polyester b. Nylon c. Rayon d. Acrylic
8. A plastic used for making crockery
   a. Polythene b. Bakelite c. Melamine d. acrylic
9. First fully man-made fibre
   a. Rayon b. Nylon c. Polyester d .acrylic
10. PET is a
    a. Polyester b. Polyamide c. Nylon d. thermosetting polymer
11. Which fibre is also known as artificial silk?
    a. Nylon b. acrylic, c. rayon, d Terycot
12. Rohan saw his mother that after winter season, she is keeping woollen clothes in the box. He found that she was putting white small balls also along with the clothes. What are these balls used for?
    a. To repel moth and other insects, b. To absorb moisture c. To attract moth, d decorate the clothes.
13. Polymers are made up of small units called
    a. layers, b. molecules, c. cells, d. monomers
14. Wood pulp is used to make
    a. plastic, b. wool, c. jute, d. rayon
15. Fibre produced in factories is called
    a. man-made fibre, b. natural fibre, c. synthetic fibre, d. both (a) and (c)
16. PET is a
    a. polyester, b. polyamide, c. nylon, d. thermosetting polymer
17. Naturally occurring polymer is
    a) cellulose, b) polyester, c) nylon, d) PVC

ANSWER:

1.Wood pulp, 2 .good coductor of electricity, 3. Polyester, 4.teflon, 5.Both are cellulose polymer, 6. High, 7.rayon, 8. Melamine, 9. Nylon, 10. Polyester, 11. Rayon, 12. To repel moth and other insects, 13. Monomers, 14. Rayon, 15. Both (a) and (c), 16. Polyester, 17.) **Cellulose**

COMPETENCY BASED QUESTIONS

CLASS - VIII

CHAPTER 4: MATERIALS: METALS AND NON- METALS

1. The substance that will be flattened on beating with a hammer is
   a. Crystal of iodine b. Lump of sulphur c. Piece of coal d. Zinc granule
2. Metal 'X' displaces metal 'Y' from its salt solution but is not able to displace metal 'Z' from its salt solution. Identify the most reactive metal.
   a. X, b. Y, c. Z, d. cannot be determined
3. Which among the following is an application of sulphur?
   a. for making antiseptic b. For making crackers c. For making fertilizers d. For water purification
4. Which of the following is a non-metal used as a disinfectant?
   a. Chlorine b. Bromine c. Iodine d. Fluorine
5. Which one of the following four metals would be displaced from the solution of its salt by the other three metal?
   a. Zinc b. Silver c. Copper d. Magnesium
6. Which of the following pairs cannot undergo displacement reaction?
   a.Iron sulphate solution and magnesium b. Zinc sulphate solution and iron c. Zinc sulphate solution and calcium d. silver sulphate solution and copper
7. The element 'z' burns in air to form an oxide. The aqueous solution of this oxide turns blue litmus red. The element 'Z' is most likely to be
   a. Carbon b. Calcium c. Iron d. Magnesium
8. Which of the following statement is correct?
   a. All metals are ductile b. All non-metals are ductile c. Generally metals are ductile d. Some non-metals are ductile
9. The ---------- oxides turns blue litmus red
   a. Metals b. Non-metals c. metalloids d. none of these
10. Gold and platinum occur in nature as
    a. Minerals b. ores c. combined with oxygen and sulphur d. free metals
11. Which of the following is a liquid at room temperature?
    a. Iron, b. Bromine, c. Iodine, d. Phosphorus
12. Which one of the following metals is the most ductile?
    a. Aluminium, b. Copper, c. Silver, d. Gold
13. Which of the following statements is correct?
    a) All metals are ductile b)All non metals are ductile
    c) generally metals are ductile d) Some non metals are duct**ile**
14. Q4: Which of the following materials react with cold water vigorously ?
    a) sodium b) magnesium c) carbon d) sulphur

REASON AND ASSERTION BASED QUESTIONS :

15. **Assertion A :The colour of copper sulphate solution changes to light green when iron nail is dipped into it.**
    Reason R: Iron being more reactive than copper displaces it from the solution
    a) Both A and R are true and R is the correct explanation of A.
    b) Both A and R are true but R is not the correct explanation of A.

c) A is true but R is false.
d) A is false but R is true.

16. In the following question, a statement of assertion is followed by a statement of reason. Mark the correct choice as:
    (a) Both Assertion and Reason are correct and Reason is the correct explanation of Assertion
    (b) Both Assertion and Reason are correct but Reason is not the correct explanation of Assertion
    (c) Assertion is correct and Reason is incorrect
    (d) Assertion is incorrect and Reason is correct
    Assertion: Metals are sonorous.
    Reason: They are generally break when hammered.

17. Which of the following methods is suitable for preventing an iron frying pan from rusting?
    a) Applying paint , b) Applying grease, c) Applying a coating of zinc d) All of these
18. Radha burns magnesium in air and she adds water to the product. She then adds blue litmus to it. What will she observe?
    a.Blue litmus turns colourless, b. No colour change, c Blue litmus turns red, d..None of above

ANSWER:

(a) **1.Zinc granule, 2.'Z', 3.For making crackers, 4.Chlorine, 5. silver, 6.Zinc sulphate solution and iron, 7.Carbon, 8. Generally metals are ductile 9. Non-metal, 10. Free metals, 11.bromine, 12. Gold, 13. Generally metals are ductile, 14. sodium, 15. Both A and R are true and R is the correct explanation of A, 16. Assertion is correct and Reason is incorrect, 17. Applying a coating of zinc, 18. No colour change**

CLASS - VIII

CHAPTER 5: COAL AND PETROLEUM

1. Which of the following is not a fossil fuel?
   a. Petrol b. Coke c. Charcoal d. Coal
2. The major component of LPG is
   a. Hydrogen b. Carbon monoxide c. Methane d. Butane
3. Which is the major component of CNG?
   a. Ethane b. Propane c. Methane d. Butane
4. Which of the following is usually referred to as 'Black gold'?
   a. Coke b. Coal tar c. Petroleum d. Coal
5. Which of the following is used as a reducing agent in extraction of iron metal?
   a. Coal b. Bitumen c. charcoal d. Coke
6. Name the petroleum product used for surfacing of roads
   a. Bitumen b. Paraffin wax c. Gasoline d. Crude oil
7. Process of separating of different constituents from petroleum is called
   a. Refining b. Cleaning c. Mining d. carbonization
8. Which of the following is a pair of exhaustible natural resources?
   a. Coal and Soil b. Air and Sunlight c. water and petroleum d. Wildlife and minerals
9. Coal is used in thermal power plant to produce
   a. Coke b. Coal tar c. Electricity d. a&b
10. _____ is a hard fossil fuel.
    a. Petroleum b. Natural gas c. Coal d. wood
11. Petroleum products can affect the environment. Drilling for petroleum may cause disturbances in the aquatic ecosystems. Transporting petroleum may cause oil spills. Sometimes tanks in which petroleum is stored may leak and pollute the ground water. Refining of petroleum to produce various products may lead to water and air pollution. When petroleum products are burnt, it gives off pollutants like carbon dioxide, carbon monoxide, nitrogen dioxide and particulate matter.
    i) Which of the following is/are affect(s) of petroleum products on environment?
    a. air pollution b. water pollution c. Greenhouse effect d. all of these
    ii) Name the gas which doesn't cause global warming.
    a. Carbon dioxide b. Methane c. Nitrous oxide d. Carbon monoxide
12. PCRA stands for
    a. Public Conservations Research Association, b. Petroleum Conservation Research Association, c. Public Council of Research Association, d. Partial Counting of remaining Amendment
13. Which one is not a coal product?
    a. Coal tar, b. Coal gas, c. Lime, d. Coke
14. Name the petroleum product used for surfacing of road
    a. Peat, b. Lignite, c. Anthracite d. Bitumen

15. The white semi-solid fraction of petroleum used for making vaseline is
    a) asphalt, b) lubricating oil c) paraffin wax d) fuel oil
16. …… are the substances that burn to produce heat and light energy.
    a. fossil b gums c Oxygen d. Fuel

ANSWER:

1.Charcoal, 2.Butane, 3.Methane, 4.Petroleum, 5. Coke, 6. Bitumen, 7.Refining, 8. Wildlife & minerals 9.electricity,10.Coal 11, i) d, ii)d 12. Petroleum Conservation Research Association, 13. Lime, 14. Bitumen, 15. Paraffin wax, 16. Fuel

CLASS - VIII

CHAPTER 6: COMBUSTION AND FLAME

1. Though oxygen is a supporter of combustion and hydrogen is combustible, water- a compound of hydrogen and oxygen- is neither combustible nor supports combustion. Which of these correctly suggests why?
   a. The constituents of a compound negate each other's properties
   b. The properties of a compound differ from the properties of its constituents
   c. Water is a mixture having two parts of hydrogen for every part of oxygen
   d. Water is not at all effective in fighting petrol and some other fires
2. Which of these explains why a chullah fire or a camp fire burns brighter when it is fanned?
   a. the air tries to put out the fire, so the fire burns brighter
   b. the amount of fuel available to fire increases
   c. The amount of oxygen available to burn increases
   d. it removes the burnt ashes allowing the wood to burn
3. Water was poured over a large oil fire to extinguish it. What would happen and why?
   a. The fire will be put off since water extinguishes fire.
   b. The fire will spread since oil floats on water
   c. the fire will be put off since water dissolves oil
   d. the fire will spread since water contains hydrogen that is a combustible gas
4. Burning of LPG is an example of----------.
   a. Rapid b. Spontaneous c. Slow d. explosion
5. Which of the following is not an inflammable substance?
   a. LPG b. Kerosene c. dry grass d. Glass
6. Which of the following is not given out during complete combustion?
   a. heat b. light c. carbon monoxide d. carbon dioxide
7. The colour of the cooking gas flame is
   a. yellow b. red c. orange d. blue
8. Which of this will have lower ignition temperature
   a. Green leaves b. Dry leaves c. a piece of card board d. a piece of wood
9. The effects of depleting green vegetation is reduction in the amount of oxygen in the earth's atmosphere. This effect will be similar to shifting from
   a. A mountain top to sea level
   b. sea level to a mountain top
   c. sea level to below sea level
   d. From poles to Sahara desert
10. Which of the following is a pair of exhaustible natural resources
    a. coal and soil b. Air and sunlight c. Water and petroleum d. wildlife and minerals
11. In villages, people use wood as fuel because
    a. It is considered as an ideal fuel, b. of its easy availability and low cost,
    c. It is environment friendly, d. It catches fire easily

12. The substance expected to have the highest ignition temperature out of the following is
    a. Kerosene b. Petrol c. Coal d .Alcohol
13. Shyam was cooking potato curry on a chulha. To his surprise he observed that the copper vessels was getting blackened from outside. It may be due to
    a. Proper combustion of fuel, b. Improper cooking of potato curry, c. Improper combustion of fuel, d. Burning of copper vessel
14. Condition/Conditions under which combustion can take place.
    a. Fuel, b. Air, c. Certain temperature, d.All the above.
15. Which one of the following gases is used in combustion?
    a. Hydrogen, b. Oxygen, c. Nitrogen, d. Carbon dioxide
16. The burning of LPG is an example of
    a. rapid combustion, b. spontaneous combustion, c. slow combustion, d. explosion
17. Which of the following is not a fossil fuel?
    a. Coals, b. Petroleum, c. Natural gas, d. Water gas
18. Sameera and Afreen are burning crackers. Suddenly Spark falls on Afreen clothes and her clothes catch fire. Which will be the best way to extinguish the fire:
    a) Cover her with a woolen blanket b. Cover her with plastic sheet
    c)Throw water on her clothes d. Spray Fire extinguisher on her clothes
19. Why do villagers use wood as fuel to cook food?
    a.It is safe for environment b. It is an ideal fuel
    c.It is easily available and low-cost d. It easily catches fire
20. Some characteristics of an ideal fuel are given below. Choose the incorrect statement for the good fuel
    a. Easy availability b. Produces large amount of heat
    c.Easily burns in air at moderate rate d. Leaves undesirable particles after burning

Reasoning and Assertion Type Questions:

21. **Assertion - Burning of a substance requires both air and moisture**
    Reason - Oxygen is a supporter of combustion
    a) Both A and R are true and R is the correct explanation of A.
    b) Both A and R are true but R is not the correct explanation of A.
    c) A is true but R is false.
    d) A is false but R is true.
22. Which zone of a flame does a goldsmith use for melting gold and silver?
    (a) Outer zone
    (b) Middle zone
    (c) Inner zone
    (d) Lower zone
23. A good fuel should have
    a. Low ignition temperature b. High calorific value c low cost d. High price

ANSWER:

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

COMPETENCY BASED QUESTIONS

CLASS - VIII

CHAPTER 7: CONSERVATION OF PLANTS AND ANIMALS

1. Deforestation increases the level of one of the following in the atmosphere.
   a. ozone b. carbon dioxide c. oxygen d. water vapour
2. The migratory bird which comes from Siberia to India for a few months every year is
   a. crow b. koel c. crane d. kingfisher
3. Which of the following is not a consequence of deforestation?
   a. Increase in soil erosion b. increase in earth's atmosphere c. decrease in rainfall d. decrease in floods
4. Which of the following activities, if not checked in time, may ultimately lead to the rise in sea level causing the flooding of low-lying coastal areas?
   a. Desalination b. desertification c. deforestation d. desegregation
5. Which of the following activities can help in the conservation of forest?
   a. Recycling of cotton shirt b. recycling of silk blankets c. Recycling of jute ropes d. Recycling of cardboard cartons
6. Which of the following is an endangered species of animals?
   a. Dinosaur b. Asiatic Lion c. Irish deer d. Hyena
7. Jim Corbett National Park is known for conservation of
   a. Tiger b. Lions c. Elephants d. Rhinoceroses
8. Which of the following is not a cause of loss of bio diversity?
   a. Destruction of habitat
   b. illegal hunting
   c. Overexploitation of natural resources
   d. Keeping animals in zoological park
9. The place meant for conservation of biodiversity in the natural habitat are:
   i) Zoological park ii) Botanical garden iii) Wildlife sanctuary iv) National park
   a. i and ii b. ii and iii c. iii and iv d. i and iv
10. The most rapidly dwindling natural resources in the world is:
    a. water b. soil c. sunlight d. forest
11. Species found in a particular area is known as –
    a. Endangered b. Popular c. Endemic d. Extinct

ANSWER:

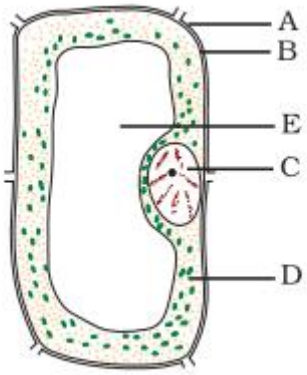
1.Carbon dioxide, 2.crane, 3.decrease in floods 4.deforestation, 5. Recycling of cardboard cartons, 6. Asiatic lion 7.tiger, 8. Keeping animals in zoological park 9.iii & iv,10.Forest, 11 Endemic

CLASS - VIII

CHAPTER 8: CELL-STRUCTURE AND FUNCTIONS

1. What are antibodies?
   a)Germs that damage our bodies
   b) Molecules that help destroy foreign cells
   c) Cells that are used in blood transfusion
   d) Agents used in cross-matching of blood
2. In general, how does the size of the cells of an animal relate to the animals size?
   a) It is directly proportional to the size of the animal
   b) It is inversely proportional to the size of the animal.
   c) It is almost the same irrespective of the size of the animal
   d) The smallest and largest animals have larger cells than others.
3. The unit of measurement used for expressing dimension of the cell is
   a) Centimetre
   b) Millimetre
   c) Micrometre
   d) Meter
4. Which of the following statements is true for eukaryotic cells
   i) They do not have a nuclear membrane
   ii) They have a well-organized nucleus
   iii)They have a nuclear membrane
   iv) Blue green algae are eukaryotic cells
   a) (ii) and (iv), b) (ii) and (iii), c) (i) and (ii), d) (i) and (iv),
5. Identify the correct statement about cell
   a) All the cells have nucleus
   b) Cells of an organ have similar structure
   c) Cells of a tissue have similar structure
   d) Shape of all types of cells is round
6. Which of the following is not a cell?
   a) Red blood corpuscles
   b) Bacterium
   c) Female egg
   d) Virus
7. Paheli accidentally placed her hand over a flame and immediately pulled it back. She felt the sensation of heat and reacted due to action of
   a) Blood cells
   b) Skin surface
   c) Muscle
   d) Nerve cells

8. Of the following parts of cell listed below, name the part that is common to plant cell, animal cell and bacterial cell
   a) Chloroplast
   b) Cell membrane
   c) Cell wall nucleus
9. The living substance of cell is
   a) Membrane
   b) Chloroplast
   c) Organelle
   d) Protoplasm
10. Choose the correct statement with respect to unicellular organism
    a) In unicellular organism tissue works in coordination to perform different functions
    b) Unicellular organisms do not require food
    c) Unicellular organisms respire and reproduce
    d) All unicellular organisms move with cilia
11. Powerhouse of a cell is-
    a. Nucleus b. cytoplasm c. mitochondria d. vacuole
12. Cells present in living organism differ in
    a. numbers, b. shape, c. size d. all of these
13. Genes are located in
    a. chromosomes, b. plastids, c. cytoplasm, d. lysosome
14. The cells capable of changing shapes are
    a. Amoeba cell, b. WBC, c. Both of these, d. None of these
15. Which of the following term is not a part of the nucleus?
    a.Mitochondria. b.Nucleolus c. Chromosomes d. Gene
16. What do we call the thread like structures present in the nucleus
    a) Chromosomes b) Genes c) Nucleoplasm d) Ribosomes
17. Identify the function of the part labelled as 'A' in the given figure :



    a. Provides rigidity to the plant cell b. Stores the cellular waste material.
    c. Controls all the activities of the cell d. None of the above

REASON AND ASSERTION BASED QUESTIONS :DIRECTIONS: The questions in this section consists of two statements, one is "Assertion A" and the other one is "Reason R". You are to examine these two statements carefully and decide if the Assertion "A" and Reason "R" are individually true. If so whether the reason is a correct explanation of the assertion. Answer the following questions selecting the appropriate options given below

18. **Assertion A :- The prokaryotic cells do not have a well defined nucleus and a nuclear membrane**
    Reason R - The human cheek cells come under the category of prokaryotic cells.
    a) Both A and R are true and R is the correct explanation of A.
    b) Both A and R are true but R is not the correct explanation of A.
    c) A is true but R is false.
    d) A is false but R is true.
19. Which of these cells will have cell wall around them ?
    a) Cheek cells b) Nerve cells c) Onion peel cells d) Blood cells

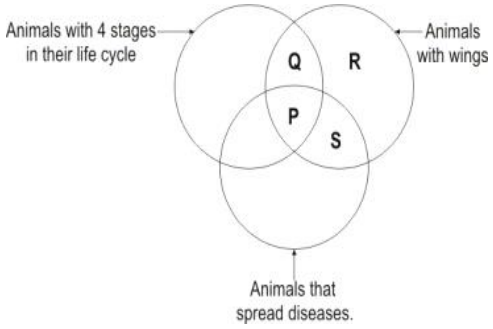
ANSWER:

1. molecules that help destroy foreign cells, 2.it is almost the same irrespective of the size of the animal, 3. Micrometre, 4. (ii) & (iii), 5. Cells of a tissue have similar structure, 6. Virus, 7.Nerve cells, 8. Cell membrane 9. Protoplasm, 10. Unicellular organisms respire and reproduce, 11. Mitochondria, 12. all of these, 13. chromosomes, 14. Both of these, 15. Mitochondria., 16. Chromosomes, 17. Provides rigidity to the plant cell, 18. A is true but R is false, 19. Onion peel cells

CLASS - VIII

CHAPTER 9: REPRODUCTION IN ANIMALS

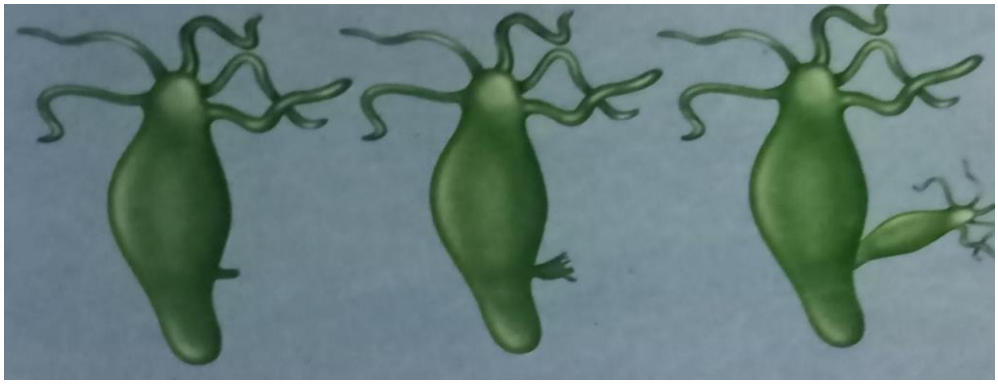
1. The animals that give birth to young ones are called_____animals
   a. Omnivorous b. viviparous c. oviparous d. herbivorous
2. Ovaries are attached to the uterus by a fibrous cord called _____
   a. Ovarian ligament b. Ovarian tendons c. a &b d. none of these
3. Which of the following is carried by urethra?
   a. Urine b. semen c. None of these d. both a & b
4. Fertilization of egg in case of women takes place in _____
   a. uterus b. vagina c. ovary d. fallopian tube
5. Characteristics that are transmitted from parents to offspring during sexual reproduction show
   a. only similarities with parents
   b. only variations with parents
   c. both similarities and variations
   d. neither similarities and variations with parents
6. The process that ensures continuity of life on earth is _____
   a. respiration b. excretion c. reproduction d. digestion
7. Mickey was observing the behavior of ducklings. He saw that they followed their mother after hatching. He took a few ducklings as soon as they hatched and kept them in a separate pool, which had a fake duck. He found that the ducklings followed the fake duck. On the basis of this experiment Mickey suggested the following explanation. Which of them could be true?
   a. either a mother duck or a fake duck is required for the eggs to hatch
   b. after hatching, the ducklings follow the first large moving object that they see
   c. The ducklings would not have learnt to swim without the fake duck
   d. The mother duck had instructed the ducklings to follow the fake duck
8. The production of an exact copy of a cell, any body part or a complete organism is
   a. reproduction b. cloning c. Metamorphosis d. None of these
9. Jean Baptiste Lamarck, a French natural historian, proposed a theory which said that if an organism acquires a character, it is passed on to its future generations. For example, Irfan's parents are thin and so will be Irfan. But if he starts eating more and put on weight, according to Lamarck's theory , he will pass on this characteristic to his children. A German biologist, August Weismann, did an experiment in which he cut off the tails of mice in 19 successive generation; yet each new generation was born with a tail. What can be concluded on the basis of these experiment?
   a. Weismann's experiment contradicted Lamarck's theory
   b. Weismann's experiment supported Lamarck's theory
   c. Weismann's experiment linked Lamarck's theory.
   d. Weismann's experiment was wrong
10. Study the diagram given below. In it, P could represent the mosquito, as it has 4 stages in its life cycle, it spreads diseases and it has wings. Which animals could letters Q, R and S represent?



a. Q-Moth, R-Cockroach, S-Frog, b. Q-Frog, R-Firefly, S-Grasshopper, c. Q-Moth, R-Firefly, S-Cockroach, d. Q-Grasshopper, R-Sparrow, S-Housefly

11. The transformation of larva into an adult through drastic changes is called-
    a.Fertilisation b. Adolescence, c. Metamorphosis d. Reproduction
12. In humans, the development of fertilized egg takes place in the
    a.ovary, b. tests, c. oviduct, d. uterus
13. In the list of animals given below, hen is the odd one out.
    human being, cow, dog, hen
    The reason for this is
    (i) it undergoes internal fertilization
    (ii) it is oviparous
    (iii) is viviparous.
    (iv) it undergoes external fertilization.
    a.Both (iii) & (iv), b. Only (iii), c.Both (i) & (ii), d.Both (i) & (iii)
14. Animals exhibiting external fertilization produce a large number of gametes.
    Pick the appropriate reason from the following:
    a. The animals are small in size and want to produce more off springs, b. Food available in plenty in water, c. To ensure better chance of fertilization, d. water promotes production of large number gametes
15. Aquatic animals in which fertilization occurs in water are said to be:
    a. viviparous without fertilization, b. oviparous with external fertilization c. viviparous with internal fertilization, d. oviparous with internal fertilization
16. What do we call the structure that gets embedded in the Wall of uterus in human beings?
    a. Embryo b. Ovum c. Foetus d. Zygote
17. Choose the correct sequence of events during human reproduction:
    a. fertilization, gamete formation, embryo, zygote
    b. gamete formation, fertilization, embryo and zygote
    c. embryo, zygote, fertilization, gamete formation
    d .gamete formation ,fertilization , zygote, embryo

18. Observe the given picture. It shows:



a. Binary fission.in Amoeba
b. Budding in Hydra
c. Spore Formation
d. None of the above

Reasoning and Assertion Type Questions:

DIRECTIONS: The questions in this section consists of two statements, one is "Assertion A" and the other one is "Reason R". You are to examine these two statements carefully and decide if the Assertion "A" and Reason "R" are individually true. If so whether the reason is a correct explanation of the assertion. Answer the following questions selecting the appropriate options given below:

19. Assertion - Amoeba reproduces by the process of binary fission
Reason - In each Amoeba a bud like bulge appears on the body upon maturation
a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false.
d) A is false but R is true.

20. In the list of animals given below, hen is the odd one out:-
'human being, cow, dog, hen'
The reason for this is
(a) it undergoes internal fertilisation
(b) it is oviparous
(c) it is viviparous
(d) it undergoes external fertilisation

ANSWER:

1.Viviparous, 2. Ovarian ligament, 3. Both a & b, 4. Fallopian tube, 5. Both similarities and variations, 6. Reproduction, 7. After hatching, the ducklings follow the first large moving object they see, 9.Weismann's experiment contradicted Lamarck's theory, 10. Q-Moth, R-Firefly, S-Cockroach, 11. Metamorphosis, 12. Uterus, 13. Both (i) & (ii), 14. To ensure better chance of fertilization, 15. . oviparous with external fertilization, 16. Embryo, 17. gamete formation ,fertilization , zygote, embryo, 18. . Budding in Hydra, 19. A is true but R is false, 20. it is oviparous

COMPETENCY BASED QUESTIONS

CLASS - VIII

CHAPTER 10: REACHING THE AGE OF ADOLESCENCE

1. What is the most important reason we sweat?
   a. To eliminate excess water from our body
   b. To reduce excess body weight
   c. To cool down our body
   d. to eliminate waste from our body
2. When Saurabh saw a thief entering his house stealthily in the middle of night, he was alarmed and his heart started beating fast. These symptoms could be attributed to the action of which hormone?
   a. Adrenaline b. thyroxin c. testosterone d. insulin
3. Given below is a doctor's advice to a person: 1. Get your blood glucose levels checked regularly. 2. Control your diet. 3. Exercise regularly. 4. Take medication without fail. The person to whom this advice is given is MOST likely to be
   a. a growing child b. a person suffering from diabetes c. a pregnant woman d. an athlete
4. A boy is 11-year old and has 80% of his full height. He is 120cm tall. His full height at the end of his growth period
   a. 160cm tall b. 150cm tall c.165cm tall d. 155cm tall
5. Vikram and Ana measure the number of breaths they take per minute while doing different activities. Study these and answer the question. The increase in rate of respiration observed serves what purpose?
   a. More glucose is delivered to muscles as their energy source
   b. More hemoglobin is delivered to muscles as their energy source
   c. More oxygen is delivered in order to breakdown glucose to do work
   d. More carbon dioxide is delivered in order to breakdown glucose to do work

Activity	Vikram (Breathe per minute)	Ana(Breathe per minute)
Sitting	12	14
Walking	25	25
Running	40	39

6. Ravi (25 years) and Sneha (12 years) measure the number of breaths they take per minute while doing different activities. Study these and answer the question. Which of these is a valid conclusion from this data?
   a. The rate of respiration is more for girls than boys
   b. The rate of respiration increases with increase physical activity
   c. The rate of respiration increases with age of a person
   d. The rate of respiration decreases with age of a person

Activity	Ravi (Breathe per minute)	Sneha (Breathe per minute)
Sitting	12	14
Walking	25	25

Running	40	39

7. Marathon runners need to stay trim and healthy but also needs lot of energy. Which of these foods would be most suitable for a marathon runner

NUTRITIONAL HIGHLIGHTS IN g/100g

	PROTEIN	CARBOHYDRATES	FATS
A	11.2	66.2	2.1
B	26	0	0.2
C	8.2	11.5	9
D	8	10	0.5

a. A b. B c. C d. D

8. The belief that the mother is completely responsible for the sex of the child is wrong because the child
   a. gets sex chromosomes only from the mother
   b. develops in the body of the mother
   c. Gets one sex chromosome from mother and the other from the father
   d. Gets sex chromosomes only from the father
9. The most conspicuous visible change that occurs in boys during puberty is
   a. development in voice box
   b. Increase in height
   c. production of sperms
   d. increased swelling
10. Which of the following is mis-match pair
    a. Adrenaline; Pituitary b. estrogen: Ovary c. Pancreas: Insulin d. Testosterone; Testis
11. Which of the following can lead to menstruation in a 21 year old woman during ovulation?
    A) Sperms available for fertilization B) Oviduct blocked C) Sperms not available for fertilization D) Oviducts not blocked
    a. A,B b. B,D c. C,D d. B,C
12. The endocrine glands release hormones into the bloodstream to reach a particular body part known as –
    a.shooting site b. construction site, c. covered site, d. target site
13. Adolescence is the period of
    a. 5 to 10 years, b. 11 to 19 years, c. 22 to 28 years, d. 30 to 40 years
14. When a sperm having X-chromosome fuses with the ovum, the child born will be
    a. male, b. female, c. male as well as female twin, d. it depends on the chance of fusion
15. How many pairs of Chromosomes are found in nuclei of their cells?
    a. 22 pairs, b. 23 pairs, c. 24 pairs, d. 25 pairs
16. Testes secrete
    a. thyroxin, b. estrogen, c. testosterone, d. iodine
17. The chemical substances which are secreted from endocrine glands are called

a.puberty, b. hormones, c. estrogen, d. adolescence

18. The right meal for adolescents consists of:
    a. chips, noodles, coke b. chapati, dal,vegetables
    c. rice, noodles, burger d. vegetable cutlet, chips, lemon drink
19. Thyroxine production in frogs requires the presence of which of the following minerals in water:
    a. Iodine b. Sulphur **c.** Carbon d. Chlorine

Case Study Based Questions :

The students of Birla Mandir School were taken to a nearby health center. On their visit they observed a boy Raja with big and bulging throat. Upon inquiring the doctor, they came to know about many diseases caused due to the lack of hormones in the body.

Now answer the following questions based on your knowledge of the chapter

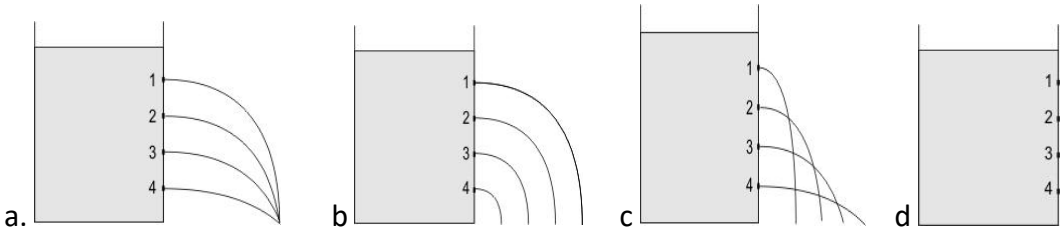
20. Which disease is Raja suffering?
    a. Goiter b. Rickets c. Dwarfism d. Night Blindness
21. Which hormone helps in the proper functioning of thyroid gland**.**
    a..Adrenaline b. Thyroxin c. estrogen d. Growth-hormone
22. Which organ of the body produces insulin hormone?
    a.Liver b. Ovary c. Pancreas d. Kidney
23. The endocrine gland attached to the brain is**:**
    a. Adrenal b. Thyroid c. Pituitary d. Testes
24. When a sperm having X-chromosome fuses with the ovum, the child born will be
    a)Male (b) female (c) male as well as female twin (d) it depends on the chance of fusion
25. Human body cells contains……. pair of chromosomes.
    a.29 b.24 c.23 d. 20
26. Voice box is ……. in boys than that in girls.
    a. smaller b. bigger c. same size d. none of these
27. In humans, the development of embryo take place in
    a. Oviduct b. uterus c. Pancreas d. Ureter

ANSWER:

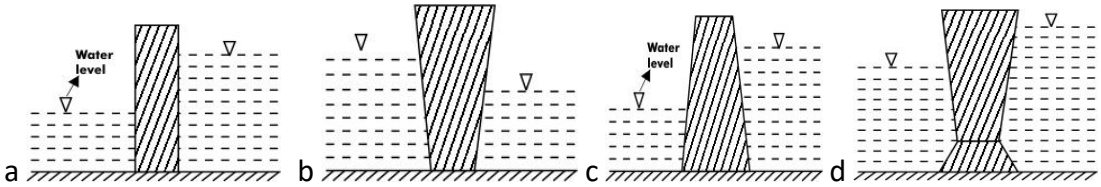
1.To cool down our body, 2.Adrenaline, 3.a person suffering from diabetes, 4.150cm tall , 5. More oxygen is delivered in order to breakdown glucose to do work, 6. The rate of respiration increases with increased physical activity, 7.A, 8. Gets one sex chromosome from mother and other from the father 9.Increase in height ,10.adrenaline: Pituitary 11. B,C, 12. Target site, 13. 11 to 19 years, 14. . female, 15. 23 pairs, 16. Estrogen, 17. Hormones, 18. chapati, dal,vegetables, 19. Iodine, 20. Goiter, 21 Thyroxin, 22. Pancreas, 23. Pituitary, 24. Female, 25. 23 pairs, 26. Bigger, 27. Uterus

CLASS - VIII
CHAPTER 11: FORCE AND PRESSURE

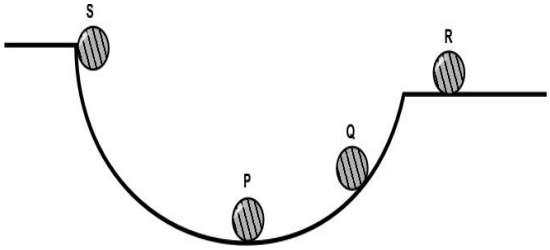
1. The figure shows a cylindrical can with four holes on one side. If water is filled in the can, which figure correctly represents the situation?



2. We know that the pressure of water increases with depth. Then, which of the following shows the most possible shape of a dam?



3. A ball is released from position S on the surface shown. Which of the following can be the position of the ball when it finally stops?



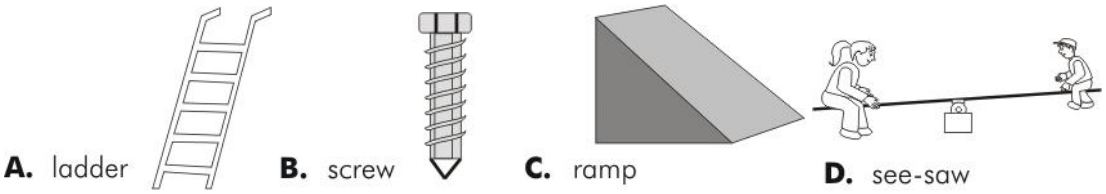
e) Definitely P

f) Definitely Q

g) Definitely R

h) P or R

4. Among the following simple machines, which is the odd one out?



5. I am travelling in a car, which is moving fast along a straight road. The car comes to a sudden halt. I will

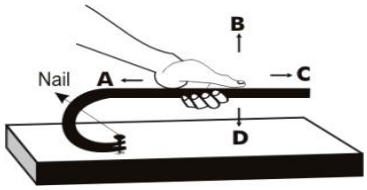
e) Feel a force pulling me ahead.

f) Feel a force pushing me back

g) Feel a force pushing me to the side.

h) Not feel any force at all.

6. The picture here shows a nail being removed from a piece of wood. In which direction should force be applied Red blood corpuscles



e) A

f) B

g) C

h) D

7. What will happen if a solid having the SAME density as the liquid is placed in it?

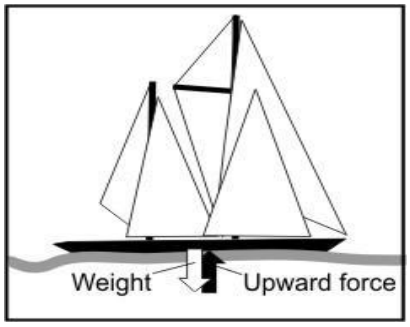
d) It will sink

e) It will float.

f) It will stay in any position within the liquid.

g) A solid cannot have the same density as a liquid.

8. The diagram below shows a boat floating on water. The arrows show the force of the water on the boat and also the downward weight force If two people get into the boat what will happen to the sizes of these forces?



a) Both the weight and upward force will increase equally

b) Both will increase, but the increase in the weight will be more

c) The weight increases and the upward force decreases

d) Both will increase, but the increase in the upward force will be more.

9. We know that all matter consists of molecules. When a gas is compressed, what happens to its molecules?

e) Nothing happens to the molecules, their arrangement or their movement

f) Each of the molecules gets compressed by about the same amount

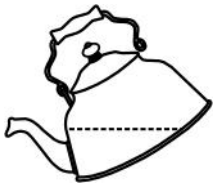
g) Nothing happens to the molecules, but the space between them reduces

h) Nothing happens to the molecules or their arrangement, but they start moving faster.

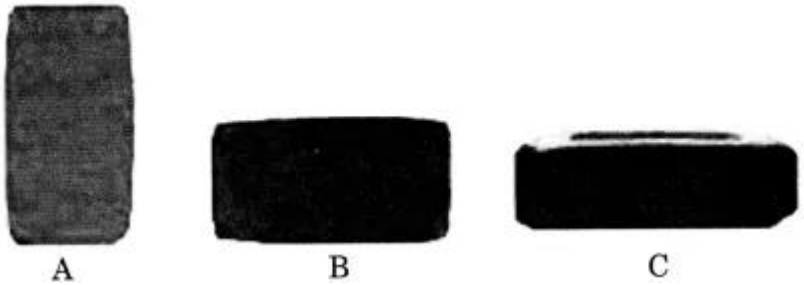
10. Which of these screws would the easiest to drive into a piece of wood?

a  b  c  d All Would be easy to drive

11. The level of tea in a kettle is shown here. Which of these correctly shows the level of the tea in the kettle later (after some tea has already been poured) while it is being poured into another cup?

a  b  c  d 

12. When we press the bulb of a dropper with its nozzle kept in water, air in the dropper is seen to escape in the form of bubbles, once we release the pressure on the bulb, water gets filled in the dropper.The rise of water in the dropper is due to-
    a. Pressure of water, b. Gravity of the earth, c. Shape of rubber bulb, d. Atmospheric pressure.
13. Two objects repel each other. This repulsion could be due to
    a. frictional force only, b. electrostatic force only, c. magnetic force only, d. either a magnetic or an electrostatic force
14. A brick is kept in three different ways as shown in given figure. The pressure exerted by the brick on the table will be



a. maximum in position A, b. maximum in position C, c. maximum in position B, d. equal in all cases

15. If in a tug-o-war, when two teams are pulling a rope, and the rope does not move towards any team, it implies that

a. Equal force is being applied in the same direction, b. Equal Force is being applied in opposite direction, c. No force is applied in any direction, d. Cannot be explained

REASON AND ASSERTION BASED QUESTIONS :

DIRECTIONS: The questions in this section consists of two statements, one is "Assertion A" and the other one is "Reason R". You are to examine these two statements carefully and decide if the Assertion "A" and Reason "R" are individually true. If so whether the reason is a correct explanation of the assertion. Answer the following questions selecting the appropriate options given below

16. **Assertion A: - A rubber sucker sticks to the surface when pressed hard**
Reason R: - The external pressure of atmosphere acts on the sucker to stick it to the surface .
a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false.
d) A is false but R is true.
17. A batsman hits a cricket ball which then rolls on the level ground. After covering a short distance the ball comes to rest. The ball stops due to
a) magnetic force b) frictional force c) gravitational force d) muscular force
18. If in a tug-of-war, when two teams are pulling a rope, and the rope does not move towards any team, it implies that
a.Equal force is being applied in the same direction, b. Equal force is being applied in opposite direction, c. No force is applied in any direction, d. Cannot be explained.

ANSWER:

1.c, 2. c, 3. d, 4. d, 5. a, 6.b, 7. c, 8.a, 9. c, 10 c, 11. a, 12. d, 13. d, 14. a, 15.b, 16 a, 17. b , 18. b,

CLASS - VIII

CHAPTER 12: FRICTION

1. Rajesh was walking along the footpath. He stepped on a banana skin and slipped. Rajesh slipped because
   a) He was careless
   b) He exerted a lot of force on the banana skin
   c) The banana skin reduced the friction between his shoes and the foot path
   d) His shoes were torn
2. Whenever the surfaces in contact tend to move or move with respect to each other, the force of friction comes into play
   a) Only if the objects are solids
   b) Only if one of the two objects is liquid.
   c) Only if one of the two objects is gaseous.
   d) Irrespective of whether the objects are solid, liquid, or gaseous
3. Gears are used to change speed in rotational movement. When two meshing gears are such that a tooth of the larger gear meshes with the same tooth of the smaller gear every time, it causes wear and tear damaging the gears. Which of these steps would avoid this problem?
   a) Ensuring that both the gears have exactly the same number of teeth
   b) Ensuring that the number of teeth in the bigger gear is exact multiple of that in the smaller gear
   c) Ensuring that the number of teeth in the bigger gear is not exact multiple of that in the smaller gear
   d) Ensuring that the two gears are made of the same materials
4. A toy car released with the same initial speed will travel farthest on
   a) Muddy surface
   b) Polished marble surface
   c) Cemented surface
   d) Brick surface
5. A boy rolls a rubber ball on a wooden surface. The ball travels a short distance before coming to rest. To make the small ball travel longer distance before coming to rest, he may
   a) Spread a carpet on the wooden
   b) Cover the ball with a piece of cloth
   c)Sprinkle talcum powder on the wooden surface
   d) Sprinkle sand on the wooden surface
6. If we apply oil on door hinges, the friction will
   a) Increase
   b) Decrease
   c) Disappear altogether
   d) Will remain unchange
7. Match with the best option: Soapy floor;

a) Less friction
b) More friction
c) Friction remains same
d) None of the above

8. Four children were asked to arrange forces due to rolling, static and sliding friction in a decreasing order. The correct arrangement is:
   a) Rolling, static, sliding
   b)Rolling, sliding, static
   c) Static, sliding, rolling
   h) Sliding, static, rolling
9. The friction between two surfaces does not depend on one of the following. This one is
   a) Amount of surface area of the two objects which is in contact with each other
   b) Weight of the object which tends to move on the surface of other object
   c) Degree of smoothness of surfaces of two objects in contact with each other
   d) Degree of roughness of surfaces of two objects in contact with each
10. Which of the following is not an advantage of friction?
    a) It enables drawing to be made on paper
    b) It enables fallen things to be picked up
    c) It enables rubber pads to be rubbed off
    d) It enables vehicles to move on ground
11. How can friction be reduced?
    a.By using oil, b. by using grease, c.By using air cushion d. all the above
12. A batsman hits the ball for a boundary past the bowler for four runs. The batsman thus
    a. Changes the direction & speed of the ball, b. Does not change the direction but speed only
    c. Does not change the speed but direction only, d. Does not change either direction or speed
13. Whenever the surfaces in contact tend to move or move with respect to each other, the force of friction comes into play
    a. only if the objects are solid, b. only if one of the two objects is liquid, c. only if one of the two objects is gaseous, d. irrespective of whether the objects are solid, liquid or gaseous.
14. Force of friction depends on
    a. roughness of surface, b. weight, c. area of contact, d. all of these
15. Which of the following statements is incorrect?
    a. Friction acts on a ball rolling along the ground, b. Friction acts on a boat moving on water.
    c. Friction acts on a bicycle moving on a smooth road, d. Friction does not act on a ball moving through air.
16. Fluids are
    a.liquids, b. gases, c. both (a) and (b), d. none of these.
17. On which of the following surface a toy car moving with the same initial speed will travel farthest:
    a) Polished Marble Surface b) Brick c) Muddy Surface d) Cemented Surface

18. What will be the effect of oiling in door hinges on the friction**?**
    a) Friction will increase b) There will be no friction at all c) Friction will decrease d) None of the above
19. Friction is caused by the _____on the two surfaces in contact:
    a) Particles b) Irregularities c) Fluid d) All of the above
20. Motor Mechanic use between the moving parts of Machines to reduce friction :
    a) Grease b) Sand paper c) Coarse powder d) None of these

REASON AND ASSERTION BASED QUESTIONS :

DIRECTIONS: The questions in this section consists of two statements, one is "Assertion A" and the other one is "Reason R". You are to examine these two statements carefully and decide if the Assertion "A" and Reason "R" are individually true. If so whether the reason is a correct explanation of the assertion. Answer the following questions selecting the appropriate options given below

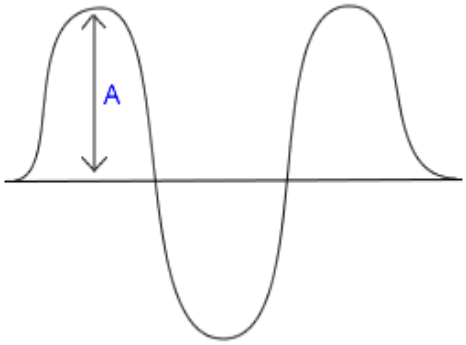
21. **Assertion A:- The sliding friction comes into play when one body rolls over another.**
    Reason R. - **Sliding friction is greater than rolling friction.**
    a) Both A and R are true and R is the correct explanation of A.
    b) Both A and R are true but R is not the correct explanation of A.
    c) A is true but R is false.
    d) A is false but R is true.
22.

ANSWER: 1.c, 2. d, 3.c, 4. b , 5. c, 6. b, 7.a, 8. c 9 10. b , 11. d, 12.a, 13. d, 14. d, 15. d , 16.c, 17. a, 18. C, 19. b, 20. a. 21. d

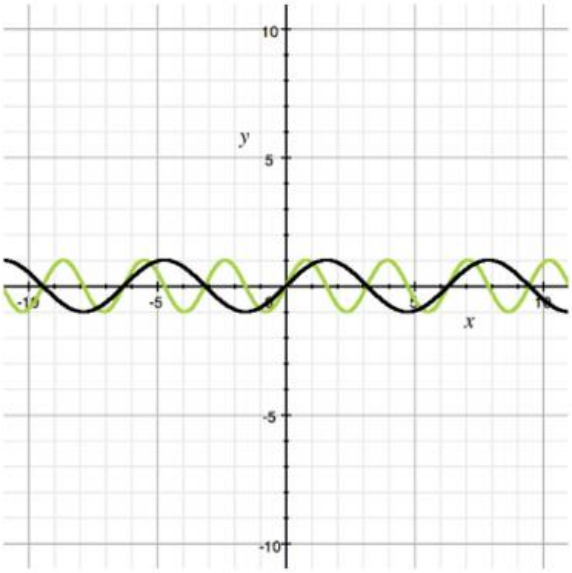
CLASS - VIII
CHAPTER 13: SOUND

1. What is the unit used to specify the frequency of a specific radio channel
   a. FM b. Kilohertz c. Decibels d. Band
2. An electric guitar is generating a sound of constant frequency. An increase in which sound wave characteristic would result in an increase in loudness
   a. speed b. wavelength c. period d. amplitude
3. During the class prize-giving ceremony, Anand clapped hard while Kumar clapped his hand softly. Everybody could hear Anand's clapping while only few could hear Kumar's clapping. This was because the sound produced by Anand was of--
   a. higher pitch b. lower frequency c. higher volume d. lower pitch
4. A ship is stationary for some time in an ocean. The ocean is 10,500 m deep. An engineer from the ship sends a signal straight down into the water. How long will it take for the echo to reach him? (Velocity of sound in water 1.5km/s)
   a. 16.5sec b. 15 sec c. 14 sec d. 7sec
5. What is the main advantage of having two ears rather than one to hear with?
   a. The clarity of sound heard increases with two ear
   b The second ear is a backup in case the first ear fails
   c. The direction of sound can be judged with two ears
   d. the symmetry of the human face is maintained
6. Speech is much better developed in humans than in the other animals. This is mainly due to which organ being better developed in human?
   a. Mouth b. tongue c. heart d. brain
7. An astronaut is moving in space when a big explosion occurs about 50 meters behind him. How will the astronaut come to know about the explosion?
   a. From the sound of the explosion
   b. from the light due to the explosion
   c. from light and sound due to the explosion
   d. From the vibration due to the explosion
8. What does a table player do to increase the pitch of his instrument?
   a. He tightens the skin across the table
   b. He strikes the table harder
   c. He changes the skin of the table
   d. He cannot increase the pitch of the tabla
9. Which of the following are used to study the growth of foetus inside the mother's womb?
   a. Radio waves b. x-rays c. infrared rays d. sound waves
10. _____ on the road side and everywhere can reduce noise pollution
    a. building b. vehicles c. plantation d. none of these
11. Sound can travel through-
    a.Gases only b. solid, liquid and gases, c. liquids only d. solids, only

12. On a rainy night, Tina observed that every time there was lightning and thunder, she would usually see the lightning a few seconds before she heard the thunder. What could be the reason for this?
    a. Sound waves travel faster than light in air, b. Light waves travel faster than sound waves. c. Thunder travels faster than lightning, d. Light waves travel through a less dense medium than sound waves.
13. If the distance represented by the letter A were increased, how would it change the way the sound was heard?



    a. The sound would be higher, b. The sound would be lower, c. The sound would be softer. d. The sound would be louder.
14. When comparing the two waves that are shown, how would Wave A (green wave) differ than Wave B (black wave)?



    a. Wave A and B have the same amplitude, but wave B (black) has a lower pitch, b. Wave A and B have the same amplitude, but Wave A has a lower pitch, c. Wave A and B have the same pitch, but Wave A is a softer sound, d. Wave A and B have the same pitch, but Wave B is a softer sound.
15. You and your father inspect an empty house with the hopes of buying it. You walk through the rooms talking to one another, and you notice that your voices and footsteps are echoing in the big, empty house. What causes the echo?
    a. Sound waves reflecting off smooth, flat surfaces throughout the house, b. Sound waves refracting around corners in the empty rooms, c. Sound waves moving slowly through air, d. Sound waves moving around the large rooms

16. On which of the following factors the loudness of a sound depends?
    a.Time period b. Frequency c.Speed d. Amplitude
17. Given below are some statements about sound:
    I. Sound does not require a medium for propagation
    II. Sound Travels slower than light
    III. Sound is produced by vibrations
    IV. Sound requires a medium for propagation
    Which of the following shows the correct combination of statements?
    a. III and IV b. I, II and III c .II, III and IV d. I, II, and IV

Reasoning and Assertion Type Questions:

DIRECTIONS: The questions in this section consists of two statements, one is "Assertion A" and the other one is "Reason R". You are to examine these two statements carefully and decide if the Assertion "A" and Reason "R" are individually true. If so whether the reason is a correct explanation of the assertion. Answer the following questions selecting the appropriate options given below:

18. Assertion - sound cannot be propagated on the moon and space
    Reason - sound requires a material medium to propagate
    a) Both A and R are true and R is the correct explanation of A.
    b) Both A and R are true but R is not the correct explanation of A.
    c) A is true but R is false.
    d) A is false but R is true.
19. A pendulum oscillates 20 times in 4 seconds. Find its time period.
    (a) 0.05 sec.
    (b) 0.001 sec.
    (c) 0.2 sec.
    (d) 0.1 sec
20. In the following question, a statement of assertion is followed by a statement of reason. Mark the correct choice as:
    (a) Both Assertion and Reason are correct and Reason is the correct explanation of Assertion
    (b) Both Assertion and Reason are correct but Reason is not the correct explanation of Assertion
    (c) Assertion is correct and Reason is incorrect
    (d) Assertion is incorrect and Reason is correct
    Assertion: The sound produced by the flute is more shrill than the sound produced by a table.
    Reason: Frequency produced by the flute will be greater than the frequency produced by the table.
21. Sound cannot travel through-
    a. Air b. Water c. vaccum d. Radiation
22. The frequency of a sound determine its-
    a. Volume b speed c pitch d. Area

ANSWERS:

(e) **1.kilohertz, 2. amplitude, 3. Higher volume,4. 14s, 5. The direction of the sound can be judged with two ears, 6. brain,7. From the light due to the explosion,8. He tightens the skin across the tabla,9. Sound waves, 10. plantation , 11. Solid, liquid and gases, 12. Light waves travel faster than sound waves, 13. The sound would be louder, 14. Wave**

A and B have the same amplitude, but wave B (black) has a lower pitch, 15. Sound waves reflecting off smooth, flat surfaces throughout the house, 16. Amplitude, 17. II, III and IV, 18.Both A and R are true and R is the correct explanation of A, 19. 0.2 sec, 20. Both Assertion and Reason are correct and Reason is the correct explanation of Assertion, 21 Vacuum, 22. Pitch

CLASS - VIII

CHAPTER 14: CHEMICAL EFFECT OF ELECTRIC CURRENT

1. It is likely that when a person sweats, the electrical resistance of the surface of his skin
   a. stays the same b. increases c. decreases d. becomes zero
2. Your task is to generate electricity through a chemical reaction. Which among the following groups would you use?
   a. Magnet, copper wire, HCL, Test tube
   b. Beaker, HCL, Zinc, copper strips
   c. silk material, rubber rod, electroscope
   d. Graphite, silicon, graduated cylinder
3. What is the normal AC voltage found in Indian homes?
   a. 110V b. 200V c. 220V d. 440V
4. Some electrical devices like AC use plugs which are bigger in size than those used by radios, TV etc. Why?
   a. devices like AC's require higher voltage
   b. devices like AC's draw higher current
   c. devices like AC's require greater protection from electric shock.
   d. none of the above
5. In a car battery, plates of lead and lead dioxide are immersed in a Liquid, . a chemical reaction occurs leading to the production of lead sulphate and water. What kind of a liquid is likely to be?
   a. An acid
   b. A base
   c. Salt Solution
   d. Distilled water
6. A car headlight bulb is marked 48W and 12V. Can this bulb be used at home in place of regular electric bulb?
   a. Yes, it can. The bulb will glow much brighter
   b. Yes, it can but the bulb will glow less brightly
   c. No it cannot. The bulb will burn out
   d. No it cannot. The bulb will not fit in the holder.
7. Boojho's uncle has set an electroplating factory near his village. He should dispose off his waste of the factory-
   a. In the nearby river
   b. In the nearby pond
   c. In the nearby corn field
   d. According to the disposal guidelines of the local authority.
8. When electric current is passed through a conducting solution, there is a change of colour of the solution. This indicates-
   a. the chemical effect of current
   b. the heating effect of current

c. the magnetic effect of current

d. the lightning effect of current

9. In an activity to check the conduction of electricity through two liquid A and B by using a bulb, it is observed that the bulb glows brightly for liquid A whereas it glows very dimly for liquid B

a. Liquid A is a better conductor than liquid B

b. Liquid B is better conductor than liquid B

c. Both liquids are equally conducting

d. Conducting properties of liquids cannot be compared in this manner

10. Which of the following metal should be electroplated on a tiffin box made of steel?

a. Copper b. Chromium c. Silver d. Tin

11. Sheena dips free ends of a tester in a salt solution while playing with it. She finds that the magnetic needle-

a.Shows deflection, b. Does not move, c.Remains in north south direction, d. Starts rotating

12. Which of the following is NOT a chemical reaction caused by electric current passing through liquids.

a. The colour of the electrolyte changes, b. Metal coating can be formed on the electrodes, c. Bubbles can form near the electrodes, d. Different smells can be released

13. which of the following is false?

a. The metal rods dipped in liquids to which cells are attached are called electrodes,

b. The liquid which can conduct electricity by providing ions are electrolytes,

c. Electroplating is the process of deposition of thin layer of desired metal on another substance,

d. Positively charged electrode is called Cathode

14. when electrodes were immersed in water and current was passed through water. Which of the following things are true

a. Bubbles of O_2 and H_2 are produced,

b. O_2 are formed on Anode,

c. H_2 are formed at Cathode,

d. All the above

15. Ram wants to deposit silver on an iron spoon. He took silver nitrate ($AgNO_3$) solution in a beaker and setup a simple circuit for electroplating. Which terminal of the battery should the spoon be connected to?

a.Positive terminal, b. Negative terminal, c. Can't say, (d) Does not matter

16. Electroplating is based on:

a) Magnetic effect of electric current b)Chemical effect of electric current

c) Heating effect of electric current d) Physical effect of electric current

17. An Electric Lamp glows due to :

a. Chemical effect of electric current b. Magnetic effect of electric current

c.Heating effect of electric current d. None of the above

18. Tap water is a good conductor of electricity while distilled water is not because

(a) Tap water contain salts

(b) Distilled water do not contain salt

(c) Only (a) is correct
(d) Both (a) & (b) is correct

ANSWERS:

1.Decrease, 2.Beaker, HCl, Zinc, Copper Strips 3. 220V, 4. Devices like Ac's draw higher current, 5. Acid, 6No, it cannot. The bulb will glow out, 7. According to disposal guideline of local authority, 8. Chemical effect of current,9. Liquid A is better conductor than liquid, 10. Tin, 11. Shows deflection 12. Different smells can be released, 13 Positively charged electrode is called Cathode, 14. All the above, 15. Positive terminal, 16. Chemical effect of electric current, 17. Heating effect of electric current, 18. Distilled water do not contain salt

CLASS - VIII

CHAPTER 15: SOME NATURAL PHENOMENA

1. Which best describes the surface of the Earth over billions of years?
   a) A flat surface is gradually pushed up into higher and higher mountains until it is covered with mountains
   b) High mountains gradually wear down until most of the Earth is at sea level
   c) High mountains gradually wear down as new mountains are continuously being formed, over and over again
   d) High mountains and flat plains stay side by side for billions of years with little change
2. When a plastic spoon is rubbed on a woollen cloth and held above a mixture of salt and pepper, pepper jumps to the spoon. Choose the best reason for this:
   a) Air pushes the pepper towards the spoon.
   b) The spoon temporarily gets magnetised.
   c) The spoon temporarily gets charged with static electricity.
   d) Gravitational attraction pulls the pepper to the spoon.
3. The annual rainfall of many leading Indian cities is given in the map below: Which of these cities is likely to have the heaviest rainfall?

   a) Mumbai
   b) Kolkata
   c) Delhi
   d) Chennai
4. Why does a stone floor feel colder than a carpeted floor on a cold winter night?
   a) The stone floor is at a lower temperature than the room temperature.
   b) The carpet is at a higher temperature than the room temperature.
   c) The stone floor conducts away heat from our body faster than the carpet.
   d) Our body can absorb heat from the carpet but not from the stone floor.
5. Two charged objects are brought close to each other. Choose the most appropriate statement from the following option
   a) They may attract
   b) They may repel
   c) They can attract or repel depending on the type of charges they carry
   d) There will be no effect

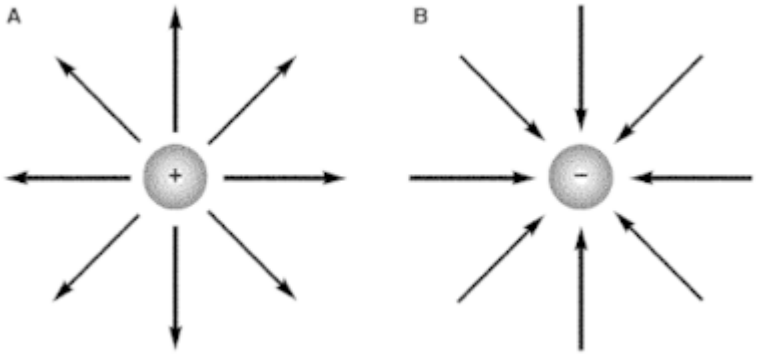
6. Major earthquakes are less likely to occur in
   a) North-East India
   b) Rajasthan
   c) Rann of Kuch
   d) Odisha
7. The earth's plate that is responsible for causing earthquake is
   a) The crust of earth
   b) The mantle of earth
   c) The inner core of earth
   d) The outer core of earth
8. The electric nature of lightning was established by a scientist named
   a) Isaac Newton
   b) Robert Hooke
   c) Benjamin Franklin
   d) Thales
9. The epicentre of an earthquake is
   a) Deep under the crust of earth
   b) In the mantle of earth
   c) On the surface of earth
   d) In the core of earth
10. An inflated rubber balloon is rubbed with a woollen cloth, whereas a ballpoint pen refill is rubbed with polythene bag The one that gets positively charged are,
    A. Inflated rubber balloon, B. Woollen cloth, C. Ballpoint pen refill, D. Polythene bag
    a) A and B
    b) B and C
    c) A and D
    d) B and D
11. Tremors on the earth can also be caused when-
    a.A volcano erupts, b. A meteor hits the earth, c..An underground nuclear explosion, d. All the above.
12. A device used to protect buildings from the effect of lightning-
    a. Lightning conductor b)Richter scale, c.electroscope, d) seismograph
13. When a plastic spoon is rubbed on a woolen cloth and held above a mixture of salt and pepper, pepper jumps to the spoon. Choose the best reason for this:
    a. Air pushes the pepper towards the spoon,
    b. The spoon temporarily gets magnetised.
    c. The spoon temporarily gets charged with static electricity
    d. Gravitational attraction pulls the pepper to the spoon.

COMPETENCY BASED QUESTIONS

14. Which is the phenomena which is not predictable by scientist?

    a. Lightning, b. Earthquake, c. Thunder storm, d. Tsunami

15. If the two charges represented in the figure were brought near each other, they would



a.Attract each other, b. Repel each other, c.Cause static discharge, d. Have no effect on each other

16. Which is the surest test of charge on a body?

    a. Repulsion, b. Lightning, c. Combustion, d. Insulation

17. While combing hair in the dry season we observe that hair fly apart. Which of the following forces is responsible for this:

    a)Magnetic force b) Frictional force c)Muscular force. d) Electrostatic force

18. When we bring two objects close to each other they repel. This repulsion occurs due to

    a) Magnetic force b) Electrostatic force c) Frictional force d) Either a magnetic or an electrostatic force

19. The point vertically above the seismic- focus is called-

    a. core b layer c. epicentre d. Crust

20. The method of charging in neutral body by touching it with a charged body is called-

    a. Induction b. Conduction c. Friction d. Core

21. . Electric discharge can be observed in

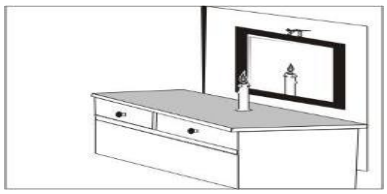
    a. Electric plugs b automobile spark plugs c. switch d. Both a and b

ANSWER:

1. High mountains gradually wear down as new mountains are continuously being formed, over and over again 2. The spoon temporarily gets charged with static electricity, 3. Mumbai, 4. The stone floor conducts away heat from our body faster than the carpet, 5 They can attract or repel depending on the type of charges they carry, 6. Odisha, 7. The crust of earth, 8. Benjamin Franklin, 9. On the surface of earth, 10. B and C, 11. All the above, 12. Lightning conductor, 13. The spoon temporarily gets charged with static electricity, 14. Earthquake, 15. a, 16, Repulsion, 17. Electrostatic force, 18. Either a magnetic or an electrostatic force, 19. Epicentre, 20. Conduction, 21. Automobile spark plugs

CLASS - VIII
CHAPTER 16: LIGHT

1. The power has just gone off in Sarita's house and she lights a candle. She decides to place it in front of a mirror as shown, as she believes it will light up the room more. Is she correct?



   a) Yes, the room will receive more light.
   b) No, since the source is one candle only.
   c) No, because of the extra shadows.
   d) It depends on the brightness of the candle.

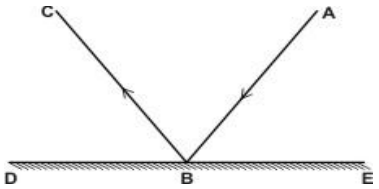
2. What kind of a mirror is this?

   a) Plane mirror
   b) Convex mirror
   c) Concave mirror
   d) Magnifying mirror

3. Have you noticed that when you see an object through a layer of hot air, it appears distorted. The reason for this phenomenon is related to:

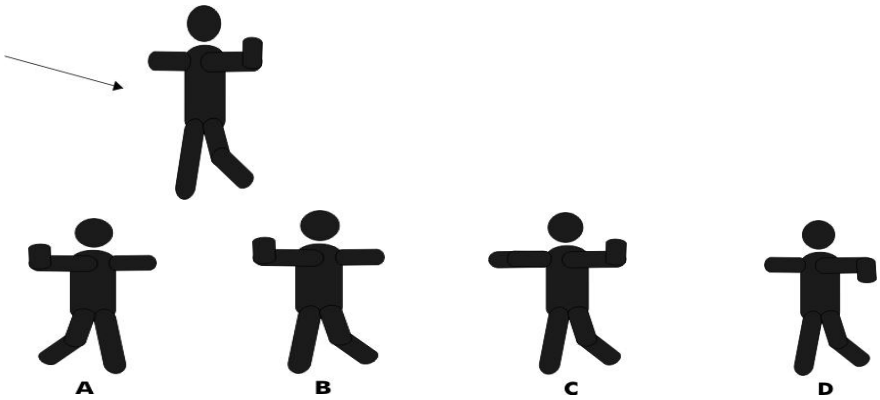
   a) density of air
   b) refraction of light
   c) temperature of air
   d) temperature of light

4. The figure below shows the path taken by a ray of light as it reflects off a smooth surface. Which of these is true? They do not have a nuclear membrane

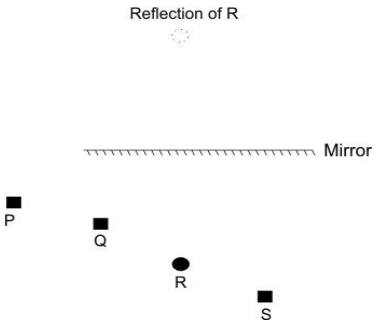


a) Angle ABE = angle ABC
b) The path A --> B --> C is the shortest path
c) B will always be the mid point of DE
d) If DE (the mirror) is rotated around B,

5. If we drop a perfectly transparent piece of glass into perfectly clear water, will we be able to see the glass?
   a) Yes, because the refractive indices of glass and water are different
   b) Yes, because no refraction takes place at the glass surface
   c) No, because both the water and the glass slab are transparent
   d) No, because light will be reflected away from the water surface itself.
6. How will the figure shown here look if seen through the rear view mirror of a car?



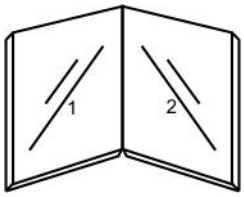
7. Four students, P, Q, R and S are standing in front of a mirror facing it. Their positions, as seen from the top, are shown below. Which of these students can see Q as well as Q's reflection in the mirror?



   a) only P
   b) only R and S
   c) only R
   d) only S
8. When light is reflected from a smooth surface, the angle of incidence must be equal to the angle of reflection." Under which of the following situations is the above statement true?"

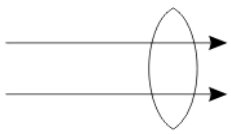
a) It is always true
b) It is true only if the surface is made of GLASS.
c) It is true only if the surface is CONCAVE or PLANE
d) It is true only if the surface is PLANE

9. When we see with only one eye (by covering the other eye with our hands), what is the difference in what we see?
   a) There is no difference
   b) We cannot distinguish colours
   c) We cannot distinguish depths.
   d) We cannot distinguish heights
10. Two plane mirrors are inclined towards each other as shown in the figure. An object is placed between them. Which of the following is true about the images that will be formed?



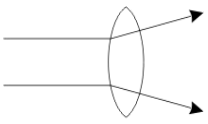
   a) Two images of the object are formed, one in each mirror
   b) The number of images will depend on the angle between the mirrors
   c) The number of images will depend on the length of the mirrors.
   d) The number of images will be determined by how big the object is
11. A phenomenon that splits light into its constituent colours is –
    a.concentration b. expansion, c. dispersion. D. radiation
12. Which of these ray diagrams correctly shows the functioning of a magnifying glass?

(a)



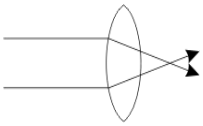
A.

(b)



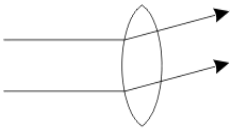
B.

(c)



C.

(d)



D.

13. The impression of an image does not vanish immediately from the retina. It persists there for about _____ of a second.
    a. 1/16 th, b. 1/5 th, c. 1, d. 6
14. Which one of the following statements is correct regarding rods and cones in the human eye?
    a. Cones are sensitive to dim light
    b. Cones are sensitive to bright light
    c. Rods can sense colour
    d. Rods are sensitive to bright light
15. The part of the human eye which gives it its distinctive colour is:
    a .Cornea b.Iris c.Pupil d. Retina
16. The splitting of white light into its colours is called :
    a. Reflection b. Refraction c. Dispersion d. Internal Reflection
17. What is the angle of incidence of a ray if the reflected ray is at an angle of 90° to the incident ray?
    (a) 60°
    (b) 180°
    (c) 90°
    (d) 45°
18. . An eye cannot see either the far off of all the objects this defect in eyes is called-
    a. myopia b. hypermetropia c. Presbyopia d. None of these

ANSWER:

1.Yes, the room will receive more light, 2. Convex mirror, 3. refraction of light, 4. The path A --> B --> C is the shortest path, 5. Yes, because the refractive indices of glass and water are different, 6. A, 7. only R and S, 8. It is always true, 9. We cannot distinguish depths, 10. The number of images will depend on the angle between the mirrors, 11. Dispersion, 12. c, 13. 1/16 th, 14 Cones are sensitive to bright light, 15 Iris, 16. Dispersion, 17. 45°, 18. Myopia

CLASS - VIII

CHAPTER 17: STAR AND THE SOLAR SYSTEM

1. Nirav's Science Teacher wants to explain to the class how seasons occur and specifically why it is colder in winter. Which of the may be a part of the demonstration she uses?

   a. Heat some water, allow the evaporated steam to come in contact with a glass containing ice cubes

   b. Take a football, a tennis ball and a table tennis ball and arrange them along an ellipse on a flat surface

   c. In a darkened room shine a torch on a black sheet, once perpendicularly and once at an angle

   d. Take the students to the playground during noon and then to computer room when AC is on.

2. Since the moon revolves around the earth every month why do we not have a lunar eclipse every month?

   a. Every new moon is a lunar eclipse

   b. The plains of the moons and the earth's revolution are different

   c. Being smaller in size the moon does not get blocked by the earth.

   d. This is because earth is also rotating around its own axis

3. That part of the earth has night _____

   a. Which is not facing the moon

   b. Which is covered by clouds

   c. Which is not facing the sun

   d. Which is having winter

4. There is a full moon on September 14^{th}. On which day will the new moon occur

   a. September 21st b.September 28th c. October13th d. October 31st

5. At any given time, different parts of earth experience different seasons. Apart from the Earth's revolution around the sun which of these is the reason for this?

   a. Earth's rotation

   b. elliptical shape of earth's orbits

   c. presence of the moon

   d. tilt of earth's axis of rotation

6. What is common to venus and moon

   a. Both are planets

   b. Both are luminous

   c. Both reflects the suns light

   d. Both are satellites of the earth

7. The earth takes one year to complete revolution around the sun whereas pluto tkes 248 of the earths years to orbit the sun. What is the main reason for this?

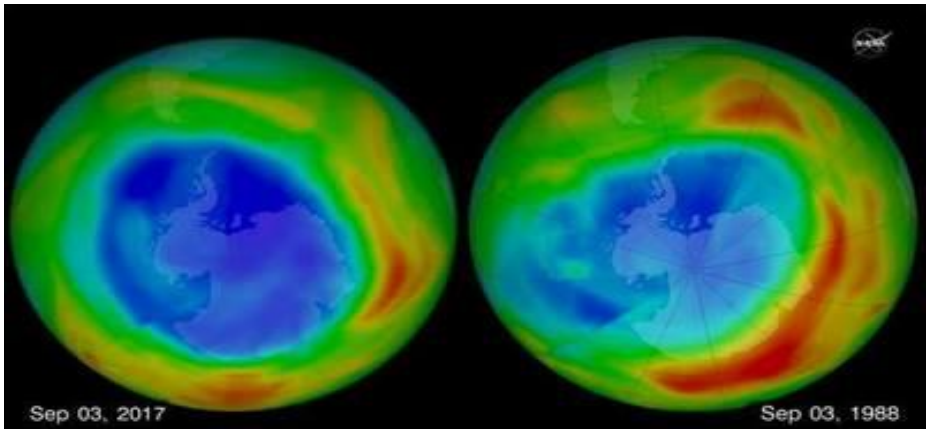
   a. Pluto being small in size is slower than the earth

   b. Pluto being more massive moves more slowly

   c. Strong winds on earth makes it move faster

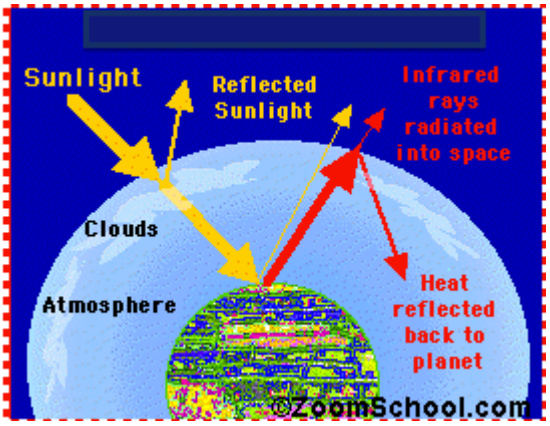
   d. Pluto being far from the sun has to travel more distance than the earth

8. In movie a spaceship explodes and continues to burn as it moves through space. This cannot happen because
   a. Space does not have oxygen
   b. Gases expand in vaccume
   c. Spaceships are made of metal that cannot explode
   d. the Carbon dioxide in space would have extinguished the fire.
9. Sun appears to move from east to west around the earth. This means that earth rotates from
   a. East to west
   b. West to east
   c. North to South
   d. South to North
10. Morning star is the name given to
    a. Pole star b. Star Sirius c. Planet Jupiter d. Planet Venus
11. When the earth crosses the tail of a comet, swarms of meteors are seen. These are known as –
    a)Asteroids b)Meteorite shower, c)meteor shower d)constellation
12. The ozone layer is damaged by



   a. CFCs
   b. Increase in greenhouse gases
   c. Increased global temperatures
   d. Sulfuric and nitric acids

13. What does this diagram illustrate?



a. Ozone Layer
b. The Greenhouse Effect
c. Ultraviolet Radiation
d. Layers of the atmosphere

ANSWERS:

1. In a darkened room shine a torch on a black sheet, once perpendicularly and once at an angle, 2. The plains of the moons and the earth's revolution are different, 3. Which is not facing the sun,4. September 28th, 5. tilt of earth's axis of rotation, 6. Both reflects the suns light, 7. Pluto being far from the sun has to travel more distance than the earth, 8. Space does not have oxygen, 9. West to east, 10. Planet Venus, 11. Meteor shower, 12. CFCs, 13. The Greenhouse Effect

CLASS - VIII

CHAPTER 18: POLLUTION OF AIR AND WATER

1. Osman Sagar lake near Hyderabad is a source of drinking water for the city. If the water is tested for bacterial content and found to have elevated count, this might mean that
   a. Water is safe to drink
   b. The food chain has been extended to the microscopic level
   c. Sewage may be entering the water
   d. The oxygen level is below normal
2. Some houses in India add alum (called Fitkari in hindi) to the water to purify it before drinking. How does it purify the water?
   a. It reacts with the impurities making them harmless
   b. It causes impurities to dissolve in the water
   c. It causes the impurities to stick to it and settle down
   d. It diffuses the impurities through reverse osmosis.
3. Normal rainwater has pH 5.6. Fishes and other aquatic animals die when the water becomes more acidic. Which of these gases is likely to make rainwater more acidic?
   a. Ozone b. Sulphur Dioxide c. Nitrogen d. Hydrogen Peroxide
4. Which of these energy sources is likely to most pollute the air with Sulphur Dioxide for each unit of electricity generated?
   a. Coal b.Natural Gas c. Nuclear fuel d. Wind Energy
5. Factory usually have chimneys to
   a. Reduce noise pollution
   b. Reduce water pollution
   c. Disperse harmful gases
   d. Make the building more beautiful
6. Bhopal Tragedy was caused due to
   a. Air Pollution
   b. Emission of poisonous Gas
   c. Water Pollution
   d. Leakage of poisonous gas
7. Water Containing high salt concentration can be purified by
   a. Boiling
   b. UV Radiation
   c. Filtration
   d. Reverse Osmosis
8. Which of the following is non-Biodegradable?
   a. Sulphur Dioxide, b. DDT, c. Nitrogen Oxide, d. Hydrogen oxide
9. Which of the following air Pollutants reduces the oxygen-carrying capacity of blood to a large extent
   a. CO_2 b. NO c. CO d. SO_2

COMPETENCY BASED QUESTIONS

10. Boojho wishes to contribute to reducing air pollution. Which vehicle should be used to going to school?
    a. Car b. School Bus c. Auto Rickshaw d. Scooter
11. When acid rain corrodes the marble of the monument, it is known as-
    a)Marble fever b)Marble cancer, c)Marble corrosion d) Marble erosion
12. Pollution hanging over urban areas that causes reduced visibility is called
    a. Air pollution
    b.Temperature inversion
    c. Light pollution
    d. Smog
13. Installation of tall chimneys for the exit of gases in thermal power plants helps in
    a. Reduction of particulate matter in the atmosphere
    b. Reduction of harmful gases in the air we breathe.
    c. Both (a) and (b).
    d. None is correct
14. Which of the following is the cause of marble cancer?
    a.Acid Rain b. Soot Particles c. CFCs d. Fog
15. Which of the following is a Greenhouse gas?
    a.Helium b. Carbon dioxide c. Oxygen d. Hydrogen
16. The increase in concentration of which gas is not responsible for Global Warming?
    (a) Sulphur dioxide
    (b) Carbon dioxide
    (c) Nitrogen
    (d) Methane
17. The Industries located in and around Agra like rubber processing, automobile, chemicals and especially the Mathura oil refinery, have been responsible for producing pollutants. They react with the water vapour present in the atmosphere to form corrosive substances. Which of the following substances were responsible for this phenomenon?
    a.Sulphur dioxide, b. Chlorine, c. Nitrogen, d. oxygen
18. The ozone layer is affected by-
    a. Nitrogen oxides b. Carbon dioxide c. Chlorofluorocarbons d. Oxygen
19. Air polluted with acidic oxides affects-
    a. Sculptures and monuments b. crops and fields c. Damaged crops d. All of these

ANSWERS:

1.Sewage may be entering the water, 2.It causes impurities to stick to it and settle down, 3. Sulphur Dioxide ,4. Coal, 5. Disperse Harmful Gases, 6. Leakage of poisonous gas, 7. Reverse Osmosis, 8. DDT, 9. CO, 10. School bus, 11. Marble cancer, 12. Air pollution, 13. Reduction of harmful gases in the air we breathe., 14. Acid Rain , 15. Carbon dioxide, 16. Nitrogen, 17. Sulphur dioxide, 18. Chlorofluorocarbons, 19. All of these.