# CHAPTER - 2

## Acids, Bases and Salts

1. A compound that turns lime water into colorless again when excess carbon dioxide is made to pass through it is, *

   **A. Calcium carbonate** **B. Calcium bicarbonate**

   **C. Calcium Oxide** **D. Calcium Hydroxide**

2. The pH of four acids namely P, Q, R, S is 2, 5, 3, 6 respectively. The strongest acid among these acids is, *

   **A. P** **B. Q**

   **C. R** **D. S**

3. Alkali oxide among the following oxides is, *

   **A. Carbon Dioxide** **B. Sulfur Dioxide**

   **C. Sodium oxide** **D. Nitrogen oxide**

4. As the pH value of a solution decreases, **

   **A. Number of $OH^-$ ions increases** **B. Number of $H^+$ ions increases**

   **C. Number of $H^+$ ions decreases** **D. Equal number of $OH^-$ and $H^+$ ions**

5. The gas liberated when dilute sulphuric acid reacts with zinc granules **

   **A. Sulphur dioxide** **B. Carbon dioxide**

   **C. Nitrogen** **D. Hydrogen**

6. $NaOH + HCl \rightarrow NaCl + H_2O$. This chemical reaction is an example of **

   **A. Neutralization reaction** **B. Substitution reaction**

   **C. Addition reaction** **D. Combustion reaction**

7. If a solution turns red litmus into blue, its pH value is

   **A. 1** **B. 4**

   **C. 5** **D. 1O**

8. A solution reacts with crushed egg-shells and releases a gas that turns lime-water milky. The solution contains,

   **A. NaCl** **B. HCl**

   **C. LiCl** **D. KCl**

9. 10 mL of a solution of NaOH is found to be completely neutralized by 8 mL of a given solution of HCl. If we take 20 mL of the same solution of NaOH, the amount HCl solution (the same solution as before) required to neutralize it will be,

**A. 4 ml** **B. 8 ml**

**C. 12 ml** **D. 16 ml**

10. In solutions, we use pH scale to measure,

**A. Density** **B. $H^+$ ion concentration**

**C. $OH^-$ ion concentration** **D. Conductivity**

11. Which one of the following types of medicines is used for treating indigestion?

**A. Antibiotic** **B. Analgesic**

**C. Antacid** **D. Antiseptic**

12. $2NaOH + Zn \rightarrow$ ……. + $H_2$

**A. $Na_2ZnO_2$** **B. $NaZnO_2$**

**C. $Na_2ZnO$** **D. NaZnO**

13. The acid present in the stinging hair of nettle leaves that causes burning pain

**A. Citric acid** **B. Methanoic acid**

**C. Tartaric acid** **D. Acetic acid**

14. The gas that is released when an acid reacts with the metal carbonate is,

**A. Carbon Dioxide** **B. Hydrogen**

**C. Oxygen** **D. Nitrogen**

15. Two ions produced by $CH_3COOH$ are

**A. $CH_3COO^-$ and $H^+$** **B. $CH_3COO^+$ and $H^-$**

**C. $CH_3CO^+$ and $OH^-$** **D. $CH_3^+$ and $COOH^-$**

16. The molecular formula of hydronium ion is,

**A. $H_2O^-$** **B. $H_3O^+$**

**C. $H_2O^+$** **D. $H_3O^-$**

17. The group of alkali metals is,

**A. Na and K** **B. Fe and K**

**C. Fe and Na** **D. Cu and Fe**

18. The correct method of diluting acid is,

**A. Adding acid to the water** **B. Adding water to the acid**

**C. Add water to the acid and stir gently** **D. Add acid to the water and stir gently.**

19. The pH value of rainwater that makes survival of aquatic life difficult is,

**A. Less than 5.6** **B. Less than 5.8**

**C. Less than 6.1** **D. Less than 5.9**

20. Two fruits that are rich in citric acid are,

**A. Lemon and Tamarind** **B. Lemon and Orange**

**C. Orange and Tamarind** **D. Tomato and Tamarind**

21. For better dental health and hygiene, the pH value of toothpaste should be,

**A. Less than 4** **B. More than 6**

**C. More than 7** **D. Less than 5**

22. Upon mixing an acid or base with water, ion concentration,

**A. Increases** **B. Decreases**

**C. Does not change** **D. Becomes neutral**

23. Two products of neutralization reaction are,

**A. Water and Salt** **B. Salt and Hydrogen**

**C. Water and hydrogen** **D. Water and carbon dioxide**

24. The pH range of our body is,

**A. 6.0 to 7.8** **B. 7.0 to 7.6**

**C. 7.0 to 7.7** **D. 7.0 to 7.8**

## CHAPTER - 3

## Metals and Non-metals

25. A compound having high melting point *

**A. Ionic compound** **B. Covalent compound**

**C. Carbon compound** **D. All the above**

26. An alloy having constituents of lead and Tin is *

**A. Bronze** **B. Brass**

**C. Solder** **D. Stainless steel**

27. Alloy of solder is used for welding electrical wires together ,because alloy of solder is *

**A. Good insulator** **B. Good heat conductor**

**C. High melting point** **D. Low melting point**

28. Amphoteric oxides react with the following reactant gives salt and water as a product *

**A. Metal and non metal** **B. Acid and base**

**C. Hydrogen and oxygen** **D. Metal and base**

29. Observe the following stages of extraction of a metal from its ore *

Sulphide ore → [ ] -> Reduction → Purifications

The process that has to be done in the empty spaces is

**A. Electrolysis** **B. Calcinations**

**C. Roasting** **D. Oxidation**

30. Copper oxide react with Concentrated hydrochloric acid gives as water and minerals as product , so copper oxide is said to be as *

**A. Acidic oxide** **B. Basic oxide**

**C. Neutrals oxide** **D. Non metal Oxide**

31. A balanced chemical equation for the reaction of aluminum metal with steam is *

**A. $3Al + 2H_2O \rightarrow Al_2O_3 + 2H_2$** **B. $Al + 3H_2O \rightarrow 2\ Al_2O_3 + H_2$**

**C. $2Al + H_2O \rightarrow 3Al_2O_3 + H_2$** **D. $2Al + 3H_2O \rightarrow Al_2O_3 + 3H_2$**

32. The process used to convert metal carbonate ores in to their oxides is **

**A. Roasting** **B. Reduction**

**C. Electrolysis** **D. Calcinations**

33. The atomic number of an element 'X' is 11 , and the atomic number of 'Y' is 17.Then the type of bond formation between these two elements **

**A. Ionic bond** **B. Covalent bond**

**C. Hydrogen bond** **D. Metallic bond**

34. Observe the following reactions * *

$Fe + CuSO_4 \rightarrow FeSO_4 + Cu$ $Zn + FeSO_4 \rightarrow Zn\ SO_4 + Fe$

The decreasing order of reactivity of metals in the above reaction is

**A. Zn > Fe > Cu** **B. Fe > Cu > Zn**

**C. Zn > Cu > Fe** **D. Cu > Fe > Zn**

35. A girl observe a blackish layer on a newly brought silver anklets after 2 month .A gas responsible for this reaction is

**A. Carbon dioxide** **B. Sulphur**

**C. Oxygen** **D. Nitrogen dioxide**

36. Corrosion of this metal is advantage in it self

**A. Iron** **B. Copper**

**C. Magnesium** **D. Aluminum**

37. A gas evolved when a metal carbonate react with an acid which extinguish the burning candle

**A. Hydrogen** **B. Carbon dioxide**

**C. Oxygen** **D. Nitrogen**

38. Aluminum, Copper, Calcium and lead metals when kept in decreasing order of their reactivity are

**A. Al > Pb > Cu> Ca** **B. Ca > Al > Pb > Cu**

**C. Cu > Ca > Al >Pb** **D. Pb > Ca > Cu > Al**

39. Reaction between X and Y forms a compound Z , 'X' loses electron and 'Y' gains electron. Which of the following properties is not shown by 'Z'

**A. Has high melting point** **B. Has low melting point**

**C. Conduct electricity in molten state** **D. Occurs as solid**

40. Which of the following pairs will give displacement reactions

**A. NaCl solution and copper metal** **B. $MgCl_2$ solution and aluminum metal**

**C. $FeSO_4$ solution and silver metal** **D. $AgNO_3$ solution and copper metal**

41. Which of the following methods is suitable for preventing an iron frying from rusting ?

**A. Applying grease** **B. Applying paint**

**C. Applying coating of zinc** **D. All of the above**

42. An element react with oxygen to give a compound with a high melting point .This compound is also soluble in water. The elements is likely to be

**A. Calcium** **B. Carbon**

**C. Silicon** **D. Iron**

43. Food can are coated with tin and not with zinc because

**A. Zinc is costlier than tin** **B. Zinc has higher melting point than tin**

**C. Zinc is more reactive than tin** **D. Zinc is less reactive than tin**

44. A layer formed when magnesium metal is exposed to air is

**A. Magnesium oxide** **B. Magnesium carbonates**

**C. Magnesium sulphide** **D. Magnesium nitrite**

45. Purpose of concentration of sulphide ore by roasting is

**A. To remove gangue from ores** **B. To remove water vapors in the ores**

**C. To convert ore into oxides form** **D. All the above**

46. Thermit process is used in

**A. Join Cracked bones** **B. Join cracked machinery parts**

**C. Treatment of teeth** **D. Concentration of metal**

47. From 1 gram gold it is possible to make wire up to 2km length ,here property of metal exhibit is

**A. Good conductor of electricity** **B. Malleability**

**C. Ductility** **D. Sonorous**

48. Following active metals preserved under kerosene

**A. Na & K** **B. K & C**

**C. Na & Ca** **D. K & Al**

49. For the following alloys related statements which one is wrong?

**A. Low electric conductivity** **B. Low melting point**

**C. Properties are different from its constituents** **D. High electric conductivity**

## CHAPTER - 4

## Carbon and Its Compounds

50. Ethane with molecular formula $C_2H_6$ has

**A. 6 covalent bonds** **B. 7 covalent bonds**

**C. 8 covalent bonds** **D. 9 covalent bonds**

51. Butanone is a four - carbon compound with the functional group

**A. Carboxylic acid** **B. Aldehyde**

**C. Ketone** **D. Alcohol**

52. While cooking, if the bottom of the vessel is getting blackened on the outside, it means that

**A. The food is not cooked completely** **B. The fuel is not burning completely**

**C. The fuel is wet** **D. The fuel is burning completely.**

53. The hydrocarbon that undergoes addition reaction among the following is *

**A.** $C_2H_6$ **B.** $C_3H_8$

**C.** $CH_4$ **D.** $C_3H_6$

54. Metallic ions that cause hardness in water

**A. Sodium and Potassium** **B. Chloride and Bromide**

**C. Calcium and magnesium** **D. Bromine and Iodine**

55. Name of the organic compound having molecular formula $CH_3CH_2Br$ is *

**A. Bromoethane** **B. Chloroethane**

**C. Ethanone** **D. Ethonal**

56. Cyclopentane has the molecular formula of $C_5H_{10}$. It has

**A. 5 Covalent bonds** **B. 10 Covalent bonds**

**C. 12 Covalent bonds** **D. 15 Covalent bonds**

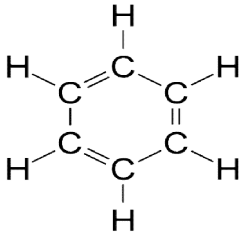
57. Identify the unsaturated compounds in the following. *

i) propane ii) propene iii) propyne iv) Chloropropane

**A. i) and ii)** **B. ii) and iv)**

**C. iii) and iv)** **D. ii) and iii)**

58. The name of this carbon compound *



**A. Cyclohexane** **B. Hexene**

**C. Pentene** **D. Benzene**

59. Common difference between members of homologous series *

**A.** $-CH_2$ **B.** **–CH**

**C.** $-CH_4$ **D.** $C_2H_5$

60. Carbon has the unique ability to form bonds with other atoms of carbon, giving rise to large molecules. This property is called*

**A. Isomerism** **B. Allotropy**

**C. Catenation** **D. Hydrogenation**

61. Identify the correct equation in the following

**A.** $CH_3CH_2OH + 3O_2 \longrightarrow 2CO_2 + 3H_2$ + Heat and Light

**B.** $CH_3CH_2OH + O_2 \longrightarrow 2CO_2 + 3H_2O$ + Heat and Light

**C.** $CH_3CH_2OH + 3O_2 \longrightarrow 2CO_2 + 3H_2O$ + Heat and Light

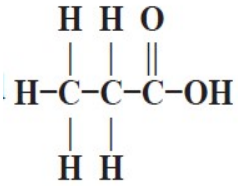
**D.** $CH_3CH_2OH + 3CO_2 \longrightarrow 2O_2 + 3H_2O$ + Heat and Light

62. Chlorine reacts with saturated hydrocarbons at room temperature in the

**A. Absence of heat** **B. Presence of light**

**C. Presence of acid** **D. Presence of base**

63. The functional group present in the carbon compound **



**A. Aldehyde** **B. Alcohol**

**C. Ketone** **D. Carboxylic acid**

64. The molecular formula of benzene is **

**A.** $C_5H_{12}$ **B.** $C_6H_{12}$

**C.** $C_6H_6$ **D.** $C_6H_{10}$

65. The number of single bonds present in the structure of a cyclohexane molecule **

**A. 12** **B. 18**

**C. 24** **D. 6**

66. The correct group of saturated hydrocarbon **

**A.** $CH_4, C_2H_4, C_3H_4$ **B.** $C_2H_6, C_3H_8, C_4H_{10}$

**C.** $C_2H_2, C_2H_6, CH_4$ **D.** $C_2H_2, C_3H_6, C_4H_6$

67. The first member of alkene series is

**A. Benzene** **B. Propene**

**C. Ethene** **D. Butene**

68. Which of the following does not belong to the homologous series

**A.** $CH_4$ **B.** $C_2H_6$

**C.** $C_3H_8$ **D.** $C_4H_8$

69. The ionic end of soap molecule reacts with

**A. Oil** **B. Water**

**C. Mud** **D. Colour**

70. The minimum number of electrons required to form trivalent bond between two atoms

**A. 4** **B. 8**

**C. 2** **D. 6**

71. Molecular formula of methane

**A.** $CH_4$ **B.** $C_2H_6$

**C.** $C_3H_8$ **D.** $C_4H_{10}$

72. General formula of alkynes

**A. CnH2n+2** **B. CnH2n**

**C. CnH2n-2** **D. CnH2n-1**

73. Property of unsaturated hydrocarbons in the following

**A. Subjected to substitution reaction** **B. Subjected to adition reaction**

**C. Burn with smokeless flame** **D. Less reactive**

74. The compounds having same molecular formula but different structural arrangements are called

**A. Allotropes** **B. Nonmetals**

**C. Isomers** **D. Isotopes**

75. Electron dot structure of Hydrogen is

**A. H:H** **B. O:O**

**C. H::H** **D. O::O**

# CHAPTER - 5

## Periodic classification of Elements

76. _____was recognized as a "Father of periodic table"

**A. Newland** **B. Dobereiner**

**C. Mendeleev** **D. Moseley**

77. In Newlands table _____elements kept in the same place

**A. Cobalt & Nickel** **B. Copper & Nickel**

**C. Chromium & Nickel** **D. Cobalt & Chromium**

78. Which element can easily loose electrons

**A. Sodium** **B. Flourine**

**C. Magnesium** **D. Aluminium**

79. The element with atomic number 18 belongs to

**A. $2^{nd}$ Period, $8^{th}$ Group** **B. $3^{rd}$ Period, $8^{th}$ Group**

**C. $2^{nd}$ Period, $18^{th}$ Group** **D. $3^{rd}$ period, $18^{th}$ Group**

80. If X element belongs to the $13^{th}$ group then its oxide formula is

**A. XO** **B. $X_2O_3$**

**C. $X_3O_2$** **D. $XO_2$**

81. A, B, C, D, E elements belongs to 1, 2, 13, 14, 16 groups. Which among these is most electronegative element

**A. A** **B. D**

**C. B** **D. E**

82. In X element there are 2 shells, it reacts with magnesium and gives MgX compound. If so what is X

**A. Cl** **B. B**

**C. S** **D. O**

83. In A, B, C elements atomic mass of A is 150, atomic mass of B is 200, then atomic mass of C is _

**A. 350** **B. 250**

**C. 550** **D. 275**

84. Which of the following is a noble gas element

**A. Na** **B. Fe**

**C. Li** **D. He**

85. Of the following pairs, the one containing example of metalloid element in the periodic table is

**A. Sodium & Potassium** **B. Flourine & Chlorine**

**C. Calcium & Magnessium** **D. Boran & Silicon**

86. Which of the following element has smallest size

**A. Carbon** **B. Magnesium**

**C. Oxygen** **D. Sulphur**

87. Mendeleevs Periodic table is based on _____

**A. Atomic weight** **B. Atomic Number**

**C. Number of Neutrons** **D. None of these**

88. Which of the following pairs have both the members from the same period of the periodic table

**A. Sodium-Calcium** **B. Sodium-Chlorine**

**C. Calcium –Chlorine** **D. Chlorine –Bromine**

89. Dobereiner‘s traid is

**A. Na, K, Rb** **B. Mg, S, As**

**C. Cl, Br, I** **D. P, S, As**

90. The last member in each period of the periodic table is

**A. A noble gas element** **B. A transition element**

**C. A Halogen** **D. An alkali metal**

91. Which one of the following combination represents a metallic element

**A. 2, 8, 7** **B. 2, 8, 8**

**C. 2, 8, 4** **D. 2, 8, 2**

92. If the valence shell of an atom of an element has 7 electrons, the element belongs to the group of __

**A. Alkali metals** **B. Inert metals**

**C. Noble gasses** **D. Halogens**

93. Which of the following statement is correct

**A. Sodium atom is larger in size than Potassium atom**

**B. Sodium atom is larger in size than Lithium atom**

**C. Chlorine atom is larger in size than sodium atom**

**D. Aluminum atom is larger in size than sodium atom**

94. The element with atomic number 36 belongs to _____block in the periodic table.

**A. P** **B. D**

**C. S** **D. F**

95. On going from right to left , in a period in the periodic table, the metallic characters of the elements

**A. Increases** **B. Decreases**

**C. Remain unchanged** **D. Decreases first then increases**

96. Which of the following properties remain unchanged on descending a group in the periodic table

**A. Atomic size** **B. Density**

**C. Valence electrons** **D. Metallic character**

97. The elements in the periodic table of A B C D atomic number is 3, 9, 4 , 8. The elements of Metallic nature are

**A. B and D** **B. A and B**

**C. A and C** **D. B and C**

98. Which of the following gas does not have an eight electrons in the outer shell

**A. Neon** **B. Argon**

**C. Radon** **D. Helium**

99. Arrange the following elements Sodium, potassium, Magnesium, and Rubidium in the increasing order of the atomic radius

**A. Mg < K < Na < Rb** **B. Mg < Na < K < Rb**

**C. Mg < Na< Rb < K** **D. Na < K < Rb < Mg**

100. It was not possible to expand the periodic table after Calcium element. This statement was given after _____law

**A. Newlands octet rule** **B. Dobereiner triad rule**

**C. Mendeleev law** **D. Moseley law**

# CHAPTER - 6

## Life Processes

101. The tissue that transports food among plants *

**A. Xylem** **B. Epidermal**

**C. Phloem** **D. Tracheid**

102. Oxygen –rich blood flows from *

**A. Lungs -→Heart → Cells** **B. Lungs -→Heart → Cells**

**C. Lungs → Cells → Heart** **D. Heart → Cells → Lungs**

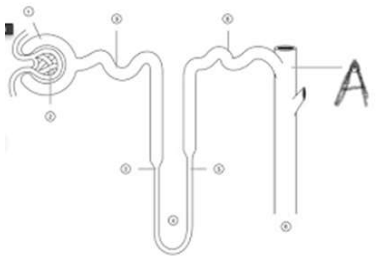
103. Which of the following are techniques used by plants to get rid of waste materials. *

1. Shedding leaves
2. In the form of resins and gums
2. Excreted into the surrounding soil
4. In cell vacuoles

**A. 1 and 2 only** **B. 1,2 and 3 only**

**C. 1,3 and 4 only** **D. 1, 2, 3 and 4**

104. In this diagram of nephron name the part which is marked as "A" *




**A. Bowman's capsule** **B. Glomerulus**

**C. Collecting duct** **D. Capillaries**

105. The process that helps in the absorption of upward movement of water and minerals dissolved in it from roots to the leaves in plants **

**A. Respiration** **B. Transpiration**

**C. Photosynthesis** **D. Translocation**

106. The correct pathway of oxygenated blood coming from lungs to the heart in the human body **

**A. Pulmonary artery → Right Ventricle → Right Atrium**

**B. Pulmonary artery → Right Atrium → Right Ventricle**

**C. Pulmonary Vein → Left Ventricle → Left Atrium**

**D. Pulmonary Vein → Left Atrium → Left Ventricle**

107. The blood leaving the tissues becomes rich in

**A. Hemoglobin** **B. Carbon dioxide**

**C. Water** **D. Oxygen**

108. One cell-thick vessels are called

**A. Arteries** **B. Veins**

**C. Capillaries** **D. Pulmonary artery**

109. A blood vessel which carries the blood from the heart to the entire body

**A. Artery** **B. Capillary**

**C. Vein** **D. Hemoglobin**

110. Name a circulatory fluid in the human body other than blood

**A. Platelets** **B. RBC**

**C. Plasma** **D. Lymph**

111. Chambers present in the heart of birds and mammals

**A. 2** **B. 3**

**C. 4** **D. 5**

112. Veins have

**A. Thick Wall without Valves** **B. Thick wall with Valves**

**C. Thin wall without Valves** **D. Thin wall with Valves**

113. The Xylem in plants are responsible for

**A. Transport of water** **B. Transport of food**

**C. Transport of amino acids** **D. Transport of oxygen**

114. Lymph is

**A. Colourless and contains less protein**
**B. Colourless and contains more protein**
**C. Red colour and contains less protein**
**D. Red colour and contains more protein**

115. The loss of water in the form of vapour from the aerial parts of the plant is known as

**A. Photosynthesis**
**B. Transpiration**
**C. Translocation**
**D. Transportation**

116. The transport of soluble products of photosynthesis is called as

**A. Photosynthesis**
**B. Transpiration**
**C. Translocation**
**D. Transportation**

117. Function of Blood

1. Transportation of food
2. Transportation of Oxygen
3. Urine Formation
4. Transportation of Wastes

**A. 1 only**
**B. 1 and 2 only**
**C. 1,2 and 3 only**
**D. 1,2 and 4 only**

118. The Kidneys in human beings are a part of the system for

**A. Nutrition**
**B. Respiration**
**C. Excretion**
**D. Transportation**

119. Vena Cava from upper part and lower part of the body carry blood from

**A. Heart to Body Cells**
**B. Body Cells to Heart**
**C. Heart to Lungs**
**D. Lungs to Heart**

120. In this diagram of human heart name the parts showing 1 and 2


**A. 1→Right Atrium and 2→ Left Ventricle**
**B. 1→Right Ventricle and 2→ Left Atrium**
**C. 1→Left Atrium and 2→ Right Ventricle**
**D. 1→Left Ventricle and 2→ Right Atrium**

121. The unit helps in clotting of blood is

**A. RBC** **B. WBC**

**C. Platelets** **D. Plasma**

122. Which of the following has a three – chambered heart

**A. Crow** **B. Lizard**

**C. Fish** **D. Tiger**

## CHAPTER - 7

## Control and Coordination

123. The pattern of response in the roots of plants is *

**A. Directional and negatively phototropic**

**B. Positively phototrophic and negatively geotropic**

**C. Non directional and positively geotropic**

**D. Growth dependent and positively hydrotropic**

124. Neck region of a person has bulged with less metabolic activity ,the gland responsible for such Problem *

**A. Thyroid** **B. Adrenal**

**C. Pancreas** **D. Pituitary**

125. Iodized salt usage is to overcome this problem *

**A. Problem in Genitals** **B. Thyroid problem**

**C. Adrenal problem** **D. Pancreatic problem**

126. Voluntary activities are controlled by this part of the brain *

**A. Hindbrain** **B. Hypothalamus**

**C. Cerebellum** **D. Spinal Chord**

127. Harmone in highest proportion in Fruits and Seeds *

**A. Gibberellin** **B. Cytokinin**

**C. Auxin** **D. Absissic acid**

128. Plant grows longer in the shade region because of this hormone *

**A. Auxin** **B. Absissic acid**

**C. Gibberellin** **D. Cytokinin**

129. Involuntary functions are controlled by *

**A. Cerebellum** **B. Cerebrum**

**C. Medulla** **D. Skull**

130. The hormone increases blood flow ,heart beat and makes ready to the situation is *

**A. Thyroxin** **B. Adrenaline**

**C. Oestrogen** **D. Insulin**

131. The hormone that regulates carbohydrate, protein and fat metabolism in the human body is **

**A. Testosterone** **B. Adrenaline**

**C. Thyroxin** **D. Insulin**

132. The mismatched pair among the following is **

**A. Adrenaline-Pituitary gland** **B. Testosterone-Testis**

**C. Insulin-Pancreas** **D. Thyroxin –Thyroid gland**

133. The part of human brain responsible for precision of voluntary actions and maintaining the posture and balance of the body **

**A. Pons** **B. Cerebrum**

**C. Hypothalamus** **D. Cerebellum**

134. The function of Hindbrain is

**A. Thinking** **B. Hunger**

**C. Sight** **D. Movement**

135. Part of the brain responsible for Thinking is

**A. Cerebrum** **B. Hypothalamus**

**C. Hind brain** **D. Medulla Oblongata**

136. Function of Hypothalamus is

**A. Sleep** **B. Hearing**

**C. Thinking** **D. Movement**

137. Part of the brain controls Breathing is

**A. Cerebrum** **B. Cerebellum**

**C. Pons** **D. Medulla Oblongata**

138. Parts of reflex arc in order is

**A. Receptor-Sensory neuron –Relay neuron-Motor neuron-Effector**

**B. Sensory neuron- Receptor- –Relay neuron-Motor neuron-Effector**

**C. Sensory neuron –Relay neuron-Motor neuron-Effector- Receptor**

**D. Sensory neuron –Relay neuron- Receptor-Motor neuron-Effector**

139. Parts of reflex arc shows the action is

**A. Receptor** **B. Sensory neuron**

**C. Relay neuron** **D. Effector**

140. Junction between two nerves

**A. Axon** **B. Synapse**

**C. Dendrite** **D. Impulse**

141. Reflex action is controlled by

**A. Cerebrum** **B. Cerebellum**

**C. Pons** **D. Medulla Oblongata**

142. Functional unit of nervous system is

**A. Axon** **B. Nephron**

**C. Neuron** **D. Synapse**

143. Movement of shoot tip of Hibiscus towards light is

**A. Phototropism** **B. Geotropism**

**C. Hydrotropism** **D. Chemotropism**

144. The process of growth of pollen tube towards ovum is

**A. Hydrotropism** **B. Chemotropism**

**C. Phototropism** **D. Geotropism**

145. Gigantism is occurred because of deficiency of this hormone

**A. Thyroid** **B. Adrenal**

**C. Thymus** **D. Pituitary**

146. Pituitary is stimulated to secrete hormones by

**A. Hypothalamus** **B. Cerebellum**

**C. Pons** **D. Medulla Oblongata**

147. One person is having slow recovery from wounds because of more sugar level in blood, the hormone responsible for this problem is secreted by

**A. Thyroid** **B. Adrenal**

**C. Pancreas** **D. Pituitary**

148. Peripheral nervous system has the following parts

**A. Cranial Nerves** **B. Spinal nerves**

**C. Brain and Spinal Cord** **D. Cranial and Spinal nerves**

149. Master gland of glandular system

**A. Adrenal** **B. Thyroid**

**C. Pituitary** **D. Parathyroid**

150. Simultaneous reaction to a stimulus by the body is

**A. Reflex action** **B. Reflex arc**

**C. Action to the stimulus** **D. Stimulate**

151. Root moves towards the soil on earth ,this movement is known as

**A. Phototropism** **B. Geotropism**

**C. Hydrotropism** **D. Chemotropism**

152. Movement of the plant not showing growth is

**A. Ridge Gourds Tendril growth**

**B. Touch me not plant leaves drooping**

**C. Arecanuttree growth towards sun**

**D. Coconut tree Root growth towards soil**

153. Hormone inhibits the growth of plant is

**A. Gibberellin** **B. Cytokinin**

**C. Auxin** **D. Absissic acid**

154. Hormone developing maleness at maturity is

**A. Testosterone** **B. Insulin**

**C. Progesterone** **D. Thyroxin**

155. Hormone developing femaleness at maturity is

**A. Adrenaline** **B. Thyroxin**

**C. Progesterone** **D. Testosterone**

156. Hormones secreted by Pancreas are

**A. Adrenaline –Thyroxin** **B. Adrenaline –Insulin**

**C. Insulin –Glucagon** **D. Thyroxine -Glucagon**

157. Route of Impulse movement through nerve is

**A. Dendrite-Axon –Cellbody-Nerve ending**

**B. Axon –Cellbody-Nerve ending -Dendrite**

**C. Axon –Dendrite-Cellbody-Nerve ending**

**D. Dendrite- Cellbody-Axon –Nerve ending**

## CHAPTER - 8

## How do Organisms Reproduce?

158. Reproductive cells contain only one copy of chromosomes in it, because of that **

**A. Hereditary traits are transferred to generation**

**B. Keeps constant number of chromosomes in the generation**

**C. Makes changes in the hereditary traits in the generation**

**D. Transfers one copy of the chromosomes to the generation**

159. This part of the flower which develops into fruit is **

**A. Ovule** **B. Ovary**

**C. Stigma** **D. Style**

160. The organ that secrets the hormone which controls the Body changes in puberty in males is **

**A. Prostate gland** **B. Scrotum**

**C. Seminal vesicle** **D. Testis**

161. Which structure among the following connects the foetus to the mother's blood? **

**A. Fallopian tube** **B. Uterus**

**C. Placenta** **D. Ovary**

162. The part of the male reproductive system which produces the liquid that nourish and helps in the movement of the sperms is, **

**A. Testis** **B. Prostate gland**

**C. Ureter** **D. Bladder**

163. Egg $\xrightarrow{A}$ Zygote $\xrightarrow{B}$ Embryo $\longrightarrow$ Foetus In this process A and B represents **

**A. Fertilization and Division** **B. Division and Pollination**

**C. Fertilization and Pollination** **D. Division andFertilization**

164. The process that does not happen if the egg is fertilized **

**A. The embryo is implanted in the lining of the uterus**

**B. Zygotestarts dividing**

**C. Grows and develops organs to become foetus**

**D. Menstruation cycle continues**

165. This among the following is not a part of the female reproductive system **

**A. Ovary** **B. Uterus**

**C. Vas deferens** **D. Fallopian tube**

166. The correct sequence found in the process of sexual reproduction in the flower is *

**A. Pollination, fertilization, embryo, seed**

**B. Seed,embryo,fertilization,pollination**

**C. Embryo, seed,pollination, fertilization**

**D. Pollination, fertilization,seed,embryo**

167. The part of the seed that grows and develops into root on germination is, *

**A. Cotyledon** **B. Plumule**

**C. Radicle** **D. Seed coat**

168. Sexually transmitting disease caused by the bacteria among the following is, *

**A. Syphilis and Warts**
**B. Warts and Gonorrhea**
**C. Warts and AIDS**
**D. Gonorrhea and Syphilis**

169. The parts which included in the female part of the flower

1. Pistil 2. Pollen grain 3. Ovary 4. Style

**A. 1,3 and 4 only**
**B. 1,2 and 3 only**
**C. 1 and 4 only**
**D. 1,2,3 and 4 all**

170. If the egg released from the ovary is not fertilized, then

**A. Implanted in the lining of the uterus**
**B. Release of egg is stopped**
**C. Menstruation is continued**
**D. Develops into embryo**

171. The Best Contraceptive method that can prevent sexually transmitting Diseases

**A. Use of Copper T**
**B. Contraceptive pills**
**C. Use of Condoms**
**D. Surgery method**

172. This of the following contraceptive method can bring the hormonal changes in the body

**A. Contraceptive pills**
**B. Use of Condoms**
**C. Use of Copper T**
**D. Surgery method**

173. The function of the ovary among the following is

1. Production of eggs
2. Secretion of Oestrogen
3. Transfer of fertilized egg into uterus
4. Helps in the development of foetus

**A. 1 and 2 only**
**B. 1 and 3 only**
**C. 2 and 4 only**
**D. 3 and 4 only**

174. The part that consists the male gametes in the flower is

**A. Ovary**
**B. Anther**
**C. Stigma**
**D. Filament**

175. The body changes that is not takes place in the male during the puberty;

**A. Voices begin to crack**

**B. Thick hair growth in armpits and genital area**

**C. Begin to develop pimples in the face**

**D. Growth of new teeth replacing milk teeth**

176. The organ in female reproductive system which prepares itself every month to receive and nurture the growing embryo is,

**A. Ovary** **B. Uterus**

**C. Fallopian tube** **D. Vagina**

177. In human males the testes lie in the scrotum outside the body because for the production of sperms

**A. Needs low temperature** **B. Needs more nutrition**

**C. Needs more temperature** **D. For more blood supply**

178. This plant among the following produces the flower having both stamen and pistil

**A. Watermelon** **B. Mustard**

**C. Papaya** **D. Ash guard**

179. If the pollen of one flower transfers to the stigma of the same flower then that process is referred as

**A. Fertilization** **B. Cross pollination**

**C. Self-pollination** **D. Reproduction**

180. Anther consists of the following structure

**A. Sepals** **B. Ovules**

**C. Stigma** **D. Pollen grains**

181. These among the following transmits by the sexual contacts

**A. Hepatitis** **B. Filariasis**

**C. Typhoid** **D. Syphilis**

182. These among the following is not a changes that happen after fertilization in flower

**A. Development of foetus from zygote**

**B. Fertilized egg converts into seed**

**C. Formation of Pollen tube**

**D. Petal sepalstamen and stigma shrivel and fall off**

# CHAPTER - 9

## Heredity and Evolution

183. Having two sets of genes in the germs cells is not possible" in order to, *

**A. Sexual reproduction**

**B. Ensure the stability of the DNA of the species**

**C. Multiply the number of chromosomes**

**D. Ensure instability of the DNA**

184. Genetic drift and natural selection, together result in the formation of new species of organisms. The reason is, *

**A. Variations** **B. Survival**

**C. Similarities** **D. Genes**

185. Studies of anatomical structures are helpful for tracing evolutionary relationships due to *

**A. Similarities** **B. Variations**

**C. Similarities and Variations** **D. Anatomical structures**

186. The factors that could determine" the birds are very closely related to reptiles," *

**A. Limbs** **B. Habitat**

**C. Food** **D. Feathers**

187. The expressions of 'Tall' or 'Short' traits in plants controlled by the genes are due to *

**A. Secretion of hormones** **B. Heredity**

**C. Nutrition** **D. Nature of Soil**

188. "Acquired traits of an individual organism during its life time cannot direct the evolution" because acquired traits, *

**A. Can be inherited** **B. Cannot be inherited**

**C. Are different** **D. Are same**

189. "The traits of an organism independently inherit to the progeny"- Mendel's monohybrid cross experiments was clarified by *

**A. Getting independently assorted plants with new combination**

**B. Comparing the progeny with the host plants**

**C. Getting the ratio of 3:1**

**D. Hybridizing two plants for a single traits**

190. Analogous organs have, **

**A. Same structure and same function**

**B. Same structure and different functions.**

**C. Different structures and same function.**

**D. Different structures and different functions**

191. " The experiences of an individual during its life time cannot be passed on to its progeny," because they are **

**A. Inherited traits**

**B. Acquired traits**

**C. Dominant traits**

**D. Recessive traits**

192. If a round green seeded pea plant (RRyy) is crossed with wrinkled yellow seeded pea plant (rrYY) the seeds produced in $F_1$ generation are **

**A. Round and Green**

**B. Wrinkled and Yellow**

**C. Wrinkled and Green**

**D. Round and Yellow**

193. Homologous organs have

**A. Same structure and same function**

**B. Same structure and different functions.**

**C. Different structures and same function.**

**D. Different structures and different functions**

194. The copies of genes for the same trait and if the copies are not identical, the trait that gets expressed and the other one remains unexpressed are called respectively,

**A. Dominant and Recessive**

**B. Recessive and Dominant**

**C. Dominant traits**

**D. Recessive traits**

195. In human beings, the paternal chromosome determines the sex of the child in this way

**A. X-Boy** **B. Y-Girl**

**C. X-Girl** **D. Y- Boy and Girl**

196. Speciation may take place when variation is combined with

**A. Natural selection** **B. Geographical isolation**

**C. Genetic drift** **D. Sexual reproduction**

197. A Mendelian experiment consisted of breeding tall pea plants bearing violet flowers with short pea plants bearing white flowers. The progeny will bore violet flowers, but almost half of them were short. This suggests that, the genetic make-up of the tall parent can be depicted as

**A. TTWW** **B. TTww**

**C. TtWW** **D. TtWw**

198. An example of homologous organs is

**A. Our arm and a dog's fore-leg** **B. Our teeth and elephant tusks**

**C. Wings of butterfly and wings of bat** **D. A and B only**

199. In evolutionary terms, we have more in common with

**A. A chinese school- boy** **B. A chimpanzee**

**C. A spider** **D. A bacterium**

200. Accidents in small populations can change the frequency of some genes which provide diversity without any adaptations

**A. Speciation** **B. Natural selection**

**C. Genetic drift** **D. Variations**

201. In Mendel's experiments monohybrid ratio in $F_2$ progeny is

**A. 3:1** **B. 9:3:3:1**

**C. 2:1** **D. 9:3:1**

202. In Mendel's experiments di-hybrid ratio in $F_2$ progeny is

**A. 3:1** **B. 9:3:3:1**

**C. 2:1** **D. 9:3:1**

# CHAPTER - 10

## Light- Reflection and Refraction

203. The suitable focal length of the convex lens used as magnifying lens to read “Hallmark 916” written on ornament is: *

**A. 12cm** **B. 60cm**

**C. 100cm** **D. 120cm**

204. If the radius of curvature of a lens is 30cm, then its focal length will be *

**A. 60cm** **B. 30cm**

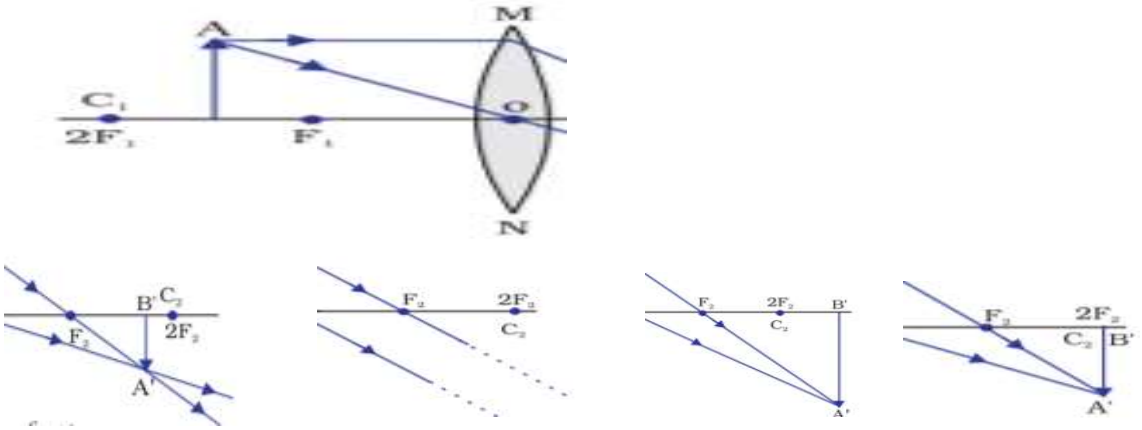
**C. 15cm** **D. 120cm**

205. Refraction of light takes place, when the *

**A. Angle of incidence is more than $90^0$** **B. Angle of incidence is less than $90^0$**

**C. Angle of incidence is $0^0$** **D. Mediums having same refractive index.**

206. Complete the ray diagram using the correct option *




A. B. C. D.

207. The focal length of a convex lens is 100cm then its power will be *

**A. +1D** **B. -1D**

**C. +0.01D** **D. -0.01D**

208. An object is kept at a distance of 30cm from a diverging lens of focal length 15cm, then the image distance and its magnification will be respectively *

**A. -10 cm and 3** **B. +10cm and 3**

**C. +10 cm and 0.33** **D. -10 cm and 0.33**

209. Concave lens always produces *

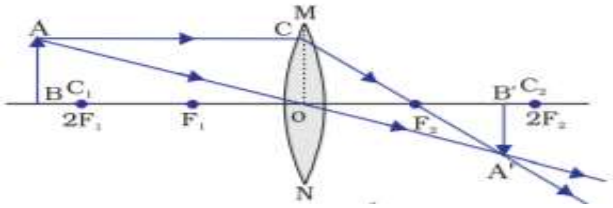
**A. erect, diminished and real image**

**B. inverted, diminished and real image**

**C. erect, enlarged and virtual image**

**D. erect, diminished and virtual image.**

210. From the ray diagram given below identify the position and nature of the image *




**A. Between $F_2$ and $2F_2$, virtual and inverted**

**B. Between $F_2$and $2F_2$, real and inverted.**

**C. Beyond $2F_2$, real and inverted.**

**D. Beyond $2F_2$, virtual and erect.**

211. The refractive index of glass is 1.5 means, *

**A. The ratio of the speed of light in water and the speed of light in glass equal to 1.5.**

**B. The product of the speed of light in water and the speed of light in glass equal to 1.5.**

**C. The product of the speed of light in air and the speed of light in glass equal to 1.5.**

**D. The ratio of the speed of light in air and the speed of light in glass equal to 1.5.**

212. A concave lens of focal length 15cm forms an image 10cm from the lens. The nature of the image is,*

**A. Real and erect**

**B. Virtual and erect**

**C. Virtual and inverted**

**D. Real and inverted**

213. A doctor prescribes a corrective lens of power -0.5D to a person. The focal length of the lens and type is **

**A. -2m and concave lens**

**B. +2 m and convex lens**

**C. +2m and concave lens**

**D. -2m and convex lens**

214. The nature and the size of the image formed when the object is kept between the principal focus '$F_1$' and optical centre 'O' of a convex lens is **

**A. Virtual, erect and enlarged**

**B. Real, inverted and small size**

**C. Virtual, inverted and small size**

**D. Real, inverted and enlarged**

215. The diameter of the circular outline of a spherical lens is, **

**A. Optical centre** **B. Centre of curvature**

**C. Aperture** **D. Principal axis**

216. Object distance and image distance of a lens are - 60cm and -20cm respectively, then the magnification of the lens will be **

**A. -0.33** **B. +3.0**

**C. +0.33** **D. +4.0**

217. Which one of the following materials cannot be used to make a lens?

**A. Water** **B. Glass**

**C. Plastic** **D. Clay**

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

**A. At the principal focus of the lens**

**B. At twice the focal length**

**C. At infinity**

**D. Between the optical centre of the lens and its principal focus**

219. Which of the following lenses would you prefer to use while reading small letters found in a dictionary?

**A. A convex lens of focal length 50cm**

**B. A concave lens of focal length 50cm**

**C. A convex lens of focal length 5cm**

**D. A concave lens of focal length 5cm**

220. The centre point of a lens is called as

**A. Optical centre** **B. Centre of curvature**

**C. Focal point** **D. Aperture**

221. A Ray of light passing through a principal focus, after refraction from a convex lens will emerge

**A. Through the principal focus on the same side of the lens.**

**B. Through the principal focus on the other side of the lens.**

**C. Parallel to the principal axis.**

**D. Without deviation.**

222. 1 diopter is a power of a lens whose focal length is

**A. 1cm** **B. 50cm**

**C. 1m** **D. 50m**

223. The positive sign in the value of magnification of a lens shows that the image is

**A. erect and real** **B. erect and virtual**

**C. inverted and real** **D. inverted and virtual**

224. The lens formula is expressed as

**A.** $\frac{1}{v}-\frac{1}{u}=\frac{1}{f}$ **B.** $\frac{1}{u}-\frac{1}{v}=\frac{1}{f}$

**C.** $\frac{1}{v}+\frac{1}{u}=\frac{1}{f}$ **D.** $\frac{1}{h}-\frac{1}{u}=\frac{1}{f}$

225. Light rays from the sun light falling on a convex lens will converge at a point on principal axis called

**A. Radius of curvature** **B. Centre of curvature**

**C. Optic centre** **D. Principal focus**

226. A highly enlarged and real image is formed by a convex lens when an object is placed

**A. between $F_1$ and O** **B. at $2F_1$**

**C. at $F_1$** **D. between $F_2$ and $2F_2$**

227. A Ray of light is travelling from a rarer medium to a denser medium. While entering the denser medium at the point of incidence, it

**A. Goes straight into the second medium** **B. Bends towards the normal**

**C. Bends away from the normal** **D. Does not enter at all**

## CHAPTER - 12

## Electricity

228. Advice used to change the resistance in an electric circuit is **

**A. Ammeter** **B. Rheostat**

**C. Galvanometer** **D. Voltmeter**

229. The potential difference between the terminals of electric heater is 60V, when it draws a current of 4A from the source.the resistance of electric heater coil is **

**A. 15Ω** **B. 240Ω**

**C. 24Ω** **D. 64Ω**

230. The resistance of a conductor does NOT depend on **

**A. Length of conductor** **B. Area of cross section of conductor**

**C. Magnetic nature** **D. Nature of the material**

231. 'WATT' is an SI unit of **

**A. Electric current** **B. Electric charge**

**C. Electric potential difference** **D. Electric power**

232. Observe the following table **

| Material | Resistivity(Ωm) |
|---|---|
| K | $6.84X10^{-8}$ |
| L | $1.62 X 10^{-8}$ |
| M | $5.20 X 10^{-8}$ |
| N | $2.63 X 10^{-8}$ |

Good conductor of electricity among these material is

**A. K** **B. L**

**C. M** **D. N**

233. S I Unit of electric charge is_____*

**A. Joule** **B. Volt**

**C. Coulomb** **D. Ampere**

234. The opposition to flow of electric current is called_____*

**A. Volt** **B. Electric current**

**C. Resistance** **D. Ampere**

235. The formula of joules law of heating is_____*

**A. V=RI** **B. H=IRT**

**C. $H=I^2R^2T$** **D. $H=I^2RT$**

236. How much work is done in moving a charge of 2C across two points having a potential difference12V--

**A. 24 Joule** **B. 6 Joule**

**C. 14 Joule** **D. 10 Joule**

237. Apiece of wire of resistance Ris cut in to five equal parts these parts are then connected in parallel if the equivalent resistance of this combination is R' then the ratio R/R' is-

**A. 1/25** **B. 1/5**

**C. 5** **D. 25**

238. Which of the following terms does not represent electrical power in a circuit?

**A. $I^2R$** **B. $\frac{VQ}{t}$**

**C. VI** **D. $V^2R$**

239. The correct way of using electrical appliances in domestic electric circuit is

**A. Connecting electrical appliances in series**

**B. Using an electrical appliance of 880 W power in 5A electric circuit**

**C. Connecting main fuse to electrical appliances in parallel**

**D. Using an electrical appliance of 2 KW power in 5A electric circuit**

240. Two conducting wires of same material and of equal lengths and equal diameters are first connected in series and then parallel in a circuit across the same potential difference. The ratio of heat produced in series and parallel combinations would be –

**A. 1:2** **B. 2:1**

**C. 1:4** **D. 4:1**

241. Tungsten is used almost exclusively for filament of electric lamps because it has--

**A. High resistivity and high melting point** **B. High resistivity and low melting point**

**C. Low resistivity and high melting point** **D. Low resistivity and low melting point**

242. The conductors of electric heating devices such as bread toasters and electric irons, made of an alloy rather than a pure metal because It has_____

**A. Less resistivity and less melting point** **B. High resistivity and low melting point**

**C. High resistivity and high melting point** **D. Low resistivity and low melting point**

243. Copper and Aluminum wires usually employed for electricity transmission because copper and Aluminum wires are having --

**A. Low resistivity and bad conductors of electricity**

**B. High resistivity and bad conductors of electricity**

**C. High resistivity and good conductors of electricity**

**D. Low resistivity and good conductors of electricity**

244. 


In an electric circuit these symbols are represents _____

**A. Ammeter,voltmeter, switch closed,switch open**

**B. Voltmeter,ammeter, switch closed,switch open**

**C. Switch open,ammeter,voltmeter,switch closed**

**D. Switch closed,ammeter, voltmeter,switch open**

245. A continuous and closed path of an electric current is called_____

**A. Electric circuit** **B. Electric connection**

**C. Electric power** **D. Electric distribution.**

246. An electric bulb is connected to a 220 V generator. The current flowing in the bulb is 0.50A Then the power of the bulb is_____

**A. 1100W** **B. 44W**

**C. 110W** **D. 100W**

247. The amount of current will an electric heater coil draw from a 220 V source,if the resistance of the heater coil is 100 ohm_____

**A. 220A** **B. 22 A**

**C. 2.2 A** **D. 220V**

248. Precautionary measures taken to prevent overload in a circuit is_____

**A. Many appliances are connected to a single socket**

**B. Many appliances are connected to a different socket.**

**C. Many appliances are not used at a time**

**D. Both B and C are correct**

249. The work done to move a unit charge from one point to other is_____

**A. Electric current** **B. Potential difference**

**C. Electric power** **D. Electric resistance**

250. The resistance of a conductor is 27 ohm , if it is cut in to three equal parts and connected it in parallel . Then the resultanrt resistance will be_____

**A. 1 ohm** **B. 3 ohm**

**C. 9 ohm** **D. 12 ohm**

251. The work done in moving a charge of 2C across two points at potential difference 12V_____

**A. 24J** **B. 6J**

**C. 14J** **D. 10J**

252. The resistance of a uniform metallic conductor is_____

**A. Directly proportion to its length** **B. Inversely proportional to its length**

**C. Equal to its length** **D. Multiple of its length**

253. The instrument used to maintain potential difference across the conductor is _____

**A. Pencil** **B. Conductor**

**C. Battery** **D. Water**

254. Instrument used to measure electric current is _____

**A. Resistor** **B. Ammeter**

**C. Voltmeter** **D. Water**

255. Instrument used to measure potential difference in an electric circuit is--

**A. Voltmeter** **B. Ammeter**

**C. Voltameter** **D. Rheostat**

256. In an electric circuit ammeter is connected in_____

**A. Parallel** **B. Series**

**C. Both parallel and series** **D. Opposite direction**

257. In an electric circuit voltmeter is connected in_____

**A. Parallel** **B. Series**

**C. Both parallel and series** **D. Opposite direction**

258. The benefits of connecting parallel series in an electric circuit is—

**A. By dividing electric current total resistance become less a in circuit**

**B. By dividing electric current total resistance become more in a circuit**

**C. If one appliance is not working then all other appliances will not stop working**

**D. Option both A and C correct**

259. If a current of 0.5A is drawn by a filament of an electric bulb for 10 minutes ,then the amount of electric charge that flows through the circuit is—

**A. 50C** **B. 5C**

**C. 300C** **D. 30C**

260. Formula of ohms law

**A. V=IT** **B. H=IRT**

**C. V=RI** **D. $H=I^2RT$**

261. SI unit of resistivity –

**A. Ohm** **B. Watt**

**C. Ohm meter** **D. Ampere**

262. To prolong the life of the filament of an electric bulb ,the gas filled in the bulb is --

**A. Oxygen** **B. Carbon dioxide**

**C. Hydrogen** **D. Nitrogen**

# CHAPTER - 13

# Magnetic Effects of Electric current

263. The magnetic field lines inside a solenoid are in the form of a parallel Straight lines. The reason for this is the magnetic field inside the solenoid is: *

**A. Very high** **B. Uniform**

**C. Zero** **D. Produced by electricity.**

264. Which of the following is not a property of magnetic lines? *

**A. Magnetic field lines dense near polis**

**B. Magnetic field lines are closed loops.**

**C. Magnetic field lines intersect each other**

**D. Magnetic field lines emerge from North Pole and merge at South Pole**

265. The correct way of using electrical appliances in domestic electric circuit is *

**A. Connecting electrical appliances in series**

**B. Using an electrical appliance off eat 880 W power in 5A electric circuit**

**C. Connecting main fuse to electrical appliances in parallel**

**D. Using an electrical appliance of 2KW power in 5A electric circuit**

266. A convenient way of finding the direction of magnetic field associated with the current carrying straight conductor is given by *

**A. Right hand thumb rule**

**B. Fleming's right hand rule**

**C. Fleming's left hand roll**

**D. Jules law**

267. The working principle of an electric motor *

**A. A current carrying conductor when placed in a magnetic field experiences a force**

**B. Electrochemical effect**

**C. Electromagnetic effect**

**D. Electromagnetic induction**

268. In Fleming's left hand rule middle finger indicates the direction of the **

**A. Magnetic field**

**B. Electric current induced in conductor**

**C. Electric current**

**D. Movement of the conductor**

269. The function of electric generator is,it **

**A. Reverses the direction of current**

**B. Converts electric energy into mechanical energy**

**C. Detects presence of electric current in the circuit**

**D. Converts mechanical energy into electrical energy**

270. The principle on which an electric generator works **

**A. Electrochemical effect**

**B. Electromagnetic effect**

**C. Electromagnetic Induction**

**D. Electro heating effect**

271. In faraday's coil and magnet experiment when coil and magnet are both stationary

**A. Coil producers more electricity**
**B. Coil produces electricity**
**C. Electricity continuously changes in the coil**
**D. There is no flow of electricity in the coil.**

272. The device used to detect the flow of electric current in faraday's coil and magnet experiment

**A. Voltameter**
**B. Ammeter**
**C. Galvanometer**
**D. Tester**

273. Which of the following correctly describes the magnetic field near a long straight conductor?

**A. The field consists of straight lines perpendicular to the wire.**
**B. The field consists of straight lines parallel to the wire.**
**C. The field consists of radial lines originating from the wire.**
**D. The field consists of concentric circles centered on the wire.**

274. The phenomenon of electromagnetic induction is

**A. The process of charging a body.**
**B. The process of generating magnetic field due to current passing through coil.**
**C. Producing induced current in a coil due to relative motion between a magnet and the coil.**
**D. The process of rotating a coil of an electric motor**

275. A device that reverses the direction of flow of current through a circuit is called a

**A. Split ring**
**B. Commutator**
**C. Slip ring**
**D. Brushes**

276. During short circuit current in the circuit

**A. Reduces substantially**
**B. Does not change**
**C. Increases heavily**
**D. Vary continuously**

277. State a false statement among the following

**A. An electric motor converts mechanical energy into electrical energy**
**B. An electric motor converts electric energy into mechanical energy.**
**C. When current carrying conductor is placed in magnetic it experiences mechanical force**
**D. Electric motor is used in appliances like fan mixer etc.**

278. The device used to get electrical energy from mechanical energy

**A. Dynamo**
**B. Galvanometer**
**C. Ammeter**
**D. Volta meter**

279. The frequency of alternating current produced in India is

**A. 100 Hertz** **B. 220 Hertz**

**C. 110 Hertz** **D. 50 Hertz**

280. The safety device used to protect electrical appliances in a domestic circuit during overloading of the circuits

**A. Fuse** **B. Volt meter**

**C. Ammeter** **D. Tester**

281. In India the potential difference between live wire and neutral wire is

**A. 220V** **B. 100V**

**C. 110V** **D. 50V**

282. To get maximum mechanical force in an electric motor the angle between direction of current and the direction of magnetic field should be

**A. 0 degree** **B. 45 degree**

**C. 90 degree** **D. 180 degree**

283. In domestic electric circuits the colour of live wire is

**A. Green** **B. Blue**

**C. Red** **D. Black**

284. The first scientist to show that the magnetic field can create the flow of electric current

**A. Ohm** **B. Michael Faraday**

**C. Oersted** **D. Isaac Newton**

285. Magnetic field has

**A. It doesn't have direction and magnitude**

**B. It has no direction but magnitude is present**

**C. It has both direction and magnitude**

**D. It doesn't have direction and magnitude**

286. In Fleming's right hand rule middle finger indicates the direction of the

**A. Magnetic field** **B. Electric current induced in conductor**

**C. Electric current** **D. Movement of the conductor**

287. Which of the following property can change while it moves freely in a magnetic field?

**A. Velocity** **B. Momentum**

**C. Mass** **D. A&B**

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

**A. Two revolutions** **B. One revolution**

**C. Half revolution** **D. One fourth revolution**

289. An electrons enters a magnetic field at right angles to it as shown in the fig.

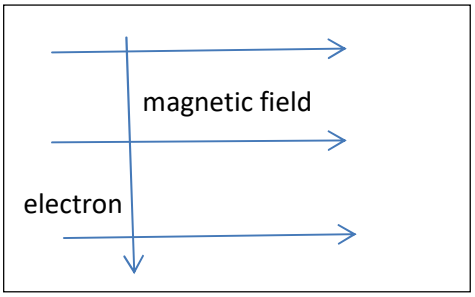
The direction of force acting on the Electron will be

**A. To the right**

**B. To the left**

**C. Out of the page**

**D. Into the page**



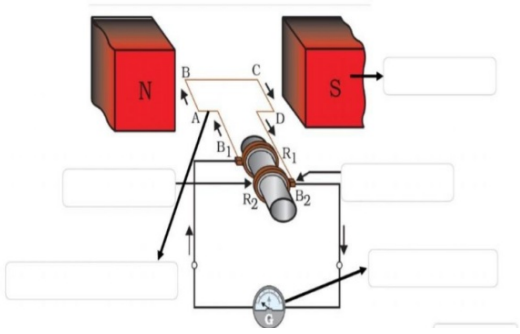

290. In this diagram R1, R2 and B1,B2 are respectively

**A. Rings & brushes**

**B. Rings& magnetic poles**

**C. Brushes& magnetic poles**

**D. Brushes & rings**




**Based on the given diagram answer question number 291 and 292**

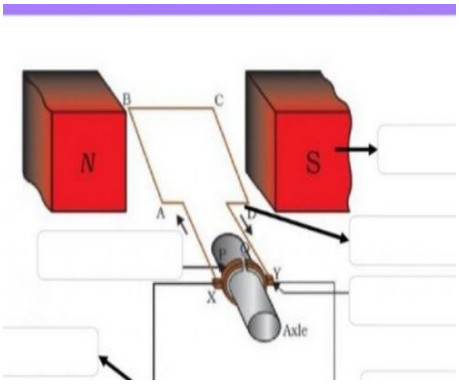
291. In the diagram name P, Q

**A. Brushes**

**B. Split rings**

**C. Complete rings**

**D. Magnetic poles**



292. The above device is used in

**A. Mixer** **B. Fan**

**C. Toy car** **D. Washing machine**

## CHAPTER - 14

## Sources of Energy

293. In a Power station coal is burnt to heat water to produce steam which further runs the turbine to Generate electricity. This power station is_____*

**A. Thermal Power Plant because coal is burnt**

**B. Hydro power plant because water is heated**

**C. Nuclear Power plant because turbine runs**

**D. Bio gas power plant because coal is used**

294. Identify the correct statement in relation to energy sources_____

A. Efficiency should be high B. Should produce high smoke

C. Should be easily available D. Should be rarely available

**A. A&B** **B. A&C**

**C. B&D** **D. C&D**

295. Which of the following energy sources is affected by moon's gravity? *

**A. Solar energy** **B. Fossil fuels**

**C. Tidal energy** **D. Biomass**

296. The energy possessed by huge waves needed to generate electricity is_____*

**A. Solar energy** **B. Kinetic energy**

**C. Potential energy** **D. Heat energy**

297. Which of the following is not a fossil fuel? *

**A. LPG** **B. Natural gas**

**C. Biogas** **D. CNG**

298. A solar water heater cannot be used to get hot water on _____*

**A. A sunny day** **B. A cloudy day**

**C. A hot day** **D. A windy day**

299. Most of the stored sources of energy we use represent stored solar energy. Which of the following is not ultimately derived from the Sun's energy? *

**A. Geothermal energy** **B. Wind energy**

**C. Nuclear energy** **D. Biomass**

300. Hot Springs are related to _____*

**A. Geothermal energy** **B. Nuclear energy**

**C. Tidal energy** **D. Wind energy**

301. The common fuel used in Thermal power plant is _____*

**A. Methane** **B. Hydrogen**

**C. Coal** **D. Kerosene**

302. The oxides of carbon, nitrogen and sulphur that are released on burning fossil fuels are _____

**A. Basic oxides** **B. Amphoteric oxides**

**C. Acidic Oxides** **D. Neutral oxides**

303. The vegetation which is submerged rots under anaerobic conditions and give rise to large amounts of methane. This problem is associated with _____

**A. By constructing Thermal power plant**

**B. By constructing Dams for Hydro Power Plants**

**C. By constructing nuclear power plants**

**D. While setting wind mills to harness wind energy**

304. The power (electricity) produced by a typical solar cell when exposed to the sun_____

**A. 1 watt** **B. 0.5 watt**

**C. 0.7 watt** **D. 0.9 watt**

305. The element used for making solar cells is_____

**A. Sulphur** **B. Phosphorous**

**C. Zirconium** **D. Silicon**

306. The voltage produced by a typical solar cell when exposed to the sun____

**A. 1.5V – 2V** **B. 2V- 2.5V**

**C. 0.5V-1V** **D. 1V-1.5V**

307. The best suited mirror to use in solar cooker is _____

**A. Concave** **B. Convex**

**C. Plain** **D. Spherical**

308. Which one of the following is used as a rocket fuel _____*

**A. CNG** **B. Petrol**

**C. Hydrogen** **D. Natural Gas**

309. The following is not used as a fuel in Nuclear reactor_____

**A. Uranium** **B. Barium**

**C. Plutonium** **D. Thorium**

310. The Main component of bio gas is _____

**A. Propane** **B. Butane**

**C. Ethane** **D. Methane**

311. The minimum wind speed required to maintain the speed of the turbine of wind mill is _____

**A. Above 10km/h** **B. Above 12 km/h**

**C. Above13 km/h** **D. Above 15 km/h**

312. The slurry left behind after the production of biogas is an excellent manure because____

**A. It is rich in Nitrogen & Phosphorous** **B. It is rich in Carbon & Sulphur**

**C. It is rich in Fluorine & Chlorine** **D. It is rich in Carbon & Oxygen**

313. Silver is used for interconnection of cells in the solar panel because____*

**A. It is costly & Shining**

**B. It is a good conductor of electricity and non rusting**

**C. It is of low cost &non-rusting**

**D. It is a bad conductor of electricity**

314. The difference in the temperature of the water at the surface of the sea and in the deeper sections of sea is exploited to obtain_____

**A. Geothermal energy**
**B. Tidal energy**
**C. Ocean thermal energy**
**D. Thermal energy**

315. The principle of nuclear bomb is _____

**A. Uncontrolled Nuclear fission**
**B. Controlled nuclear fission**
**C. Nuclear fusion**
**D. Thermo nuclearfusion**

316. The principle of solar cell is_____

**A. Light energy is converted to heat energy**
**B. Heat energy is converted into light energy**
**C. Light energy is converted into electricity**
**D. Light energy is converted into Chemical energy**

317. The principle of solar cooker is _____

**A. Light energy is converted into Heat energy**
**B. Heat energy is converted into Light energy.**
**C. Heat energy is converted into Chemical energy**
**D. Light energy is converted into Mechanical energy.**

318. A turbine cannot be rotated by____*

**A. Flowing water**
**B. Heat of sun**
**C. Steam**
**D. Moving wind**

319. Energy produced in Nuclear power plant by _____*

**A. Controlled nuclear fission**
**B. Uncontrolled nuclear fission**
**C. Nuclear fusion**
**D. Thermo nuclear fission**

# CHAPTER - 15

## Our Environment

320. The correct statement with respect to bio-degradable substances among the following is, these substances *

**A. Remain inert in the environment for a long period.**

**B. Harms various organisms in the eco system**

**C. Increase the density of harmful chemicals in different tropic levels.**

**D. Undergo recycling naturally in the environment.**

321. Two steps of formation of ozone layer *

**A.** $O_2+O \rightarrow O_3$, $O_2+O \rightarrow O_3$

**B.** $O_2 \rightarrow O+O$, $O_2+O \rightarrow O_3$

**C.** $O_2+O_2 \rightarrow O_3$, $O_2+O \rightarrow O_3$

**D.** $O+O \rightarrow O_2$, $O_2+O \rightarrow O_3$

322. The materials that change slowly their form and nature are *

**A. Used tea leaves**

**B. Peels of vegetables**

**C. Waste papers**

**D. Plant fibres**

323. Ozone layer is formed from the oxygen at the higher levels of the atmosphere by the action of **

**A. X rays**

**B. Ultra violet rays**

**C. Infrared radiation**

**D. Radio waves**

324. Molecular formula of Ozone is

**A.** $O$

**B.** $O_2$

**C.** $O_3$

**D.** $H_2O$

325. The chemical present in CFC which is responsible for declination of ozone layer is

**A. Chlorine**

**B. Fluorine**

**C. Carbon**

**D. Oxygen**

326. Bio-degradable substance among the following is

**A. DDT**

**B. Agriculture waste**

**C. Plastic**

**D. Glass**

327. Eco friendly fuel is

**A. Petrol** **B. Kerosene**

**C. Biogas** **D. LPG**

328. Reason for acid rain is

**A. Deforestation** **B. Sulphur and Nitrogen oxide**

**C. Fossil fuel** **D. Nuclear waste**

329. Best method to manage non-biodegradable waste is

**A. Burning** **B. Dumping**

**C. Burying** **D. Recycling**

330. The substance responsible for the depletion of ozone layer

**A. CFC** **B. CCF**

**C. HDFC** **D. KFC**

331. Role of ozone for organism is

**A. Supplying oxygen** **B. Pollution control**

**C. Protection from UV rays** **D. Supply of carbon dioxide**

## CHAPTER - 16

## Sustainable Management of Natural Resources

332. Water harvesting is a method which_____ *

**A. Increase ground water level** **B. Not practiced in modern days**

**C. Has no relation with the groundwater** **D. Decrease groundwater level.**

333. The practice of using used materials without changing their shape and form is_____*

**A. Reuse** **B. Recycling**

**C. Repurpose** **D. Reduce**

334. Kulha is a type of_____ *

**A. Dam** **B. Lake**

**C. Canal** **D. Well**

335. Floods can be prevented by___*

**A. Afforestation**
**B. Removing of top soil**
**C. Deforestation**
**D. Agriculture**

336. Coliform is a _____

**A. Group of bacteria**
**B. Group of virus**
**C. Group of fungi**
**D. Group of protozoa**

337. The name given for replenishment of forest_____

**A. Afforestation**
**B. Silviculture**
**C. Deforestation**
**D. Siri culture.**

338. Khadins,Bundhis,Ahars and Katta's are ancient structures used for_____

**A. Grain storage**
**B. Wood storage**
**C. Water harvesting**
**D. Soil Conservation**

339. Arbari forest of Bengal is dominated by _____

**A. Teak**
**B. Sal**
**C. Bamboo**
**D. Mangroves**

340. Tehri dam is built on the river_____

**A. Yamuna**
**B. Ganga**
**C. Satlej**
**D. Beas**

341. Following is a greenhouse gas_____

**A. Nitrogen oxide**
**B. Sulphur dioxide**
**C. Carbon dioxide**
**D. Carbon monoxide**

342. If you paint old chair to make a new, you are _____

**A. Recycling**
**B. Reusing**
**C. Recovering**
**D. Reducing**

343. Amrutha Devi Bishnoi sacrifice her life to protect the _____

**A. Palm Trees**
**B. Khejri trees**
**C. Sal trees**
**D. Teak wood trees**

344. The main causes for abundant colioform bacteria in the river Ganga is_____

**A. Disposal of human excreta directly**

**B. Discharge of effluents from electroplating industries**

**C. Agricultural wastes**

**D. Immersion of ashes**

345. The Indira Gandhi canal has brought greenery to considerable areas of_____

**A. Gujarat** **B. Rajasthan**

**C. Bihar** **D. Madhya Pradesh**

346. The natural resources is defined as_____

**A. Found on land** **B. Man made substances**

**C. Forest products** **D. A gift of nature very useful to mankind**

347. The following community in Rajasthan has a religious tenet of conservation of forest and wildlife_____

**A. Munda** **B. Jaishwal**

**C. Bishal** **D. Bishnoi**

348. Ground water will not be depleted due to_____

**A. Afforestation** **B. Thermal Power plants**

**C. Loss of forest and decreased rain fall** **D. Cropping of high water demanding crops**

349. Primary source of water is _____

**A. Rivers** **B. Ground water**

**C. Lakes** **D. Rain water**

350. The biodiversity hot spot is found in _____

**A. Rivers** **B. Forests**

**C. Deserts** **D. Oceans**

351. Canal system of Dams _____

**A. Transfer large amounts of water over great distance**

**B. Appears good**

**C. Can decrease water pressure**

**D. Can connect other dams.**

# ANSWER KEY

| Q.No | Answer | Q.No | Answer | Q.No | Answer | Q.No | Answer | Q.No | Answer | Q.No | Answer |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | B | 34 | A | 67 | C | 100 | A | 133 | D | 166 | A |
| 2 | A | 35 | B | 68 | D | 101 | C | 134 | D | 167 | C |
| 3 | C | 36 | D | 69 | B | 102 | A | 135 | A | 168 | D |
| 4 | B | 37 | B | 70 | D | 103 | D | 136 | A | 169 | A |
| 5 | D | 38 | B | 71 | A | 104 | C | 137 | C | 170 | C |
| 6 | A | 39 | B | 72 | C | 105 | B | 138 | A | 171 | C |
| 7 | D | 40 | D | 73 | B | 106 | D | 139 | D | 172 | A |
| 8 | B | 41 | C | 74 | C | 107 | B | 140 | B | 173 | A |
| 9 | D | 42 | A | 75 | A | 108 | C | 141 | D | 174 | B |
| 10 | B | 43 | C | 76 | C | 109 | A | 142 | C | 175 | D |
| 11 | C | 44 | A | 77 | A | 110 | D | 143 | A | 176 | B |
| 12 | A | 45 | C | 78 | A | 111 | C | 144 | B | 177 | A |
| 13 | B | 46 | B | 79 | D | 112 | D | 145 | D | 178 | B |
| 14 | A | 47 | C | 80 | B | 113 | A | 146 | A | 179 | C |
| 15 | A | 48 | A | 81 | D | 114 | A | 147 | C | 180 | D |
| 16 | B | 49 | D | 82 | D | 115 | B | 148 | D | 181 | D |
| 17 | A | 50 | B | 83 | B | 116 | C | 149 | C | 182 | C |
| 18 | D | 51 | C | 84 | D | 117 | D | 150 | A | 183 | B |
| 19 | A | 52 | B | 85 | D | 118 | C | 151 | B | 184 | A |
| 20 | B | 53 | D | 86 | C | 119 | B | 152 | B | 185 | C |
| 21 | C | 54 | C | 87 | A | 120 | A | 153 | D | 186 | D |
| 22 | B | 55 | A | 88 | B | 121 | C | 154 | A | 187 | A |
| 23 | A | 56 | D | 89 | C | 122 | B | 155 | C | 188 | B |
| 24 | D | 57 | D | 90 | A | 123 | D | 156 | C | 189 | A |
| 25 | A | 58 | D | 91 | D | 124 | A | 157 | B | 190 | C |
| 26 | C | 59 | A | 92 | D | 125 | B | 158 | B | 191 | B |
| 27 | D | 60 | C | 93 | B | 126 | C | 159 | B | 192 | D |
| 28 | B | 61 | C | 94 | A | 127 | B | 160 | D | 193 | B |
| 29 | C | 62 | B | 95 | A | 128 | A | 161 | C | 194 | A |
| 30 | B | 63 | D | 96 | C | 129 | C | 162 | B | 195 | C |
| 31 | D | 64 | C | 97 | C | 130 | B | 163 | A | 196 | B |
| 32 | C | 65 | B | 98 | D | 131 | C | 164 | D | 197 | C |
| 33 | A | 66 | B | 99 | B | 132 | A | 165 | C | 198 | D |

| Q.No | Answer | Q.No | Answer | Q.No | Answer | Q.No | Answer | Q.No | Answer | Q.No | Answer |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 199 | A | 234 | C | 269 | D | 304 | C | 339 | B | | |
| 200 | C | 235 | D | 270 | C | 305 | D | 340 | B | | |
| 201 | A | 236 | A | 271 | D | 306 | C | 341 | C | | |
| 202 | B | 237 | D | 272 | C | 307 | A | 342 | B | | |
| 203 | A | 238 | D | 273 | D | 308 | C | 343 | B | | |
| 204 | C | 239 | B | 274 | C | 309 | B | 344 | A | | |
| 205 | B | 240 | D | 275 | B | 310 | D | 345 | B | | |
| 206 | C | 241 | A | 276 | C | 311 | D | 346 | D | | |
| 207 | A | 242 | C | 277 | A | 312 | A | 347 | D | | |
| 208 | D | 243 | D | 278 | A | 313 | B | 348 | A | | |
| 209 | D | 244 | D | 279 | D | 314 | C | 349 | D | | |
| 210 | B | 245 | A | 280 | A | 315 | A | 350 | B | | |
| 211 | D | 246 | C | 281 | A | 316 | C | 351 | A | | |
| 212 | B | 247 | C | 282 | C | 317 | A | | | | |
| 213 | A | 248 | D | 283 | C | 318 | B | | | | |
| 214 | A | 249 | B | 284 | B | 319 | A | | | | |
| 215 | C | 250 | B | 285 | C | 320 | D | | | | |
| 216 | C | 251 | A | 286 | B | 321 | B | | | | |
| 217 | D | 252 | A | 287 | D | 322 | D | | | | |
| 218 | B | 253 | C | 288 | C | 323 | B | | | | |
| 219 | C | 254 | B | 289 | D | 324 | C | | | | |
| 220 | A | 255 | A | 290 | A | 325 | A | | | | |
| 221 | C | 256 | B | 291 | B | 326 | B | | | | |
| 222 | C | 257 | A | 292 | C | 327 | C | | | | |
| 223 | B | 258 | D | 293 | A | 328 | B | | | | |
| 224 | A | 259 | C | 294 | A & C | 329 | D | | | | |
| 225 | D | 260 | C | 295 | C | 330 | A | | | | |
| 226 | C | 261 | C | 296 | B | 331 | C | | | | |
| 227 | B | 262 | D | 297 | C | 332 | A | | | | |
| 228 | B | 263 | B | 298 | B | 333 | C | | | | |
| 229 | A | 264 | C | 299 | C | 334 | B | | | | |
| 230 | C | 265 | B | 300 | A | 335 | A | | | | |
| 231 | D | 266 | A | 301 | C | 336 | A | | | | |
| 232 | B | 267 | A | 302 | C | 337 | A | | | | |
| 233 | C | 268 | C | 303 | B | 338 | C | | | | |