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INTERNATIONAL HEALTH OLYMPIAD

REFERENCE BOOK

CATEGORY 1 - IHO JUNIORS
(Classes 5 to 7)

INTERNATIONAL HEALTH OLYMPIAD

REFERENCE BOOK

Category 1: Junior

MESSAGE

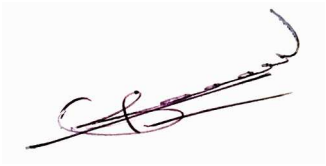
Dear Aspirants,

International Health Olympiad is a mission to figure out young blooming talents who has extra ordinary potential in learning. International Health Olympiad is conceived as an international quiz competition for students of class 5-12 on Science subjects including Physics, Chemistry, Biology and Mathematics, giving special focus on health related topics so as to educate the young generation about health and health related topics so as to create a generation well aware about Health issues and importance of health care and hence the name International Health Olympiad.

International Health Olympiad has a syllabus that spreads across various fields of Science based on the school academic syllabi of the three categories of the three categories of competition. We want each of the participants to win in International Health Olympiad and this reference book is a designed with a view of helping the participants in preparing for the competition.

The book contains a large number of questions that would enrich your knowledge in all areas covered in the syllabus of IHO and also it will help you enlarge your knowledge bank. With this Reference book, you can take your preparations for International Health Olympiad to the next level and thus make yourself a strong competitor for all other participants. The book is so designed not just for International Health Olympiad but to equip the participants to participate in many other competitions as well.

I wish good luck to you all and may god almighty bless you to become the winner of International Health Olympiad.



Fr. Davis Chiramel

Chairman, Kidney Federation of India

MESSAGE

Dear Knowledge Seekers,

It gives me immense pleasure to wish success to all aspirants competing to win International Health Olympiad. Let the thirst for knowledge in you take you all to heights of glory!

International Health Olympiad is a unique platform where the true talents gets rewarded for the knowledge they have. Besides being a talent hunt for students and related fields, International Health Olympiad keeps its primary focus on making the current generation aware about health and importance of health care. As the new health issues are arising every day, it becomes a necessity to educate the young generation about health care. This unique idea of spreading knowledge and thereby making people healthy is the factor which connects VPS Lakeshore Hospital and International Health Olympiad. VPS Lakeshore has been serving the society in health care since more than a decade and we have always tried to be innovative on our own and VPS lakeshore is proud to be the associating partner with International Health Olympiad for the same reason.

It's really happy to know that International Health Olympiad is publishing a free reference book to help the participants in preparing for the competition, covering the syllabus of the competition. I hope this material could help you prepare better for the competition and be a good asset for you in gathering knowledge.

With Best Wishes,

S.K. Abdulla
Chief Executive Officer, VPS Lakeshore Hospital

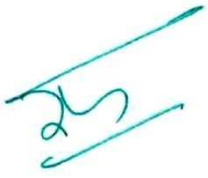
MESSAGE

Dear Candidate,

I consider it a privilege to be addressing you through this book, which draws your attention to the most important aspect of your growing years. The 'parent' generation have always been a worried lot, since ages, either about the food intake of the children or about the sickness frequency. Later, nutrition, exercise, posture etc. of the children started to attract the criticism of parents and interested elders like teachers too. Now, pollution of air and water, adulteration of crops and food and ill-health of the mind of the youngsters due to too much exposure to devices are all considered to be aftermaths of technological development. Hence, I believe that engineering colleges should own up the responsibility to not only change the perception but also actively be the change-makers via awareness campaigns and education through such books and related programmes. Our interactions with the students who come to us to study engineering, tell us that they want to clean up not only such an image but also go for responsible engineering, which is more creative than, destructive. It is our students, who have motivated us to be a part of this endeavour, to care for their younger brothers and sisters to have a healthier life through a healthier and informed mind.

In this context, what does the book talk about? It engages with the natural curiosity the child is blessed with. It substantiates the general understanding of life the young reader has already collected from the environment. It kindles in the child, the desire to perform, and through such performances in Olympiads to keep the flame of ambitions burning in his or her mind.

Please read the book carefully and prepare well and come to us, with good results and always get back to us with any suggestions you wish to have in the book or in the contest or in this world!



Dr. Sudha Balagopalan
Principal, Vidya Academy of Science and Technology

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General Science Quiz

Level 1

1. Pick out the odd one: Water , Liquid , Solid , Gas.

Ans: Water.

2. Which state the molecules have large kinetic energy?

Ans : Gas.

3. Where we can see illuminated matter?

Ans : Neon lamp.

4. A phase change of matter depends up on ?

Ans : Temperature.

5. Which scientist put forward the formula $E = mc^2$?

Ans: Albert Einstein.

6. When a solid reaches its melting point, it becomes ----------?

Ans: Liquid.

7. Which gas is helpful to burning?

Ans: Oxygen.

8. In hydraulic system pressure transmitted through?

Ans: Liquid

9. Density is the amount of ---------- in a certain volume?

Ans: Mass

10. Which gas is very useful for human beings?

Ans: Oxygen.

11. Due to friction between moving parts of machine there is found

Ans: heat

12. When up thrust is equal to weight of object then it

Ans: floats

13. There will be great distance in stopping a vehicle which is moving

Ans: fast

14. To reduce air and water resistance objects are _____.

Ans: streamlined

15. True or false: Any substance will float on water/gas if its density is less than that of air/Water

Ans: True

16. Upward push which is acting on object which is partially or totally immersed in a liquid or gas is called

Ans: Buoyant force

17. Force of attraction between two masses is called

Ans: gravitational force

18. a charged balloon attaches to a wall because of

Ans: electrostatic force

19. a body is said to be under balanced forces when the resultant force applied on that body is

Ans : Zero

20. the force experienced by an object divided by the area of the surface on which the force acts

Ans: Pressure

21. the pressure of the water at the bottom of the pond is _____at the surface of the pond

Ans: higher than

22. As we go to the higher altitude the atmospheric pressure _____.

Ans: decreases

23. the force involved in falling of an apple from a tree is

Ans: gravitational force

24. Which gland is known as emergency gland?

Ans: adrenal gland

25. Which is the largest organ in human body?

Ans: Skin

26. Which blood group is also known as universal recipient?

Ans: AB group

27. Which one of the following acts as a communication system?

Ans: nerve

28. The tear gland helps us in _____.

Ans: providing a clean moist surface

29. In diphtheria the organ affected is?

Ans : Throat

30. Which is the longest cell in human body?

Ans: nerve cell

31. Vitamin that promote eye sight?

Ans : Vit A

32. Disease known as white plague?

Ans : Tuberculosis

33. Which part of the plant gets carbon dioxide from the air for photosynthesis?

Ans ; Stomata

34. Iodine used to detect presence of starch. it gives starch

Ans: Blue color

35. The plant which traps & feeds on insects is

Ans: Pitcher plant

36. The main function of a leaf is

Ans: To prepare food

37. What do roots do?

Ans: Absorb water, Absorb nutrients, and Hold the plants in place

38. . World environment day is observed on

Ans: June 5th

39. The SI unit of Velocity :

Ans: m/sec

40. The time interval between two consecutive sunrises is known as :

Ans: Day

41. The S.I. Unit of length :

Ans: Meter

42. Motion of a pendulum is an example of

Ans: Periodic motion

43. Some kind of change in the position of an object is called :

Ans: Motion

44. The average speed is the :

Ans: Total distance travelled by the total time

45. Light year is a measure of :

Ans: Distance

46. What is the basic unit of time?

Ans: Second

47. When is pendulum said to have completed one oscillation?

Ans: Movement of bob from one extreme position and then to its first extreme position

48. A bus covers 20 km in 30 minutes at speed X and a distance of 30 km in 40 minutes at speed Y. Which speed is higher?

Ans: Y

49. 1 hectometer is equal to _____ m

Ans: 100 m

50. Five km is ---------- m

Ans: 5000 m

51. _____ is nocturnal.

Ans: Owl

52. Border Leicester and Corriedale are all breeds of what?

Ans: Sheep

53. Which animal is the first to be domesticated?

Ans: Dog

54. True or false : Dog can't hear high pitched sounds

Ans: True

55. What is the one thing worm don't have other animals do?

Ans: Eyes

56. Where the rarest species Tarsiers found?

Ans: Islands of South Asia

57. Which is the largest living bird?

Ans: Ostrich

58. Which is the largest in size among the sub species of Tiger?

Ans: Siberian tiger

59. Kidney stones are mainly formed by which of the following compound?

Ans: Calcium Oxalate

60. _____ made inside the nucleus of a cell, associates with proteins to form ribosome.

Ans: RNA

61. Why is sickle cell disease so called?

Ans: pH changes in the blood cells make them collapse into a sickle shape

62. The most advanced evolutionary inflorescent is found in?

Ans: Dahlia

63. The process of converting vapours back into liquid is called as

Ans: Condensation

64. Which is the method used to separate two miscible liquids?

Ans: Separating funnel

65. The spinner in washing machine dries clothes works on the principle of _____

Ans: Centrifugation

66. The process of solid changing directly in vapour form without becoming liquid is called

Ans: Sublimation

67. Relation between two populations that benefits both is known as

Ans: Mutualism

68. Incident angle = Reflected Angle. This law in optics is known as _____.

Ans: Law of reflection

69. Light travels in _____.

Ans: Straight lines

70. Butter paper is an example of _____ object

Ans: A translucent

71. Give an example for protective food?

Ans: Fruits

72. Goiter: swelling of thyroid glands occurs due to the deficiency of _____.

Ans: Iodine

73. Which of the following is considered as 'body building foods'?

Ans: Proteins

74. Our body prepares which type of Vitamin in the presence of sunlight?

Ans: Vitamin D

75. _____ is essential for forming haemoglobin in the blood.

Ans: Iron

76. Our hair and nails contain

Ans: Protein

77. Rickets is caused by the deficiency of

Ans: Vitamin D

78. Scurvy (Bleeding gums) is caused due to the deficiency of

Ans: Vitamin C

79. The essential components of our food are called _____

Ans: Nutrients

80. The food component present in sugar is

Ans: Carbohydrates

81. The percentage of water in the human body is

Ans: 70

82. Foods like pizza, burger and noodles are rich in

Ans: Carbohydrates

83. _____ provides more than double the energy provided by carbohydrates or proteins in human body.

Ans: Fats

84. The component of food which help our body to fight against infections is

Ans: Proteins

85. The disease caused by the deficiency of iodine is

Ans: Goiter

86. _____ helps to maintain a constant body temperature in our body.

Ans: Water

87. Our body needs ____ liters of water every day

Ans: 2-3

88. Deficiency of proteins and carbohydrates in infants leads to

Ans: Marasmus

89. Excessive body weight due over nutrition leads to

Ans: Obesity

90. Vitamins and minerals are _____ type of foods.

Ans: Protective food

91. The mineral we get from fish is

Ans: Iodine

92. Night blindness is caused by the deficiency of

Ans: Vitamin A

93. Benedict's solution is used to test the presence of _____ in food.

Ans: Sugar

94. Colds are caused by _____

Ans: Virus

95. Main cause of asthma is _____.

Ans: Pets

96. A medicine which contain dead or weakened germs is used to prevent infectious disease is called a

Ans: Vaccine

97. Viruses are made up of

Ans: DNA, RNA, protein coat

98. Use of organisms specially micro-organisms in manufacture or industrial processes is called

Ans: Biotechnology

99. BCG vaccination can prevent

Ans: Tuberculosis

100. Microorganisms also help in production of food like

Ans: Bread

101. Plasmodium is found in

Ans: female anopheles

101. Person with hand foot and mouth diseases have spots in hand, foot and mouth called

Ans: blisters

102. Aspirin comes from which of the following?

Ans: Willow bark

103. Carrot is orange in color because?

Ans: It contains carotene

104. The main excretory product of frog is?

Ans: Urea

105. The lining of marrow cavity is called?

Ans: Endosteum

106. Which one of the following is not a true fish?

Ans: Starfish

107. The primary source of carbohydrates is _____.

Ans: coal-far

108. The function of Trypsin is to?

Ans: Break down proteins

109. The branch of agriculture which deals with the feeding, shelter, health and breeding of the animals is called

Ans: Animal Husbandry

110. Which of the following parts of human body is affected by Pyria ?

Ans: Teeth and gums

111. The vitamin which is generally excreted by human in urine is ?

Ans: Vitamin – C

112. Acromegaly is caused by irregular secretion of

Ans: Pituitary

113. The A, B, O blood groups were discovered by _____.

Ans: Karl Landsteiner

114. Identical twins are born, when _____.

Ans: Two sperms fertilize one ovum

115. The food which gives an athlete instant energy is _____.

Ans: Glucose

116. DNA structure was first described by

Ans: Watson and Crick

117. One feels sensation of heat when exposed to _____.

Ans: infra-red rays

118. The temperature of the substance remains constant when it is melting and boiling though some quantity of heat is supplied. What happens to this energy?

Ans: it is used to change the state of the substance

119. We cannot use mercury thermometer at low temperatures because:

Ans: Mercury freezes at low temperatures

120. The minimum possible temperature beyond which water cannot be cooled is

Ans: 273.15℃

121. On which of the scales of temperature, the temperature is never negative?

Ans: Kelvin

122. Chlorophyll is found in oval-shaped structures called as

Ans: chloroplast

123. Light dependent of photosynthesis stage cannot be carried out without _____.

Ans: Water

124. Plants can be called as _____.

Ans: Heterotrophy

125. Light absorbed by chlorophyll is converted into _____.

Ans: chemical energy

126. Hydro phonics refers to _____

Ans: growing plants without soil

127. For many autotrophic organisms, an essential source of energy is

Ans: light

128. Carbon dioxide (CO_2) taken in night is stored in form of _____ in plants.

Ans: chemical energy

129. Oxygen (O2) released during photosynthesis comes from _____-

Ans: water

130. Excess sugars in plants are changed in to the form of _____

Ans: Starch

131. From where does saliva come in our mouth?

Ans: it is secreted by salivary glands situated in our mouth

132. In grass-eating animals, the grass is stored in a part of the stomach where the food gets converted into cud. This part is called _____.

Ans: rumen.

133. Which instrument is used to measure changes in volume of substances?

Ans: Dilatometer

134. What will happen to lime water when we exhale air into it?

Ans: turns milky

135. The function of hair follicles inside the nose is to _____.

Ans: to trap germs and dust particles in air.

136. Deforestation generally decreases _____.

Ans: Rainfall

137. Which of the following is not true about deforestation?

a. Population explosion is one of the reasons for deforestation.

b. Cleaning of forest for agriculture causes deforestation.

c. Deforestation is taking place only in developing courtiers.

d. Cash crop economy of third world is a cause of deforestation.

Ans: C

138. Fossil fuel and metallic minerals are _____resources.

Ans: Non-renewable resources

139. Hot spots are regions of high _____

Ans: Endemism

140. Conservation within the natural habitat is called _____.

Ans: insitu conservation

141. Dodo is a _____ bird.

Ans: extinct

142. Biodiversity _____ towards the equator

Ans: Increases

143. IUCN is also called as _____.

Ans: World Conservation Union

144. MAB program stands for _____.

Ans: Man and Biosphere

145. When combustion of coal takes place in insufficient air (oxygen) which gas is formed instead of carbon dioxide?

Ans: Carbon monoxide

146. The concept of 'Biosphere Reserve' was evolved by _____.

Ans: UNESCO

147. The three R's to save the environment are _____.

Ans: Reduce, Recycle, Reuse

148. Water pollution can be identified by testing its _____ and _____.

Ans: PH level and Biological Oxygen Demand (BOD)

149. A large gene pool enables _____.

Ans: conservation of natural resources

150. Pyrethrum is used in _____.

Ans: insecticides

151. Biogas generation is mainly based on the principle of_____.

Ans: fermentation

152. Atomic energy is obtained by using ores of_____.

Ans: uranium

153. Red Data Book provides a list of _____.

Ans: rare, endangered or endemic species

154. In the atmosphere, the layer above the troposphere is _____.

Ans: stratosphere

155. Both power and manure are provided by _____ power plants.

Ans: Biogas plants

156. _____ of stratosphere provides protection to our life.

Ans: Ozone

157. Which one of the following in endangered species? : Cuscuta , Nepenthes, Datura, Butea sps.

Ans: Nepenthes

Level 2

1. What does the term 'locavore' mean?

Ans: The consumer who eats only locally grown food products

2. Air pollutants most often lead to human health problems of the ----------

Ans: circulatory and respiratory systems

3. Oncogenes are associated with

Ans: cancer

4. The excretion of insoluble calcium phosphate present in our body is done by

   Ans: Intestine

5. What is an otoscope?

Ans: A special light that allows the doctor to see inside your ear

6. How many minutes of exercise or activity do you need each day?

Ans: 30 minutes

7. Which nutrients are most likely to be affected by food processing and storage?

Ans: Vitamins

8. What are the reagents used to show presence of protein in foodstuffs?

Ans: Nitric acid and ammonium hydroxide

9. Which of the following vegetable proteins is considered as good as an animal protein?

Ans: Soya bean protein

10. Mumps disease is caused by

Ans: Virus

11. Milk is a poor source of

Ans: Vitamin C

12. The vitamin necessary for coagulation of blood is

Ans: Vitamin K

13. Besides carbohydrates, a major source of energy in our food is constituted by

Ans: Fats

14. A person suffering from high blood pressure should avoid foods which are rich in

Ans: Sodium

15. What ingredient makes bread rise?

Ans: yeast

16. What is the European dish calamari?

Ans: Squid

17. What is the main ingredient used in guacamole?

Ans: Avocado

18. What food does the Giant Panda mainly eat?

Ans: bamboo

19. What are the four main ingredients of a Waldorf salad?

Ans: Celery, apple, walnut and grapes

20. What is the main ingredient of Hummus?

Ans: chickpeas

21. What is the main export out of Cuba?

Ans: sugar

22. What is Venison?

Ans: Deer meat

23. What is Tofu made of?

Ans: Soya beans

24. What type of cake is traditionally eaten at Christmas time in Italy?

Ans: Panettone

25. From which country does Feta cheese originate?

Ans: Greece

26. Which nuts are used to make marzipan?

Ans: Mexico

27. Which vegetable is zucchini better known as?

Ans: Almonds

28. Major illness caused due to non availability of sanitation facilities?

Ans. Diarrhoea

29. How long should you wash your hands?

Ans: 20 seconds

30. What is the single most effective way to prevent the transmission of disease?

Ans: Hand washing with soap and water

31. How many times one should wash teeth?

Ans: Twice a day

32. SPM stands for……

Ans. Suspended Particulate Matter

33. What is reason for drying your hands after washing them?

Ans: Because germs and bacteria are more easily spread with wet hands.

34. How can you tell if food has enough bacteria to cause food poisoning?

Ans: You can't, it will appear normal.

35. How many times a day should you brush your teeth?

Ans: Two.

36. Which country consumes the most energy in the world?

Ans: The United States.

37. Washing my hands should be:

Ans: A habit that I do often

38. Viruses are:

Ans: Total Parasites

39. Smallest form of bacteria is called:

Ans: Cocci

40. Which one of the following disease caused by bacteria:

Ans: Tuberculosis

41. Expanded form of HIV is

Ans: Human immune deficiency syndrome virus

42. Normal temperature of human body is:

Ans: 98.4 degree

43. Strongest muscles of man found in:

Ans: Jaw

44. Which one of the following is a water borne disease?

Ans: Influenza

45. What is the name given to the green pigment in plants?

Ans: Chlorophyll

46. Which of the following type of teeth is used for grinding food?

Ans: Molar

47. What is the single most effective way to prevent the transmission of disease?

Ans: Hand washing

48. What element is added to water to prevent tooth decay?

Ans: Fluoride

49. What uses, on average, 26% of the water in a home?

Ans: Toilet Flushing

50. Which one of the following gases plays a decisive role in affecting the climate of earth?

Ans: Carbon dioxide

51. Which fruit is rich in potassium?

Ans: Banana

52 . Which one of the following, acts like a fuel in driving the body?

Ans: Carbohydrates

53. The maximum amount of forest covered area is present in:

Ans: Madhya Pradesh

54. AIDS virus spreads in the body through ----------

Ans: Helper T-cells

55. The cells which act as parasites in the body

Ans: Cancer cells

56. Inactive cancer gene is called

Ans: Proto-oncogene

57 AIIDS is due to (BHU)

Ans: reduction in number of helper T-cells

58. The symptom of typhoid called intestinal hemorrhage occurs in ___ week of infection.

Ans: 3rd

59. Swine flu is caused by

Ans: H1N1

60. Immunity acquired after an infection is

Ans: active immunity

61. Immunological destruction of body tissue or product due to antibodies reacting with it as antigen is called

Ans: Autoimmune diseases

62. Increased asthmatic attacks in certain seasons are due to

Ans: Inhalation of seasonal pollen

63. Inflammation reaction is brought about by

Ans: Mast cells

64. Inflammatory response in allergy is due to release by mast cells of

Ans: Histamine

65. Innate immunity is

Ans: Inborn immunity

66. Innate immunity is provided by

Ans: Phagocytes

67. Which one engulfs foreign materials?

Ans: Macrophages

68. Macrophages are derived from

Ans: Monocytes

69. Memory cells are formed from

Ans: B-lymphocytes

70. O blood group is universal donor because the blood has

Ans: No antigens

71. Passive immunity is

Ans: Acquired through readymade antibodies

72. Which one helps in differentiation of cells of immune system?

Ans: Thymosin

73. Passive immunity is obtained through injecting

Ans: Antibodies

74. Persons with blood group A posses

Ans: Antigen A and antibodies b

75. Progenitors formed in bone marrow but differentiating elsewhere are

Ans: Pre-T cells

76. Resistance developed in an individual as a result of antigenic stimulus is

Ans: Active acquired immunity

77. Rh- mother carries Rh+ foetus. The foetus is at a risk of disease called

Ans: Haemolytic disease

78. Rh factor is named after

Ans: Monkey

79. Segments of antigen that are recognized by antibody are

Ans: Epitopes

80. Blood group O has

Ans: No antigen but both a and b antibodies

81. Blood of AB group cannot be given to B group patient because

Ans: patient has antibodies

82. Both B-cells and T-cells of immune system are produced in

Ans: Bone marrow

83. Cells involved in immune mechanism are

Ans: Lymphocytes

84. Cells of immune system that cause pore formation in the antigen are

Ans: Killer T-cells

85. Chemically an antibody is

Ans: Protein

86. Child death may occur in the marriage of

Ans: Rh+ man and Rh- woman

87 Conversion of antigen into harmless insoluble matter by antibodies is

Ans: Agglutination

88. During infection T-cells interact with

Ans: B-cells

89. During inflammation which of the following is secreted by connective tissue

Ans: Histamine

90. Father of immunology is

Ans: Edward Jenner

91. Gamma-globulins are synthesized in

Ans: Lymph and lymph nodes

92. Hay fever is due to

Ans: Allergy

93. Histamines or inflammation producing substances are formed by

Ans: Mast cells

94. How many variable segments are present in an antibody?

Ans: 2

95. Humeral immunity is due to

Ans: B- lymphocytes

96. Hypersensitivity to an allergen is due to aberrant functioning of ……..

Ans: immune system

97. Both B-cells and T-cells of immune system are produced in

Ans: Bone marrow

98. Cells involved in immune mechanism are

Ans: Lymphocytes

99. Cells of immune system that cause pore formation in the antigen are

Ans: Killer T-cells

100 . If a man is Rh+ and woman Rh-

Ans: the first child will survive

101. Which is not involved in elicitation of immune response?

Ans: Brain

102. Antibodies are complex

Ans: Glycoprotein

103. Antibodies are formed by

Ans: B-cells

104. Antibodies are produced by

Ans: Plasma cells

105 .Antibodies belong to class of proteins

Ans: Immunoglobulin

106. Antibody formation and immunity production by globulin protein is found in

Ans: Plasma

107. Antibody is connected with

Ans: Immune system

108. Antibody production is carried out by

Ans: Lymphocytes

109. Antigen binding site in an antibody is found between

Ans: one heavy and one light chain

110. Antigenic determinants of an antigen that are recognized by antibody are

Ans: Epitopes

111. Antigens are found

Ans: On cell surface

112. BCG vaccine provides protection against

Ans: T.B.

113. Binding of antigen to antibody is through

Ans: Electrostatic interactions

114. Blood group A has

Ans: Antigen A on RBC

115. Blood group AB has

Ans: No antibody

116. Blood group is due to

Ans: Specific antigens on the surface of RBC

117. A blood group has both A and B antigens but no antibodies, It is

Ans: AB

118. A compound formed in an organism for inhibiting growth of another organism is

Ans: Antibody

119. A disease due to allergic reaction is

Ans: Hay fever

120. A doctor suggested to a couple not to have more than one child because of

Ans: Rh+ male Rh- female

121. A molecule that produces an immune response is

Ans: Antigen

122. A noninfectious unnatural and unusual reaction to substance or condition is

Ans: Allergy

123. A person is injected with gamma globulin against hepatitis B. It is

Ans: Artificially acquires passive immunity

124. Acquired immunity as developed after vaccination or infection is found in

Ans: Vertebrates only

125. Acquired immunity is found in

Ans: Vertebrates

126. Active immunity is due to

Ans: Memory cells

127. Active immunity means

Ans: Resistance developed after disease

128. AIDS is caused by

Ans: RNA virus

129. Which is most abundant immunoglobulin?

Ans: Ig G

130. An example of innate immunity is

Ans: Neutrophils

131. An Rh- individual receives Rh+ blood. The recipient becomes

Ans: Isoimmunized

132. The role of pacemaker in heart is to

Ans: initiate heart beat

133. The sequence of cardiac cycle is

Ans: Atrial systole – Ventricular systole – Joint diastole

134. Thickest part of human heart is

Ans: left ventricle

135Thromboplastin required for blood clotting at the place of injury is released by

Ans: blood platelets

136Tricuspid valve is present between

Ans: right atrium and right ventricle

137. Thrombocytes have a life of

Ans: 3-4 days

138. Typical 'lub-dup' sounds heard in heart beat are due to

Ans: Closure of bicuspid-tricuspid valves followed by semi lunar valves

139. Valve present over left auriculo-ventricular opening is

Ans: Bicuspid valve

140. Valve surrounding opening of coronary sinus is

Ans: Thebesian valve

141. Valves which allow blood from ventricles into arteries and not in opposite direction are

Ans: AV valves and semi lunar valves

142. Wall of blood capillary is formed of

Ans: Endothelial cells

143. Which is the phagocytic structure of blood?

Ans: Monocyte

144. Mammalian heart is enclosed by

Ans: Pericardium

145. Mitral valve is also called

Ans: Bicuspid valve

146. Murmur occurs due to defect in

Ans: Heart valves

147. Number of RBC/mm3 in healthy female is

Ans: 4.5 – 5.0 million

148. Number of WBCs present in one mm3 of blood is

Ans: 7000

149. Oxygen carrier in human blood is

Ans: Haemoglobin

150. Oxygenated blood from lungs enters heart through

Ans: Pulmonary vein

151. Oxygenated blood occurs in

Ans: Pulmonary veins

152.. Pace maker is situated in heart

Ans: In the wall of right atrium

153. Pericardial fluid is secreted by

Ans: Visceral peritoneum

154. Pericardial fluid is secreted by

Ans: Visceral peritoneum

155. Heart beat is accelerated by

Ans: Sympathetic nerves and epinephrine

156. Heart beat is hard on left side as

Ans: Ventricles are on left side

157. Heart beat is initiated by

Ans: SA node

158. Heart beat originate from

Ans: Pace maker

159. Heart is perfectly four-chambered in

Ans: Birds and Mammals

160. Impulse originating from SA node is transmitted to

Ans: AV node

161 .In human beings duration of cardiac cycle is

Ans: 0.8 sec

162. In human beings which one regulates heart beat?

Ans: cardiac branch of vagus nerve

163. In humans, blood passes from post caval to diastolic right atrium of heart due to

Ans: Pressure difference between post caval and atrium

164. In normal blood pressure of 120/80 mm Hg, the numerator represents

Ans: Systolic pressure

165. In sphygmomanometer what does “sphygmos” mean?

Ans: Pulse

166. Kidney shaped nucleus occurs in

Ans: Monocyte

167. Largest number of white blood corpuscles is

Ans: Neutrophils

168. Blood pressure is lowest

Ans: During ventricular diastole

169. Blood pressure is measured by

Ans: Sphygmomanometer

170. Blood vessel carrying least CO2 is

Ans: Pulmonary vein

171. Blood vessel which ends in capillaries is

Ans: Artery

172. Cardiac output is

Ans: 5.3 litres / minute

173. Cardiac output is blood

Ans: Pumped by each ventricle per minute

174. Cell fragments of megakaryocytic yield

Ans: Blood platelets

175. Cells formed in bone marrow include

Ans: RBC and leucocytes

176. Chordae tendineae are found in

Ans: Ventricle of heart

177. Circulation of blood was discovered by

Ans: Harvey

178. Contraction of heart is known as

Ans: Systole

179. Deoxygenated blood from wall of heart is carried by

Ans: Coronary sinus

180. Deposition of cholesterol in walls of arteries is

Ans: Atherosclerosis

181. Difference between systolic and diastolic pressure is

Ans: pulse pressure

182. First and louder sound of heart during ventricular systole is

Ans: Lubb

183. 'Dup' sound is produced during closure of

Ans: Semilunar valves

184. A fully mature human RBC has

Ans: No nucleus

185. A portion of cardiovascular system that transports oxygen depleted blood from the heart to lungs and brings oxygenated blood back to heart is

Ans: Pulmonary circulation

186. A sample of blood shows clumping with antiserum A but not with antiserum B. The blood group would be

Ans: A

187. A young man of 25 years has his blood pressure

Ans: 120/80 mm Hg

188. Abnormal fall in total count of WBCs in the human blood is called

Ans: Leucopenia

189. All veins have deoxygenated blood except

Ans: Pulmonary veins

190. Amount of blood pumped by heart into body per minute is called

Ans: Cardiac output

191. Artery is a vessel that carries blood

Ans: away from heart

192. At the time of diastole, heart is filled with

Ans: Venous blood

193. Auricular systole in cardiac cycle lasts for about

Ans: 0.1 sec

194. Blood capillaries are made of

Ans: Endothelium

195. Goiter disorder is caused by deficiency of

Ans: Iodine

196. Which one of the following diseases is caused by bacteria

Ans: Tuberculosis

197. Bone cancer belongs to the category of

Ans: Sarcoma

198. AIIDS day

Ans: December 1

199. Carcinoma is……..

Ans: Melanoma cancer of skin

200. HIV is a member of a group of viruses called

Ans: Retroviruses

201. Incubation period of typhoid is

Ans: 7 – 17 days

202. Diseases of the heart, joints and nervous system are called

Ans: degenerative diseases

203. Insulin deficiency causes

Ans: Diabetes mellitus

204. Pernicious anaemia is caused by the deficiency of vitamin

Ans: B12/Cobalamine

205. Kala-azar is caused by

Ans: Leishmania donovani

206. Disease caused by Trypanosoma gambiense is

Ans: Sleeping sickness

207. Ringworm in humans is caused by

Ans: Fungi

208. AIDS was first reported in

Ans: U.S.A.

209. Western blot test is used for detection of

Ans: AIDS

210. A person was found to HIV positive by ELISA. The test that affirms it is

Ans: Western blot

211. AIDS virus HIV first starts

Ans: Leucocytes

212. Typhoid is spread by……

Ans: House fly

213. _____ diseases are also called inborn diseases

Ans: Congenital

214. Vector host of malaria is

Ans: Female Anopheles mosquito

215. Chicken pox is caused by

Ans: Varicella-Zoster Herpes virus

216. Kwashiorkor and beri-beri are

Ans: Deficiency diseases

217. Elephantiasis is caused by

Ans: Wuchereria bancrofti

218. Confirmatory test commonly employed for diagnosis of AIDS is

Ans: Western blot test

219. HIV has a protein coat and a genetic material which is

Ans: Single stranded RNA

220. HIV reduces natural immunity of body by destroying

Ans: T-lymphocytes

221. Widal test is used for diagnosis of

Ans: Typhoid

222. Bronchogenic carcinoma is cancer of

Ans: Lungs

223. The study of classification of diseases is called _____

Ans: Nosology

224. Congenital diseases

Ans: are present at birth

225. Which is Trans placental disease

Ans: German measles

226. …… is used for treatment of thyroid

Ans: I-131

227. A person preparing food (e.g., Mary Milton) can be a major source of spread of disease

Ans: Typhoid

228. Breast cancer is the example of _____ disease.

Ans: Malignant

229. Which of the following is fourth dimension of health?

Ans: Spiritual

230. Congenital diseases caused by environmental factors are

Ans: Cleft palate and harelip

231. Deficiency of vitamin C/Ascorbic acid causes

Ans: Scurvy

232. Pneumonia that infects lung alveoli is caused by

Ans: Streptococcus species

233. Sarcoma is cancer of

Ans: Mesodermal tissue

234. AZT is used in treatment of

Ans: AIDS

235. Cancer of blood is

Ans: Leukemia

236. Cancer of cervix is caused by

Ans: Human Papilloma virus

237. HIV infects

Ans: Helper T-cells

238. Beri-Beri is caused by the deficiency of _____.

Ans: Vitamin B

239. Who separated medicines from religion, superstition and philosophy?

Ans: Hippocrates

240. Name water borne diseases

Ans: Cholera

241. Deficiency of vitamin A causes (MP-PMT)

Ans: Night blindness

242. Metastasis is connected with

Ans: Malignant tumour

243. HIV is retrovirus as its genetic information is contained in

Ans: RNA instead of DNA

244. Itai-Itai disease is caused by _____.

Ans: Cadmium

245. Name a non congenital disease

Ans: Hepatitis

246. A slate of complete physical mental and social well being is called

Ans: Health

247. Dengue is caused by

Ans: Female Aedes

248. A droplet infection is

Ans: Pneumonia

249. Human papilloma virus may cause cancer of

Ans: Uterine cervix

250. Cancerous cells are killed by radiations because they are

Ans: Dividing rapidly

251. Malaria is caused by _____.

Ans: Plasmodium

252. Small pox and rabies are caused by (BHU)

Ans: Virus

253. Pair of viral diseases is

Ans: Common Cold, AIDS

254. Which of the following is known as slim disease?

Ans: AIDS

255. Some protection is provided against carcinogens by

Ans: Tocopherol/Vit. E

256. In AIDs the system which fails is

Ans: Defense

257. Enzyme responsible for replication of HIV is

Ans: Reverse transcriptase

258. Burkitt's lymphoma is caused by

Ans: E-B virus

259. Heamophilia disease can transfer through _____.

Ans: Heredity

260. Filariasis is caused by

Ans: Wuchereria

261. Name a communicable disease

Ans: amoebiasis

262. The cells which act as parasites in the body

Ans: Cancer cell

263. TAB vaccine is useful against

Ans: Typhoid

264. The pathogen of the typhoid is directly transmitted through

Ans: water

265. Name a vital disease

Ans: Poliomyelitis

266. A sexually transmitted bacterial disease is

Ans: Syphilis

267. AIDS is characterized by sharp reduction in number of

Ans: Helper T-cells

268. Immune deficiency syndrome could develop due to

Ans: AIDS virus

269. Typhoid is caused by a species of

Ans: Salmonella

270. Excessive bleeding from an injury is due to deficiency of

Ans: Vitamin K

271. Infection of Ascaris occurs due to (BHU, MP-PMT)

Ans: Contaminated food and water

272. Inactive cancer gene is called

Ans: Proto-oncogene

273. Tumor enclosed in a capsule is

Ans: Benign

274. AIDS causing HIV principally infects

Ans: T4 lymphocytes

275. After entering a T-cell, HIV first forms

Ans: ssDNA

276. Which of the followings is a structural change in cancer cells?

Ans: Apoplasia

277. Iodine deficiency causes _____ disease.

Ans: Goiter

278. The branch which deals with the study of defense mechanism against diseases is called

Ans: Immunology

279. Disease existing at or before birth is

Ans: Congenital

280. Osteomalacia is due to deficiency of

Ans: Vitamin D

281. A bacterial disease is

Ans: Leprosy

282. AIDS is caused by

Ans: Virus

283. Carcinoma is cancer of

Ans: Epithelial cells

284. Benign tumour is the one which

Ans: Differentiated and capsulated

285. Most common type of Salmonella found in India is

Ans: Serotype Typhimurium

286. Leprosy is _____ type of disease.

Ans: Contagious

287. Frost bite is caused by

Ans: physical agent

288. A disease transferred from mother to child through placenta is

Ans: AIDS

289. Kwashiorkor, a disorder of children is due

Ans: Protein/essential amino acid deficiency

290. Down's syndrome is caused by

Ans: Trisomy of 21st chromosome

291. Smoking may cause cancer of

Ans: Lung

292. What is the leading cause of cancer death for men?

Ans: lung cancer

293. What is the minimum amount of moderate-intensity physical activity adults should engage in 5 or more days of the week?

Ans: B - 30 minutes per day

294. How many servings of fruits and vegetables should be eaten daily for good health?

Ans: 5-9 servings per day

295. When engaging in strenuous exercise in high heat, it's important to monitor yourself and others for signs of heat stroke. Which of the following is NOT a sign of heat stroke?

Ans: heavy sweating

296. What is the leading cause of death for men?

Ans: heart disease

297. Air pollutants most often lead to human health problems of the

Ans: circulatory and respiratory systems

298. Oncogenes are associated with

Ans: Cancer

299. The genetically engineered 'golden rice is rich in which of the following?

Ans: B-carotene, vitamin-A and folic

298. Which country has been declared Ebola-free by the World Health Organization (WHO) recently?

Ans: Liberia and Sierra Leone

299. The excretion of insoluble calcium phosphate present in our body is done by

Ans: Intestine

300. Which one among the following muscles is immune to fatigue?

Ans: Cardiac muscle

301. Which one among the following mixture is used for de-worming by mixing with poultry feeds?

Ans: CC14 and piperazine

302. The project 'Sankalp' is associated with the elimination of

Ans: AIDS, HIV

303. Who among the following is known for his work on medicine during the Gupta period?

Ans: Susrutha

304. Clotting of blood required for which Vitamin?

Ans: Vitamin K

305. The longest bone in the human body is-

Ans: Femur

306. Bedaquiline, a newly launched vaccine by Health Ministry, is related with the treatment of which disease?

Ans: Tuberculosis

307. What is the theme of 2016 World Health Day (WHD)?

Ans: Beat Diabetes

308. The highest incidents of maternal deaths in India are caused due to

Ans: Hemorrhage

309. Filaria is caused by

Ans: Mosquito

310. Which committee has been constituted to monitor the functioning of the Medical Council of India (MCI) for at least a year?

Ans: R.M. Lodha committee

311. If someone is injured in an accident and broken his/her knee joint, then he or she needs to consult -

Ans: Orthopedic

312. Which of the following virus is responsible for diarrhoea among infants and young children?

Ans: Rota virus

313. Exposure to sunlight helps a person improve his health because

Ans: the ultraviolet rays convert skin oil into Vitamin D

314. As per recently released World Malaria Report 2015 of WHO, which continent has become first in the world to end malaria?

Ans: Europe

315. The most healthy edible oil for heart is -

Ans: Olive oil

316. Which Vitamin is required for in clotting of blood?

Ans: Vitamin K

317. A molecular marker in normal breast tissue is identified that can predict a woman's risk for developing Breast cancer. These cells are called as?

Ans: Mammary epithelium

318. What is the trade name of world's first malaria vaccine developed by GlaxoSmithKline?

Ans: Mosquirix

319. The union minister of Women and Child Development Maneka Gandhi launched which programme which is the world's largest digital mass education programme for addressing the malnutrition in women and children?

Ans: IAP Health Phone programme

320. The World Health Organization has its headquarters in?

Ans: Geneva

321. The smallest bones in the human body are found in the...

Ans: Ears

322. Swine flu is caused by ?

Ans: Virus

323. Where is the All India Malaria Research Institute located?

Ans: New Delhi

324. In 2006, the U.S. Food and Drug Administration approved a human papilloma virus vaccine for Cancer. What is the name of it?

Ans: Gardasil

25. Which type of disease is asthma?

Ans: Chronic disease

326. What is Cardiac Arrest?

Ans: Failure of the heart to contract

327. When someone has Hepatitis, which organ is affected?

Ans: The Liver

328. What is the definition of Hemorrhage?

Ans: Injury to the head

329. Deficiency of Vitamin B1 causes?

Ans: Beriberi

330. AIDS is an acronym for_____

Ans: Acquired Immuno Deficiency Syndrome

331. Tuberculosis is caused by?

Ans: Bacteria

332. The pigment that gives color to the skin is?

Ans: Melanin

333. Which is not a communicable disease?

Ans: Arthritis

334. Who is regarded as the "father of plastic surgery"?

Ans: Susruta

335. In the medical tests MRI "M" stands for?

Ans: Magnetic

336. Osteoporosis is a condition that affects which part of the body?

Ans: Bones

337. What is the largest organ of the human body?

Ans: The skin

338. How many taste buds are on your tongue?

Ans: Nine thousand

339. Calcium crystals are a normal part of what body region?

Ans: The ears

340. The smallest bone in the human body is about the size of:

Ans: grain of rice

341. Cells related to _____ divide remarkably faster than other cells in the body.

Ans: Hair

342. What percentage of the human body is water?

Ans: 66%

343. What is the name of the disease in man arising out of Vitamin B1 deficiency?

Ans: Beriberi

344. The deficiency of which of the following group of nutrients affects the skin ?

Ans: Riboflavin, Niacin, Pyridoxine, Pantothenic Acid

345. What does niacin deficiency cause?

Ans: Pellagra

346. What are the effects of Vitamin B6 deficiency?

Ans: Certain types of Eczema

347. Which of the following diseases is associated with Vitamin C deficiency?

Ans: Scurvy

348. Using purgatives on a regular basis is harmful to health. Which deficiency does it cause?

Ans: Potassium

349. Deficiency of Vitamin D gives rise to:

Ans: Rickets

350. What is the condition known as, in which the body does not get its fair share of nutrients, either from starvation, or as a result of poor absorption?

Ans: Malnutrition

351. Night blindness drying of the conjunctiva, dry and scaly skin and loss of hair are some of the symptoms of:

Ans: Vitamin A deficiency

352. It makes up most of your blood and helps carry oxygen and food to the cells in your body. It helps your body get rid of wastes through urine and sweat.

Answer: Water

353. What food nutrient is our body's main source of energy?

Answer: Carbohydrates

354. They are very important for building strong bones.

Answer: Calcium

355. It is a degenerative brain disorder that causes a gradual and irreversible decline in memory and eventually, the ability to care for oneself.

Answer: Alzheimer's disease

356. It is a dietary-deficiency disease resulting from inadequate intake of niacin.

Answer: Pellagra

357. An irregularity in the rhythm of the heartbeat is referred to as what?

Answer: Arrhythmia

358. It is a water-soluble vitamin found in fruits and leafy vegetables and is also called as ascorbic acid.

Answer: Vitamin C

359. A prolonged deficiency of Vitamin C in the diet causes what disease?

Answer: Scurvy

360. What is the theme for this year's Nutrition Month Celebration?

Answer: Gutom at Malnutrisyon, Sama-sama nating Wakasan

361. What is the protein food found in milk?

Answer: Casein

362. What is the cheapest source of Vitamin D?

Answer: Sunlight/Morning Sunshine

363. What is the scientific name of guava?

Answer: Psidium guajava

364. The package of simple ready-to-cook foods designed as a supplement to the usual diet of the child is called what?

Answer: Nutri-Pak

365. What severe form of child malnutrition is caused by inadequate intake of protein?

Answer: Kwashiorkor

366. It refers to the food that a person usually consumes.

Answer: Diet

367. This vitamin is extracted from liver which is essential for red blood cell formation.

Answer: Vitamin B12/Cyanocobalamin

368. It is a relapse or recurrence of an illness or disease.

Answer: Palindromia

369. It is the scientific regulation of diet in treating disease.

Answer: Dietotherapy

370. Any substance that nourishes a person to enable him to live and grow.

Answer: Food

371. It is a condition characterized by sleepiness, indifference, and lack of energy.

Answer: Lethargy

372. _____ is a metabolism of fat.

Answer: Lipometabolism

373. _____ is caused by lack of calories or inadequate amount of food.

Answer: Marasmus

374. It is a type of cancer of the blood characterized by an abnormal increase of immature white blood cells called “blasts“.

Answer: Leukemia or Leukaemia

375. The slowness of heart rate is referred to as what?

Answer: Bradycardia

376. The first secretion from the mother’s breast is rich in antibodies and minerals. This is produced after giving birth and before the production of true milk. It provides newborns with immunity to infections.

Answer: Colostrum

377. These are the “building blocks” of protein which is an integral part of all body tissues especially muscle.

Answer: Amino Acids

378. It is the enlargement of the thyroid gland appearing as a swelling of the front of the neck.

Answer: Goiter

379. It helps prevent goiter.

Answer: Iodine

380. This refers to the ease with which nutrients, particularly minerals, can be absorbed from the digestive tract and utilized by the body.

Answer: Bio-availability/Bioavailability

381. _____ is a term to describe minerals that are attached to other molecules such as proteins or carbohydrates and used to improve the bio-availability of minerals.

Answer: Chelates

382. These are the building blocks of fats and oils.

Answer: Fatty Acids

383. It refers to the study of measurement of the physical characteristics of the body such as height and weight.

Answer: Anthropometry

384. It is the pressure of the blood on the walls of the arteries.

Answer: Blood Pressure

385. _____ is the rate of energy used for metabolism when the body is at complete rest.

Answer: Basal Metabolic Rate (BMR)

386. It is an eating disorder characterized by binge eating, sometimes followed by vomiting or purging.

Answer: Bulimia

387. What is the natural stimulant found in coffee, tea, and chocolate?

Answer: Caffeine

388. It is the unit of heat and the measurement of energy.

Answer: Calorie

389. _____ is a monosaccharide, sometimes known as blood sugar.

Answer: Glucose

390. It is the main carbohydrate in milk.

Answer: Lactose

391. These refer to the substances obtained from food and used in the body to provide energy and structural materials and to regulate growth, maintenance and repair of the body's tissue.

Answer: Nutrients

392. _____ is a chronic disease characterized by excessively high body fat in relation to lean body tissue.

Answer: Obesity

393. It is an excess of body weight that includes fat, bone, and muscle.

Answer: Overweight

394. What is the general term for the people who exclude meat, poultry, fish, or other animal-derived foods from their diets?

Answer: Vegetarians

395. These are organic, essential nutrients required only in small amounts.

Answer: Vitamins

396. _____ is a guideline for the amount of energy and selected nutrients considered adequate to meet the nutrient needs of practically all healthy people.

Answer: Recommended Dietary Allowances (RDA)

397. It is the breaking down of foodstuffs in the body into a form that can be absorbed and used or excreted.

Answer: Digestion

398. It is the state of being healthy and fit, gaining all nutrients.

Answer: Wellness

399. It is a lack of adequate fluids in the body.

Answer: Dehydration

400. It is a deficiency in blood where iron level intake is too low.

Answer: Anemia or Anemia

401. These are foods that are supplemented with essential nutrients in quantities greater than already present.

Answer: Fortified Foods

402. How do you call a healthcare professional with training in nutrition and diet planning?

Answer: Dietician/Dietitian

403. _____ is the science that deals with foods and their effects on health.

Answer: Nutrition

404. _____ is a drug or remedy used for treating illness.

Answer: Medicine

405. It is a lack of healthy foods in the diet, or an excessive intake of unhealthy foods, leading to physical harm.

Answer: Malnutrition

406. What is the best way to determine the nutritional status of an individual?

Answer: Weighing

407. What substance are nails made of?

Answer: Keratin

408. Dairy products are generally made from what common liquid?

Answer: Milk

409. He is a Polish-American chemist considered as the “Father of Vitamin Therapy” and was the first to coin the term “vitamin” as vital factors in the diet.

Answer: Casimir Funk

410. It is the only sugar manufactured my mammals.

Answer: Lactose

411. Axerophthol is the same as what vitamin?

Answer: Vitamin A

412. It is a malignant growth of cells.

Answer: Cancer

413. Cardiopathy is known to be as what sort of disease?

Answer: Heart Disease

414. It is a disease caused by a deficiency of Vitamin D.

Answer: Rickets

415. What vitamin is a viosterol?

Answer: Vitamin D2

416. What nutrient is needed as the main structural component of the body?

Answer: Protein

417. What vitamin helps in blood clotting and is known as naphthoquinone?

Answer: Vitamin K

418. What vitamin is needed for a healthy immune system and strong connective tissue?

Answer: Vitamin C/Ascorbic Acid

419. It is also known as tocopherol and is necessary for normal reproduction.

Answer: Vitamin E

420. What is the cheapest source of iodine in our household?

Answer: Iodized salt

421. What fruit is an alligator pear?

Answer: Avocado

422. Who was the Philippine President who declared July as a month of nutrition?

Answer: Ferdinand Marcos

423. This is often marketed as “super fruits” being rich in vitamins A and C.

Answer: Guava

424. It is an agency of the Philippine government under the Department of Health responsible for creating a conducive policy environment for national and local nutrition planning, implementation, monitoring and evaluation, and surveillance using state-of the art technology and approaches.

Answer: National Nutrition Council (NNC)

425. It is a medical condition in which the eye fails to produce tears caused by a deficiency in vitamin A.

Answer: Xerophthalmia

426. He is referred to as the "Father of Medicine".

Answer: Hippocrates

427. _____ is a thiamine-deficiency disease.

Answer: Beriberi

428. What Presidential Decree, known as the "Nutrition Act of the Philippines" which created the National Nutrition Council (NNC) as the highest policy-making on nutrition, was promulgated on 1974?

Answer: P.D. 491

429. What Executive Order, which named the Department of Health as the chair of the NNC?

Answer: Executive Order No. 472

430. What is the process of removing harmful pathogens from various types of food?

Answer: Pasteurization

431. It protects the child from measles and is given only once as early as nine months.

Answer: Measles Vaccine

432. It protects the unborn child from the tetanus and is given to the mother twice.

Answer: Tetanus Toxoid

433. It is the current vaccine for tuberculosis.

Answer: Bacillus Calmette Guerin (BCG)

434. What is the substance found in colostrum that fights against infection and creates antibodies that stimulates immunity?

Answer: Immunoglobulin

435. _____ is a hidden hunger.

Answer: Malnutrition

436. It is also called “Night Blindness” and is a poor vision in relatively low light.

Answer: Nyctalopia

437. Malunggay has different parts. One of these is the fruit/seed. For what is the use of this fruit/seed?

a. Arthritis c. Wounds

b. Stomach Ache d. Leukemia

Answer: a. Arthritis

438. _____ is slowness in eating.

Answer: Bradyphagia

439. A person who stores too much sugar in the body may suffer from _____.

Answer: Diabetes

440. Who discovered the vitamin D and the role of the vitamin in preventing rickets?

Answer: Edward Mellanby

441. What is the medical term for the inflammation of the protective membranes covering the brain and spinal cord, known collectively as the meninges?

Answer: Meningitis

442. _____ is a great toe displacement toward other toes.

Answer: Hallux varus

443. This disease happens when the flow of oxygen-rich blood to a section of heart muscle suddenly becomes blocked and the heart can’t get oxygen.

Answer: Heart Attack

444. Condition in which the bone marrow produces unusually large, structurally abnormal, immature red blood cells

Answer: Megaloblastic anemia

445. _____ means hernia of the stomach.

Answer: Gastrocele

446. _____ is any illness resulting from the consumption of contaminated food or foods which contain poisonous substances.

Answer: Foodborne Illness / Foodborne Disease / Food Poisoning

447. What is the stable food of Filipinos that is served every meal?

Answer: Rice

448. When protein reaches the intestines for it to be digested, in what unit is it broken?

Answer: Amino Acid

449. It is a statement or information on food labels indicating the nutrient(s) and the quantity of said nutrient found or added in the processed foods or food products.

Answer: Nutrition Facts

450. _____ is the addition of nutrients to processed foods or food products at levels above the natural state.

Answer: Fortification / Food Fortification

451. This is a strategy to encourage food manufacturers to fortify processed foods or food products with essential nutrients at levels approved by the Department of Health (DOH).

Answer: Sangkap Pinoy Seal Program

452. It is the process of introducing vaccine into the body to stimulate the formation of antibodies which fight germs that cause diseases.

Answer: Immunization

453. What do you call the medical condition in which a person's spine is curved from side to side?

Answer: Scoliosis

454. What is the act establishing the Philippine Food Fortification Program?

Answer: R.A. 8976

455. This results from a disproportion among essential nutrients with or without the absolute deficiency of any nutrients.

Answer: Imbalance

456. What is the other name for vetsin, which we usually used in cooking that give flavor to the foods we eat?

Answer: Monosodium glutamate / Sodium glutamate

457. _____ is a substance formed by protein in the blood that is used by the immune system to identify and neutralize foreign objects such as bacteria and viruses.

Answer: Antibody

458. It is the removal of mineral or calcium ions from the bone or other calcified tissue to make them flexible and easy for pathological investigation.

Answer: Decalcification

459. These are smaller amounts of vitamins or minerals consumed.

Answer: Micronutrients

460. What hormone is produced in the pancreas that regulates the metabolism of glucose? [The lack of this hormone causes diabetes.]

Answer: Insulin

461. _____ are portions and types of foods and beverages consumed on a regular basis.

Answer: Diet

462. It is a standardized ratio of weight to height.

Answer: Body Mass Index (BMI)

463. In what part of the body does digestion begin?

Answer: Mouth

464. What group of foods builds and repairs worn-out tissues?

Answer: Grow Foods

465. In what year was it discovered that citrus fruit juices aided in the treatment of scurvy, now known as vitamin C deficiency disease?

Answer: 1720

466. What basic food group provides the body with heat and energy?

Answer: Energy-Giving Foods (Go Foods)

467. It is a deficiency of calcium in elderly.

Answer: Osteoporosis

468. What is the poor man's meat?

Answer: Monggo

469. What vitamin do we get from yellow foods?

Answer: Vitamin A

470. What mineral makes our teeth harder?

Answer: Calcium, Iron, Phosphorus

471. What are the water-soluble vitamins?

Answer: Vitamin C and Vitamins B complex

472. What vitamin helps in preventing hemorrhage and known as bandage vitamin?

Answer: Vitamin K

473. What do you call the thrombocytes that are tiny colorless disk-shaped and plays an important part in the clotting process?

Answer: Platelets

474. What do you call the cholesterol that comes from food?

Answer: Dietary Cholesterol

475. What do you call the cholesterol that circulates in your blood?

Answer: Serum Cholesterol/Blood Cholesterol

476. What is the body's most essential nutrient?

Answer: Water

477. What are the fat-soluble vitamins?

Answer: Vitamins A, D, E, and K

478. It must accompany smart eating for weight control.

Answer: Regular Exercise

479. _____ is a guideline for helping people choose a varied, balanced, and moderate diet.

Answer: Daily Food Guide

480. It is a fatlike substance found only in animal sources of food.

Answer: Cholesterol

481. What is the governmental agency responsible for food labels?

Answer: Food and Drug Administration (FDA)

482. These are the substances added for a specific effect.

Answer: Additives

483. _____ is an excess body fat.

Answer: Obesity

484. How many calories are there in a pound?

Answer: 3,500 calories

485. It is an eating disorder characterized by an irrational fear of becoming obese.

Answer: Anorexia nervosa

486. It refers to the eating of large amounts of starches on days leading up to athletic competition.

Answer: Carbohydrate Loading

487. It is when the body's immune system overreacts to food substances.

Answer: Food Allergy

488. _____ is using a medicine in a way that is not intended.

Answer: Medicine misuse

489. It is the ability to be physically active.

Answer: Physical Fitness

490. Of the existing 22 amino acids, how many are considered to be essential in the diet?

Answer: 9 amino acids

491. What are the complex carbohydrates?

Answer: Starches

492. What mineral helps build red blood cells?

Answer: Iron

493. It is a fat-soluble vitamin that enhances the absorption of calcium and therefore aids in the formation and maintenance of bones and teeth.

Answer: Vitamin D

494. What are the simple carbohydrates?

Answer: Sugars

495. What is the primary role of carbohydrates in the body?

Answer: To provide energy

496. _____ is the sole source of energy used by the brain.

Answer: Glucose

497. It is a B vitamin that is a factor in energy metabolism and supports normal vision and skin health.

Answer: Vitamin B2 or Riboflavin

498. _____ is an excessively rapid heartbeat.

Answer: Tachycardia

499. It is a bad breath.

Answer: Halitosis

500. _____ is a condition in which a person can no longer control his or her need or desire for a drug.

Answer: Drug Addiction

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PHYSICS

1. Radiocarbon is produced in the atmosphere as a result of

Ans: collision between fast neutrons and nitrogen nuclei present in the atmosphere.

2. It is easier to roll a stone up a sloping road than to lift it vertical upwards because

Ans: work done in rolling a stone is less than in lifting it

3. The absorption of ink by blotting paper involves

Ans: capillary action phenomenon

4. Siphon will fail to work if

Ans: the level of the liquid in the two vessels is at the same height

5. Large transformers, when used for some time, become very hot and are cooled by circulating oil. The heating of the transformer is due to

Ans: both the heating effect of current and hysteresis loss

6. Light year is a unit of

Ans: Distance

7. Mirage is due to

Ans: unequal heating of different parts of the atmosphere

8. Light from the Sun reaches us in nearly

Ans: 8 minutes

9. Stars appears to move from east to west because

Ans: the earth rotates from west to east

10. Pa (Pascal) is the unit for

Ans: Pressure

11. Planets do not twinkle because

Ans: they are nearer to earth and hence we receive a greater amount of light and, therefore minor variations in the intensity are not noticeable

12. Metals are good conductors of electricity because

Ans: they contain free electrons

13. Let a thin capillary tube be replaced with another tube of insufficient length then, we find water

Ans: Depressed

14. If two bodies of different masses, initially at rest, are acted upon by the same force for the same time, then the both bodies acquire the same

Ans: Momentum

15. Rectifiers are used to convert

Ans: Alternating current to Direct current

16. Sound waves in air are

Ans: Longitudinal

17. Magnetism at the centre of a bar magnet is

Ans: Zero

18. It is more difficult to walk on a sandy road than on a concrete road because

Ans: the friction between sand and feet is less than that between concrete and feet

19. Lux is the SI unit of

Ans: intensity of illumination

20. On a rainy day, small oil films on water show brilliant colours. This is due to

Ans: Interference

21. Point A is at a lower electrical potential than point B. An electron between them on the line joining them will

Ans: move towards B

22. Materials for rain-proof coats and tents owe their water-proof properties to
Ans: surface tension

23. RADAR is used for

Ans: detecting and locating the position of objects such as aero planes

24. Sound of frequency below 20 Hz is called

Ans: Infrasonic

25. On a clean glass plate a drop of water spreads to form a thin layer whereas a drop of mercury remains almost spherical because

Ans: cohesion of mercury is greater than its adhesion with glass

26. Suitable impurities are added to a semiconductor depending on its use. This is done in order to

Ans: increase its electrical conductivity

27. Stars twinkle because

Ans: the refractive index of the different layers of the earth's atmosphere changes continuously, consequently the position of the image of a start changes with time

28. It takes much longer to cook food in the hills than in the plains, because

Ans: in the hills the atmospheric pressure is lower than that in the plains and therefore water boils at a temperature lower than 100^{o}C causing an increase in cooking time

29. Moment of inertia is

Ans: Tensor

30. Inside an aero plane, flying at a high altitude,

Ans: normal atmospheric pressure is maintained by the use of air pumps

31. One thousand microns is equal to

Ans: 10-3m

32.Sound travels at the fastest speed in

Ans: Steel

33. Oil raise up the wick in a lamp. The principle involves

Ans: capillary action phenomenon

34. Superconductors are substances which

Ans: Superconductors are substances which

35. Light travels at the fastest speed in

Ans: Vacuum

36. Railway tracks are banked on curves

Ans: necessary centripetal force may be obtained from the horizontal component of the weight of the train

37. On a cold day when a room temperature is 15oC, the metallic cap of a pen becomes much colder than its plastic body, though both are at the same temperature of 15oC, because

Ans: metals are good conductor of heat

38. Intensity of sound at a point is ____ its distance from the source.

Ans: inversely proportional to square of

39. Of the four locations mentioned below the highest inside temperature will be attained in the pressure cooker operated with the pressure valve open

Ans: at a place in a valley below sea level

40.Light Emitting Diodes (LED) is used in fancy electronic devices such as toys emit

Ans: visible light

41. Mercury is commonly used as a thermometric fluid rather than water because

Ans: mercury has greater visibility than water

42. Optical fibre works on the

Ans: total internal reflection

43. Light from the star, Alpha Centauri, which is nearest to the earth after the sun, reaches the earth in

Ans: 4.2 years

44. Supersonic plane fly with the speed

Ans: greater than the speed of sound

45. Mach number is used in connection with the speed of
Ans: Aircraft

46. Rainbow is due to

Ans: refraction and reflection of sunlight by water droplets

47. Stars which appear single to the naked eye but are double when seen through a telescope are

Ans: Binaries

48. Solar eclipse will take place when

Ans: the moon is between the sun and the earth

49. Isotopes of an element contain

Ans: the same number of protons but different number of neutrons

50. One watt-hour is equivalent to

Ans: 3.6×10^3 J

51. Sir C.V. Raman was awarded Nobel Prize for his work connected with which of the following phenomenon of radiation?

Ans: Scattering

52. Radiocarbon dating technique is used to estimate the age of

Ans: Fossils

53. Large astronomical telescopes always use as objective

Ans: combinations of lenses

54. Rainbow is produced when sunlight fall on drops of rain. Which of the following physical phenomena are responsible for this?

Ans: Diffusion and Refraction

55. Natural radioactivity was discovered by

Ans: Henri Becquerel

56. Planets are

Ans: non-luminous heavenly bodies

57. One nanometer is equal to

Ans: 10^{-9}m

58. Mica is used in electrical appliances such as electric iron because mica is

Ans: a good conductor of heat but a bad conductor of electricity

59. It is easier to roll a barrel full of coal tar than to pull it because

Ans: the rolling friction is much less than the sliding friction

60. Minimum number of unequal vectors which can give zero resultant are

Ans: Three

61. Rain is falling vertically downwards. To a man running east-wards, the rain will appear to be coming from

Ans: East

62. An aeroplane is flying horizontally with a velocity of 600 km/h and at a height of 1960 m. When it is vertically at a point A on the ground a bomb is released from it. The bomb strikes the ground at point B. The distance AB is

Ans: 3.33 km

63. What is the unit for measuring the amplitude of a sound?

Ans: Decibel

64. Reading of a barometer going down is an indication of

Ans: Rainfall

65. Decibel is the unit for

Ans: intensity of sound

66. One fathom is equal to

Ans: 6 feet

67. Fathom is the unit of

Ans: Depth

68. Light year is a measurement of

Ans: Stellar distances

69. Very small time intervals are accurately measure by
Ans: Atomic clocks

70. One kilometre is equal to how many miles?
Ans: 0.62

71. Kilohertz is a unit which measures
Ans: electromagnetic radio wave frequencies

72. One horse power is equal to
Ans: 746 watts

73. 'Bar' is the unit of

Ans: Pressure.

74. One Joule is equal to
Ans: 10^7 ergs

75. Kilowatt is a unit to measure
Ans: Power

76. Electric current is measure by
Ans: Ammeter

77.A chronometer measures
Ans: Time

78. Nautical mile is a unit of distance used in
Ans: Navigation

79. Knot is a unit of speed?
Ans: Ship

80. Atoms are composed of
Ans: electrons and nuclei

81. In an atomic explosion, enormous energy is released which is due to
Ans: conversion of mass into energy

82. Isotopes are separated by
Ans: Distillation

83. The wavelength of X-rays is of the order of
Ans: 1 angstrom

84. Mesons are found in
Ans: Cosmic rays

85. Which radioactive pollutant has recently drawn to public, due to its occurrence in the building material?

Ans: Thorium

86. What is the wavelength of visible spectrum?

Ans: 3900 - 7600 angstrom

87. The isotope of uranium capable of sustaining chain reaction is

Ans: U-235

88. The age of most ancient geological formations is estimated by

Ans: Uranium - lead method

89. Who suggested that most of the mass of the atom is located in the nucleus?

Ans: Rutherford

90. The dark lines in the solar spectrum are due to

Ans: absorption of corresponding wavelengths by the outer layers of the sun

91. In an atomic nucleus, neutrons and protons are held together by

Ans: exchange forces

92. 'No two electrons in an atom can have the same set of four quantum numbers' is
Ans: Pauli's exclusion principle

93. Nuclear fission is caused by the impact of
Ans: Neutron

94. Which of the following rays are more penetrating?

Ans: Gamma rays

95. How many colours the sunlight spectrum has?

Ans: 7

96. When a magnet is suspended freely it always aligns itself in -------- direction?

Ans: N-S

97. ---------- is the only natural magnet.

Ans: Magnetite

98. When a magnet is placed on a plastic plate with common pins spread on it, then ----?

Ans: Pins stick at the ends of the magnet

99. The south pole of the freely suspended magnet points towards -------?

Ans: Geographical North

100. like poles of magnets -------- each other.

Ans: Repel

101. Unlike poles of magnets -------- each other.

Ans: Attract

102. ---------- is the surest test of magnetism.

Ans: Repulsion

103. When a N pole of a bar magnet is brought near the north pole of a freely suspended magnetic needle, then it ----------?

Ans: Repels

104. When a S pole a magnet in brought near the N pole of a freely suspended magnetic needle, then it ----------?

Ans: Attracts

105. _____is a device used by pilots and navigators used to find the direction.

Ans: magnetic compass

106. Magnetism of a magnet is lost by doing?

Ans: Heating and Hammering.

107. Electric bell is an example of _____magnet.

Ans: Electromagnet

108. _____ type of magnet is used in cranes to lift heavy containers from ships.

Ans: Cylindrical magnet

109. The nerves in our body transmits messages as _____

Ans: Electrical impulses

110. Scalars are quantities that are described by _____

Ans: Magnitude

111. Which one is a scalar quantity?

Ans: Speed

112. What is the rate of acceleration of gravity?

Ans: 9.8 m/s

113. Vectors are the quantities that are described by _____

Ans: Both magnitude & direction

114. What does Displacement refer to?

Ans:It refers to how far out of place an object is

115. Speed is _____

Ans:Scalar quantity which does not keep track of direction

116Acceleration is _____

Ans: The rate at which an object changes its velocity

117. The acceleration of an object is _____

Ans: Directly proportional to force and inversely proportional to mass

118. Increasing force tends to _____ while increasing mass tends to _____

Ans: Increase acceleration, decrease acceleration

119.'An object at rest stays at rest and object in motion stays in motion with the same speed and in the same direction unless acted upon by an unbalanced force.' This is which law of Newton?

Ans: First law of motion

120. What do you understand by inertia?

Ans: Tendency to resist changes in their state of motion

121. According to Newton's second law of motion acceleration of an object is dependent upon two variables. Which are those two variables?

Ans:The net force acting upon the object and the mass of the object

122. Who developed the concept of inertia?

Ans: Galileo

123. What is the metric unit of force?

Ans: Newton

124. What are the two variable on which the amount of momentum of an object is dependent?

Ans: Mass and Velocity

125. What is potential energy?

Ans: Energy that is stored in an object due to its position relative to some zero position

126. One horsepower is equivalent to approximately _____

Ans: 750 Watts

127. What is conduction?

Ans: Transferring of heat from one object to another object through particle collisions

128. The change in temperature is the result of the gains and losses of _____ during collisions.

Ans: Kinetic energy

129. Convection is the process of heat transfer from one location to the next by _____

Ans: The movement of fluids

130. What is Polarization?

Ans: Process of separating opposite charges within an object

131. What is Grounding?

Ans: Process of removing the excess charge on an object

132. Among the following which is the best conductor?

Ans: Silver

133. Insulators are _____

Ans: Materials that impede the free flow of electrons from atom to atom and molecule to molecule

134. Gravitational force is directly proportional to the _____ of the interacting objects.

Ans: Mass

135. Gravitational attraction is inversely proportional to the _____

Ans: Square of the distance

136. What is the shape of converging lens?

Ans: Relatively thick across their middle and thin at their upper and lower edges

137. What is the shape of diverging lenses?

Ans: Relatively thin across their middle and thick at their upper and lower edges

138. What is myopia?

Ans: It is the inability of the eye to focus on distant objects

139. Hyperopia is _____

Ans: The inability of the eye to focus on nearby objects

140. Which are the materials generally used in electrical operations in electronics?

Ans: Lead and tin

141. Consider the following sentences "Concave lens always forms _____ "

Ans: Erect, virtual and smaller image.

142. A pendulum of a given length takes always the same time to complete one oscillation. This observation was made by a very famous scientist name _____

Ans: Galileo Galilee

143. The force acting on an object perpendicular to the surface is called

Ans: thrust

144. The spherical body moves with a uniform angular velocity "a", around a circular path of radius "r". Which one of the following statements is correct?

Ans: The body has a radial acceleration directed towards the center of the path.

145. Splitting of light into its constituent colors is known as..

Ans: Dispersion

146. Uses of Multiple Reflection of sound can be observed in instruments like

Ans: Stethoscope

Stethoscope is a medical instrument used for listening sounds produced within the body mainly in the heart or lungs. Sound of patients heart beat reaches the doctor's ears by multiple reflection of sound.

147. When a CD is seen in sunlight, rainbow like colours are seen.

This can be explained on the basis of the phenomenon of

Ans: Refraction, Diffraction and transmission

148. Diffusion of light in the atmosphere takes place due to

Ans: Dust particles

149. Winds and cyclones are caused by the differences in the _____

Ans: Air and Pressure

150. Spring Balance is used for measuring

Ans: The force acting on an object

151. On humans, the sound is produced by the

Ans: Voice box

152. Amplitude and frequency are two important properties of

Ans: Sound

153. Sound can travel through a medium except

Ans: Vacuum

154. "Cryogenics" is used in

Ans: Space journey, magnetic levitation and telemetry

155. When light waves pass from air to glass, the variables affected are _____

Ans: Wavelength and velocity

156. A person travel from A to B and again he travel from B to A ,In this case what would be the correct answer:

Ans: Distance will be more than displacement.

157. The motion of a freely flowing body or object is in a.

Ans: Uniformly accelerated motion.

158. Consider the following statements:

Ans: The change in the velocity could be due to change in its magnitude or direction of the motion. And when the velocity of an object changes it is observed that the object is accelerating.

159. To accelerate the motion of an object we required.

Ans: Unbalanced force

160. Safety belt in a car is used because.

Ans: It exerts a force on our body to make the forward motion slow.

161. When we hit a pile of carrom coins, at bottom coin moves out while the other coins fall vertically. It is due to _____.

Ans: It is due to inertia.

162. Who is the father of discoveries?

Ans: Archimedes

163. X–rays travel with the velocity of

Ans: light

164. Power of a lens is measured in

Ans: diopter

164. Bhabha Atomic Research Centre (BARC) is located at

Ans: Trombay

165. Power reactor is located in Tamil Nadu at

Ans: Kalpakkam

166. Which one of the following is used as a moderator in nuclear reactor.

Ans: Graphite

167. Which one among the following radiations carries maximum energy?

Ans: gamma rays

168. Which one of the following remains constant while throwing a ball upward?

Ans: Acceleration

169. Which one of the following is the unit of activity of a radioactive source?

Ans: Becquerrel

170. Which one of the following common devices works on the basis of the principle of mutual induction?

Ans: Transformer

171. Oil or soap film when in daylight appears coloured because of

Ans: Interference

172. A woman's voice is shriller than man's voice due to

Ans: higher frequency

173. Recording of sound on tapes was first invented by

Ans: Paulsen

174. Which one of the following would be most powerful electro magnet?

Ans: soft iron

175. Production of beats is a result of the phenomenon of

Ans: Interference

176. A watch based on the oscillating spring is taken from earth to moon, it will

Ans: give the same time

177. When milk is churned cream gets separated due to

Ans: centrifugal force

178. We cannot see during a fog because of

Ans: scattering of light

179. Earthquake is measured using

Ans: Seismograph

180. The term Mach is used to measure speed of

Ans: Aeroplane

181. Colour formation in thin films is due to

Ans: Interference.

182. A transformer

Ans: Generates emf.

183. Sound travels fast through

Ans: Steel.

184. The lens used to rectify long sight is

Ans: convex lens

185. Einstein got the Nobel Prize for his theory of

Ans: Relativity

186. An artificial satellite can be tracked very precisely from the earth by using

Ans: doppler Effect

187. Solar cells are made up of

Ans: both silicon and germanium

188. The colour of star is an indication of its

Ans: Temperature.

189. The hydraulic brakes used in automobiles is a direct application of

Ans: Pascal's law

190. A falling drop of rain water acquires the spherical shape due to

Ans: Surface tension

191. The difference between musical sound noises is due to

Ans: Pitch

192. Atom bomb is based on

Ans: nuclear fission

193. Indian Scientist who received the Nobel Prize

Ans: Sir C.V. Raman

194. Raman effect involves

Ans: scattering of light

195. Ball pen works on the principles of

Ans: capillarity and surface tension

196. TV waves are otherwise known as

Ans: micro waves

197. Filament of an electric bulb is made of

Ans: Tungsten

198. The principle of Dynamo was discovered by

Ans: Michael Faraday

199. Magnetism at the centre of a bar magnet is

Ans: 0

200. What do we call a substance which is repelled by a magnet?

Ans: Diamagnetic

201. A device used for measuring the depth of the sea is called

Ans: Fathometer

202. The source of sun's radium energy is

Ans: Nuclear fusion

203. What is the name of the nuclear reactor at Trombay?

Ans: Apsara.

204. Land and sea breezes are due to

Ans: convection of heat

205. Earth is located in which galaxy?

Ans: The Milky Way galaxy

206. Which effect shows particle nature of height?

Ans: Photoelectric effect

207. Einstein's mass energy relation is given by which expression?

Ans: E = mc^2

208. Conversion of chemical energy into electrical energy occurs in which thing?

Ans: Battery

209. Why do Electricians use rubber gloves while working?

Ans: Rubber is an insulator

210. Which phenomena is used in optical fibres?

Ans: Total internal reflection

211. Which phenomena cannot be attributed to the refraction of light?

Ans: Redshift

212. What is the unit of luminous efficiency of an electric bulb?

Ans: Lumen / watt

213. When do all the magnetic materials lose their magnetic properties?

Ans: Strongly heated

214. What is the relative permeability of a paramagnetic material?

Ans: Greater than unity

215. In which part of the eye lies the pigment, that decides the colour of the eyes of a person? Ans: Choroid

216. Instrument used to store the electric charge is known by which name?

Ans: Capacitor

217. Two electron beams are travelling parallel to each other. What will be their reactions?

Ans: Repel each other

218. Which property is processed by the ferromagnetic substance?

Ans: Hysterasis

219. Which are the space waves are affected seriously by atmospheric conditions?

Ans: UHF

220. What work is work done in moving a positive charge on an equipotential surface?

Ans: Zero

221. If a bar magnet is cut length wise into 3 parts, what will the total number of poles be?

Ans: 6

222. How is image formed on the retina of a human eye?

Ans: Real and inverted

223. What is most suitable for the core of an electromagnet?

Ans: Soft iron

224. The intensity of a magnetic field is defined as the force experienced by which pole?

Ans: Unit North Pole

225. What is not the cause of low conductivity of electrolyte?

Ans: Ionization of salt

CHEMISTRY

1. The nucleus of an atom consists of
   A. electrons and neutrons
   B. electrons and protons
   C. protons and neutrons
   D. All of the above

   Answer: Option C

2. The number of moles of solute present in 1 kg of a solvent is called its
   A. molality
   B. molarity
   C. normality
   D. formality

   Answer: Option A

3. The metal used to recover copper from a solution of copper sulphate is
   A. Na
   B. Ag
   C. Hg
   D. Fe

   Answer: Option D

4. The number of d-electrons in Fe^{2+} (Z = 26) is not equal to that of
   A. *p*-electrons in Ne(Z = 10)
   B. *s*-electrons in Mg(Z = 12)
   C. *d*-electrons in Fe(Z = 26)
   D. *p*-electrons in CI(Z = 17)

   Answer: Option D

5. The metallurgical process in which a metal is obtained in a fused state is called
   A. smelting
   B. roasting
   C. calcinations
   D. froth floatation

   Answer: Option A

6. The molecules of which gas have highest speed?
   A. H_2 at -73°C
   B. CH_4 at 300 K
   C. N_2 at 1,027°C
   D. O_2 at 0°C

   Answer: Option A

7. The oldest rocks in the earth's crust were once molten, and came from deep inside the earth. The molten rock, called magma, spewed out in volcanic eruptions during the earth's early life and solidified into hard rock's called
   A. granite
   B. basalt
   C. igneous rocks
   D. sedimentary rocks

   Answer: Option C

8. The law which states that the amount of gas dissolved in a liquid is proportional to its partial pressure is
   A. Dalton's law
   B. Gay Lussac's law
   C. Henry's law
   D. Raoult's law

   Answer: Option C

9. The main buffer system of the human blood is
   A. H_2CO_3 - HCO_3

B. H_2CO_3 - CO_3^{2-}

C. CH_3COOH - CH_3COO^-

D. NH_2CONH_2 - NH_2CONH^+

Answer: Option A

10. The gas present in the stratosphere which filters out some of the sun's ultraviolet light and provides an effective shield against radiation damage to living things is

A. helium

B. ozone

C. oxygen

D. methane

Answer: Option B

11. The most commonly used bleaching agent is

A. alcohol

B. carbon dioxide

C. chlorine

D. sodium chlorine

Answer: Option C

12. The nucleus of a hydrogen atom consists of

A. 1 proton only

B. 1 proton + 2 neutron

C. 1 neutron only

D. 1 electron only

Answer: Option A

13. The heat required to raise the temperature of body by 1 K is called

A. specific heat

B. thermal capacity

C. water equivalent

D. None of the above

Answer: Option B

14. The nuclear particles which are assumed to hold the nucleons together are
    A. electrons
    B. positrons
    C. neutrons
    D. mesons

    Answer: Option D

15. The mass of P_4O_{10} that will be obtained from the reaction of 1.33 gram of P_4 and 5.07 of oxygen is
    A. 2.05 gram
    B. 3.05 gram
    C. 4.05 gram
    D. 5.05 gram

    Answer: Option B

16. The octane number of zero is assigned to
    A. 2-methyl octane
    B. n-heptane
    C. iso-octane
    D. 3-methyl octane

    Answer: Option B

17. The metal that is used as a catalyst in the hydrogenation of oils is
    A. Ni
    B. Pb
    C. Cu
    D. Pt

    Answer: Option A

18. The most abundant rare gas in the atmosphere is
    A. He

B. Ne

C. Ar

D. Xe

Answer: Option C

19. The Latin word *formica* means ant. The name formic acid is derived from this Latin word because

A. this acid, in ancient times, was used to eliminate ant-hills

B. this corrosive acid is secreted by ants to drive away their enemies

C. this acid was first obtained by the distillation of ants

D. ants are attracted by the odour of this acid

Answer: Option C

20. The ore which is found in abundance in India is

A. monazite

B. fluorspar

C. bauxite

D. magnetite

Answer: Option A

21. The inherited traits of an organism are controlled by

A. RNA molecules

B. nucleotides

C. DNA molecules

D. enzymes

Answer: Option C

22. The heat energy produced when the human body metabolises 1 gram of fat is

A. 30 KJ

B. 1 KJ

C. 39 KJ

D. 29 KJ

Answer: Option C

23. What is the number of moles of CO2 which contains 16 g of oxygen?

A. 0.5 mole

B. 0.2 mole

C. 0.4 mole

D. 0.25 mole

Answer: Option A

24. The main use of salt in the diet is to

A. make the taste of food better

B. produce in small amounts the hydrochloric acid required for the digestion of food

C. ease the process of cooking

D. increase the solubility of food particles in water

Answer: Option B

25. The monomer of polythene is

A. vinyl chloride

B. ethylene

C. ethyl alcohol

D. None of the above

Answer: Option B

26. The luster of a metal is due to

A. its high density

B. its high polishing

C. its chemical inertness

D. presence of free electrons

Answer: Option D

27. The number of water molecules present in a drop of water (volume 0.0018 ml) at room temperature is

A. 1.568×10^3

B. 6.023×10^{19}

C. 4.84×10^{17}

D. 6.023×10^{23}

Answer: Option B

28. The most malleable metal is

A. platinum

B. silver

C. iron

D. gold

Answer: Option D

29. The oil used in the froth floatation process is

A. coconut oil

B. olive oil

C. kerosene oil

D. pine oil

Answer: Option D

30. The number of waves in n x 10^{th} Bohr's orbit are

A. n^2

B. n

C. n^{-2}

D. n^3

Answer: Option B

31. The mass of one Avogadro number of helium atom is

A. 1.00 gram

B. 4.00 gram

C. 8.00 gram

D. $4 \times 6.02 \times 10^{23}$ gram

Answer: Option B

32. The items amenable to detection by soft x-rays are

A. contrabands

B. lead in bullets

C. narcotics

D. genuine coins from counterfeit coins

Answer: Option D

33. The material which can be deformed permanently by heat and pressure is called a

A. thermoplastic

B. Thermosetting

C. chemical compound

D. polymer

Answer: Option B

34. The mass number of a nucleus is

A. always less than its atomic number

B. the sum of the number of protons and neutrons present in the nucleus

C. always more than the atomic weight

D. a fraction

Answer: Option B

35. The inexpensive and commonly used variety of glass is called soda glass. It is called so because

A. was used initially for making bottles of soda(carbonated drink)

B. is made using soda(sodium carbonate)

C. was initially used for storing sodium carbonate

D. is made using soda lime

Answer: Option B

36. The gas used in the manufacture of vanaspati from vegetable oil is

A. hydrogen

B. oxygen

C. nitrogen

D. carbon dioxide

Answer: Option A

37. The ionic radii of N^{3-}, O^{2-}, F^{-} and Na^{+} follows the order

A. $N^{3-} > O^{2-} > F^{-} > Na^{+}$

B. $N^{3-} > Na^{+} > O^{2-} > F^{-}$

C. $Na^{+} > O^{2-} > N^{3-} > F^{-}$

D. $O^{2-} > F^{-} > Na^{+} > N^{3-}$

Answer: Option A

38. The graphite rods in the nuclear reactor

A. react with U to release energy

B. produce neutrons

C. undergo combustion which triggers the nuclear fission

D. convert fast moving neutrons into thermal neutrons

Answer: Option D

39. The first metal used by man was

A. iron

B. copper

C. gold

D. bronze

Answer: Option B

40. The hydronium ion is

A. H^{+}

B. HO -

C. $H2^{+}$

D. H_3O^{+}

Answer: Option D

41. The method that cannot be used for removing permanent hardness of water is

A. adding sodium carbonate

B. distillation

C. adding caustic soda

D. boiling

Answer: Option D

42. The gas used for artificial ripening of green fruit is

A. ethylene

B. ethane

C. carbon dioxide

D. acetylene

Answer: Option A

43. Zone refining is used for the purification of

A. Au

B. Ge

C. Ag

D. Cu

Answer: Option B

44. The main chemical constituent of the oil of cardamom which is responsible for flavour of this oil is

A. cineole

B. engenol

C. geraniol

D. limonene

Answer: Option A

45. The high reactivity of fluorine is due to

A. its high electro negativity

B. small size of fluorine atom

C. availability of d-orbitals

D. strong F - F bond

Answer: Option A

46. The iron ore magnetite consists of

A. Fe_2O_3

B. Fe_3OH_4

C. $FeCO_3$

D. $3Fe_2O_3.. 3H_2O$

Answer: Option A

47. The ionization energy of hydrogen atom in the ground state is x KJ. The energy required for an electron to jump from 2^{nd} orbit to 3^{rd} orbit is

A. 5x/36

B. 5x

C. 7.2 x

D. x/6

Answer: Option A

48. The major constituent of air is

A. nitrogen

B. carbon dioxide

C. oxygen

D. hydrogen

Answer: Option A

49. The main chemical constituent of clay is

A. silicon oxide

B. aluminium borosilicate

C. zeolites

D. aluminium silicate

Answer: Option D

50. The mineral containing both magnesium and calcium is

A. magnesite

B. calcite

C. carnallite

D. dolomite

Answer: Option D

51. The metal does not give H_2 on treatment with dilute HCL is

A. Zn

B. Fe

C. Ag

D. Ca

Answer: Option C

52. The number of g-molecule of oxygen in 6.02 x 10^{24}CO molecules is

A. 1 gram of molecule

B. 0.5 gram of molecule

C. 5 gram of molecule

D. 10 gram of molecule

Answer: Option C

53. The most extensive, commercially useful source of thorium as monazite sand occurs in India at

A. Orissa coast

B. Travancore coast

C. West Bengal coast

D. Gujarat coast

Answer: Option B

54. The main active constituent of tea and coffee is

A. nicotine

B. chlorophyll

C. caffeine

D. aspirin

Answer: Option C

55. The maximum number of isomers for an alkene with molecular formula C_4H_8 is

A. 5

B. 4

C. 2

D. 3

Answer: Option B

56. The hardest form of carbon is

A. coke

B. graphite

C. diamond

D. charcoal

Answer: Option C

57. The most important ore of aluminum is

A. bauxite

B. magnetite

C. hematite

D. monazite

Answer: Option A

58. The organic reaction represented by equation $CH_3 - CH = O + H_2NOH$ gives $CH_3 - CH - NH + H_2O$ is an example of

A. an addition reaction

B. a condensation reaction

C. an oxidation reaction

D. an elimination reaction

Answer: Option B

59. The number of electrons presents in H^+ is

A. zero

B. one

C. two

D. three

Answer: Option A

60. The hottest part of the gas flame is known as

A. luminous zone

B. dark zone

C. blue zone

D. non-luminous zone

Answer: Option D

61. The human body is made up of several chemical elements; the element present in the highest proportion (65%) in the body is

A. carbon

B. hydrogen

C. oxygen

D. nitrogen

Answer: Option C

62. The isomerism which exists between CH_3CHCI_2 and CH_2CI. CH_2CI is

A. chain isomerism

B. functional group isomerism

C. positional isomerism

D. metamerism

Answer: Option C

63. The half life period of an isotope is 2 hours. After 6 hours what fraction of the initial quantity of the isotope will be left behind?

A. 1/6

B. 1/3

C. 1/8

D. 1/4

Answer: Option C

64. The number of waves made by an electron moving in an orbit having maximum magnetic quantum number is +3

A. 4

B. 5

C. 2

D. zero

Answer: Option A

65. The number of atoms present in 21.6 gram of silver (atomic weight = 108) are same as the molecules in

A. 1.8 gram of H_2O

B. 12 moles of $KMnO_4$

C. 0.6N H_2SO_4

D. 4.6 gram of C_2H_5OH

Answer: Option B

66. The National Chemical Laboratory is situated in

A. New Delhi

B. Bangalore

C. Pune

D. Patna

Answer: Option C

67. Equal masses of oxygen, hydrogen and methane are kept under identical conditions. The ratio of the volumes of gases will be

A. 2 : 16 : 2

B. 2 : 16 : 1

C. 1 : 16 : 2

D. 1 : 1 : 1

Answer: Option C

68. The mass number of an atom is equal to

A. the number of protons

B. the number of protons and electrons

C. the number of nucleons

D. the number of neutrons

Answer: Option C

69. The maximum number of covalent formed by nitrogen is

A. 1

B. 2

C. 3

D. 4

Answer: Option D

70. The formula C_6H_5-CO-CH_3 represents

A. Acetone

B. Acetic acid

C. Acetophenone

D. Phenyl acetate

Answer: Option C

71. The metal that is usually extracted from sea water is

A. Ca

B. Na

C. K

D. Mg

Answer: Option D

72. The method of concentrating the ore which makes use of the difference in density between ore and impurities is called

A. liquation

B. leaching

C. levigation

D. magnetic separation

Answer: Option C

73. The inert gases are _____ in water

A. sparingly soluble

B. insoluble

C. soluble

D. None of these

Answer: Option A

74. The molecular formula of phosphorous is

A. P_1

B. P_2

C. P_3

D. P_4

Answer: Option D

75. The names of the scientists, Newlands, Mendeleev, and Meyer are associated with the development of

A. atomic structure

B. metallurgy

C. periodic table of contents

D. discovery of elements

Answer: Option C

76. The element common to all the acids is known as which name?

Ans: Hydrogen

77. What is the sum of pH and pOH in aqueous solution at 25°C?

Ans: 14

78. By what factor is a solution with pH = 2 more acidic than one with pH = 6?

Ans: 104

79. Red litmus paper is changed into blue in solution of which thing?

Ans: Base

80. What is formed by dissolution of base or acid in water?

Ans: Exothermic

81. Blue litmus paper is converted into red in solution of which thing?

Ans: acid

82. According to Arrhenius theory of an acid and base, an acid is a substance that gives which ions in water?

Ans: H+ ions

83. What the negative logarithmic value of hydrogen is on called?

Ans: pH

84. What is the physical state of dispersion medium of a cloud?

Ans: Gas

85. Vander Wall's equation explains the behavior of which gases?

Ans: real gases

86. In general gas equation, pV= nRT, V is the volume of which gas?

Ans: n mole of a gas

87. What is the ratio of rate of diffusion of oxygen and hydrogen?

Ans: 1 : 4

88. Absolute zero is the temperature where all gases are expected to have how much volume?

Ans: Zero volume

89. 4.4 g of CO2 contains how many litre of CO2 at STP?

Ans: 2.24 litre

90. Glucose or fructose is converted into C2H5OH in the presence of which thing?

Ans: zymase

91. Which type of materials act as effective catalysis?

Ans: Transition metals

92. What is the substance which decreases the rate of a chemical reaction?

Ans: Poison

93. TEL minimize the knocking effect when mixed with petrol, how does it act?

Ans: As negative catalyst

94. Which is the catalyst used in the manufacture of sulphuric acid by contact process?

Ans: V_2O_5

95. Which catalyst is sensitive to temperature changes?

Ans: Enzyme

96. Which is the temperature at which the catalytic activity of the catalyst is maximum?

Ans: Optimum temperature

97. Alcoholic fermentation is brought about the action of which thing?

Ans: Yeast

98. Which is catalyst used in the Deacon's process for the manufacture of chlorine?

Ans: $CuCl_2$

99. In the Ostwald's process for manufacture of HNO_3, which catalyst is used?

Ans: Pt

100. Which gas has maximum colorific value?

Ans: Oil gas

101. When ammonium chloride is dissolved in water, the solution becomes cold. What is change?

Ans: Endothermic

102. When ice melts into water, which type of change occurs in entropy?

Ans: Increases

103. In which type of coal percentage of carbon is the highest?

Ans: Anthracite

104. What is the mixture of carbon monoxide and nitrogen called?

Ans: Producer gas

105. What is the mixture of carbon monoxide and hydrogen called?

Ans: Water gas

106. Which law of thermodynamics introduces the concept of entropy?

Ans: Second law

107. For which element, the standard enthalpy is not zero?

Ans: C (Diamond)

108. Which fuel causes minimum environmental pollution?

Ans: Hydrogen

109. Which gas has the highest fuel value?

Ans: Hydrogen

110. The compound with negative heat of formation is known as which name?

Ans: Exothermic compound

111. Which hydrocarbon is mainly present in gobar gas?

Ans: Methane

112. What happens when the door of a refrigerator is kept open?

Ans: Room heated

113. What does the second law of thermodynamics introduced?

Ans: The concept of Entropy

114. What is an extensive property of the system?

Ans: Volume

115. A gas expands isothermally and reversible. How much work is done by the gas?

Ans: Maximum

116. About which is the information not conveyed by thermodynamics?

Ans: Rates of reactions

117. Which is the element that has the highest first ionization potential?

Ans: Nitrogen

118. What has the highest ionization potential?

Ans: Ne

119. Which of the following among alkali metals is most reactive?

Ans: Cs

120. Which is the element having lowest melting point in periodic table?

Ans: He

121. Which are the elements on the right side of the periodic table?

Ans: Non-metals

122. Which transition metal is in liquid state?

Ans: Mercury

123. Which electronic configurations exhibit metallic character?

Ans: 2, 8, 2

124. Which element has the lowest electron affinity?

Ans: Argon

125. By whom was the calculation of electro negativities first done?

Ans: Pauling

126. Which element does not exist in liquid state at room temperature?

Ans: Na

127. What is the most electropositive amongst the alkaline earth metals?

Ans: Barium

128. Which block of elements are mostly metals with high B.P., M.P. values?

Ans: d-block

129. Which are the vertical lines in modern periodic table called?

Ans: Group

130. What is horizontal line in modern periodic table called?

Ans: Period

131. In a period, the elements are arranged in which order?

Ans: Increasing charges in the nucleus

132. Which noble gas does not have octet of electrons in its outer shell?

Ans: He

133. Which pair of elements is in the same period of the periodic table?

Ans: Na, Cl

134. Why is the electron affinity of chlorine highest than that of fluorine?

Ans: Smaller nuclear charge

135. The chemical used as a fixer in photography is

Ans: Sodium thiosulphate

136. The alcohol used in power alcohol is

Ans: ethyl alcohol

137. The reaction between methane and chlorine in diffused sunlight is

Ans: substitution

138. The alloy of aluminium used for making magnet is

Ans: alnico.

139. Which variety of glass is heat resistant?

Ans: pyrex glass

140. Periodic table was given by

Ans: Mendeleev

141. Ruby is an oxide of

Ans: Aluminium

142. Tobacco is preserved from drying out in

Ans: Glycerol

143. The alcohol used in the preparation of dynamite is

Ans: methyl alcohol

144. The element used in lead pencils is

Ans: carbon

145. Epsom salt is chemically known as

Ans: magnesium sulphate

146. Aluminium oxide is a/an

Ans: amphoteric acid

147. Oil of vitriol is

Ans: sulphuric acid

148. Calcium sulphate is known as

Ans: potash alum

149. Homo nuclear molecules contain

Ans: covalent bond

150. Normal valency of nitrogen is

Ans: 3

151. The isotope atoms differ in

Ans: atomic weight

152. Nucleus of an atom contains

Ans: protons and neutrons

153. The solute in a solution can be separated by

Ans: evaporation

154. Natural rubber is a polymer derived from

Ans: isoprene

155. The acid present in lemon is

Ans: citric acid

156. First atomic theory was proposed by

Ans: John Dalton

157. Which substance is obtained by the hydrolysis of oil?

Ans: glycerol

158. Air contains maximum amount of

Ans: nitrogen

159. Which one of the following gases is readily soluble in water at room temperature?

Ans: carbon dioxide

160. Radon is

Ans: inert gas

161. Washing soda is

Ans: sodium carbonate

162. The catalyst used in the preparation of NH3 by Haber's process is

Ans: A. iron

163. The vitamin that helps in the clotting of blood is

Ans: Vitamin K

164. Bronze is an alloy of

Ans: copper and tin

165. Who was the father of chemistry?

Ans: Cavendish

166. The ore of manganese is

Ans: hrolusite

167. National chemical laboratory is at

Ans: Pune

168. First atomic model was proposed by

Ans: John Dalton

169. Magnetron is used for the production of

Ans: Cathode rays

170. Gobar gas mainly contains

Ans: methane

171. The scientist who gave the atomic concept of matter is

Ans: Ruther Ford

172. The chemical name for vitamin c is

Ans: ascorbic acid

173. Which one of the following is used in softening of hard water?

Ans: washing soda

174. The colouring agent is used to get ruby red colour glass is

Ans: selenium sulphide

175. Calamine is the ore of

Ans: zinc

176. When aluminium reacts with alkalis, the gas liberated is

Ans: hydrogen

177. What is the most common soil in sea water?

Ans: sodium chloride

178. Which of the following is a super cooled liquid?

Ans: glass

179. Curd is sour due to presence of

Ans: lactic acid

180. Brass is an alloy of

Ans: copper and zinc

181. Which one of the following elements is not present in stainless steel?

Ans: tungsten

182. Good conductors of electricity is

Ans: metal

183. The oxide ore of iron is

Ans: hematite

184. Which gas is used in the preparation of soda water?

Ans: carbon dioxide

185. The most common ore of Aluminium is

Ans: bauxite

186. Match stick head contains

Ans: scarlet phosphorous

187. Which is used to produce artificial rain?

Ans: silver nitrate

188. The alcohol used in the preparation of dynamite is

Ans: glycerol

189. The poisonous gas produced by a motor car

Ans: carbon monoxide

190. Cooking oil can be converted into vegetable ghee by the process of

Ans: hydrogenation

191. Carbon dioxide is

Ans: an acidic oxide

192. The cathode of a lead storage battery is made up of

Ans: lead

193. Milk is a natural

Ans: emulsion

194. Which of the following is used to remove rust stains on cloth?

Ans: oxalic acid solution

195. Lactic acid is present in

Ans: sour milk

196. Which product is obtained in the manufacture of soap from oils?

Ans: glycerin

197. Red phosphorous does not react with

Ans: alkali

198. The concept of an electrolyte in water was described by

Ans: Arrhenius

199. The boiling point of water on the Kelvin scale

Ans: 373°K

200. When the pH of a solution is zero, then it is

Ans: strongly acidic

201. Bleaching powder is prepared by passing chlorine through _____.

Ans: dry slaked lime

202. The metal that occurs in free state is

Ans: gold

203. The pH of an acidic solution is

Ans: less than 7

204. Tannic acid is present in

Ans: tea

205. The elements with the maximum number of isotopes in nature is

Ans: uranium

206. The acid present in stomach juice is

Ans: hydrochloric acid

207. The gas which is believed to be the main cause of explosion in the coal mines is

Ans: methane

208. The element with the maximum number of isotopes in nature is

Ans: uranium

209. The harmone that contains iodine is

Ans: thyroxin

210. The scientist who gave the atomic concept of matter is

Ans: Ruther Ford

211. Horizontal rows in the periodic table are called _____

Ans: Periods

212. In Periodic table vertical columns are called _____

Ans: Groups

213. Alkali metals belong to which group in periodic table?

Ans: Group 1

214. What are reactive metals called?

Ans: Alkali metals

215. Unreactive non metals are called_____

Ans: Noble gases

216. Group 0 elements are _____

Ans: Unreactive non metals

217. What does Nucleus consist of?

Ans: Protons and Neutrons

218. What is the relative charge of Proton and Electron?
Ans: +1, -1

219. What is atomic number of an atom?

Ans: Number of protons

220. The lowest energy level fills with _____ first.

Ans: Electrons

221. What is the maximum number of electrons the second energy level can hold?

Ans: 8

222. Ions are charged particles that form when atoms _____

Ans: Lose or gains electrons

223. What do metal atoms lose to form positively charged ions?

Ans: Electrons

224. The atoms in a molecule are joined together by _____

Ans: Covalent bond

225. Reactive metals are extracted by _____

Ans: Electrolysis

226. Alkanes are _____

Ans: Saturated Hydrocarbons

227. Polyunsaturated fats have _____

Ans: Many double bonds

228. Which of the following is used to freeze food?

Ans: Liquid Nitrogen

229. The pH level is lower if _____

Ans: Concentration of hydrogen ions is greater

230. All acids contain _____

Ans: H+

231. Which one of the following metals does not form amalgams?

Ans: Copper

MATHEMATICS

1. 8965865*0.000001=?
   a. 8.965865
   b. 89.65865
   c. 896586.5
   d. 896.5865 ans: a
2. if we keep 5 papers together one above the other and make 5 holes, what will be the total number of holes ?
   a. 10
   b. 25
   c. 12
   d. 15 ans: b
3. $5^2 \times 5^{-2} = ?$
   a. 1
   b. 0
   c. 5^4
   d. 5^{-4} ans: a
4. 55 / 5 * 66 / 3 + 55 + 69 / 3 – 5 =?
   a. 268
   b. 315
   c. 300
   d. 168

   ans: b
5.

5.

0.0873 x 92.581 x 99.749 is almost equal to :

a. 0.6
b. 608
c. 806
d. 08.6 ans : c

6. the number of decimal places in the product 5 x 8 x 0.2 x 10 x 0.00005 x2x 5 x 10 x 100 x 10^{-2} is
   a. 1
   b. 2
   c. 4
   d. 10 ans: a
7. a recipe that calls for 3/4 cup of sugar needs to be doubled. Which measuring cups could be used for the doubled amount?
   a. 1 cup and 1/4 cup
   b. 1 cup and 1/4 cup
   c. 1 cup and 1/2 cup
   d. 1/2 cup and 1/4 cup ans: c

8. What is the denominator of a whole number?
   a. 1
   b. 0
   c. 10
   d. 2

   Ans: a
9. If 24 trousers of equal size can be prepared in 54 meters of cloth, what length of cloth is required for each trouser?

   A. $\frac{4}{3}$ B. $\frac{9}{4}$ C. $\frac{8}{9}$ D. $\frac{14}{9}$ ans: b
10. A football team won 10 matches out of the total number of matches they played. If their win percentage was 40, then how many matches did they play in all?

A. 24 B. 26 C.25 D.22 ans: c

11. In the following questions, find the two words, one from each group, that together make a new, meaningful word. The word from the first group always comes first.

p	q	r
ALL	FOR	CAN

1	2	3
COVER	TIN	EVER

A. P3 B. P1 C. Q3 D. R2

ans: c

12. $2^{3+}\ 2^3+2^3+2^3$ is equal to

a. 2^5

b. 2^{12}

c. 2^6

d. 2^3 ans: b

13. What is the value of $(4^2 - 6 + 5) / (3^2 + 8 - 7 \times 2)$?

a. 6

b. 4

c. 9

d. 5 ans: d

14. The value of $\frac{2^3 \times 3^4 \times 4}{3 \times 32}$ is

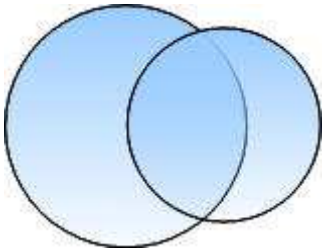
a. 3^3

b. 56

c. 3^2+3

d. 3^4 ans: a

15. Two circles overlap. The area of the overlapped region is 1/2 of the small circle's area and is 1/3 of the large circle's area. What is the ratio of the area of the small circle to the large circle?



ans : 2 to 3

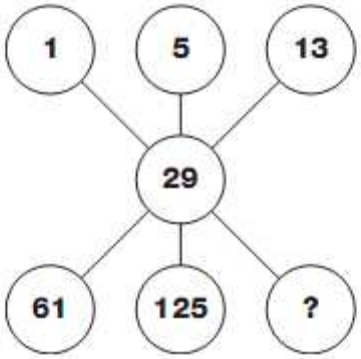
16. The difference between a two-digit number and the number obtained by interchanging the positions of its digits is 36. What is the difference between the two digits of that number?

a. 5
b. 8
c. 9
d. 4 ans: d

17. $(-8) \times (-8) \times (-8) \times (-8) \times (-8) + (-8) \times (-8) \times (-8) \times (-8) \times (-8) =$
    a. $-2(8)^5$
    b. $-(2)^{16}$
    c. $-(4)^8$
    d. All of these ans.d

18.

Which number replaces the question mark?



a. 198

b. 253

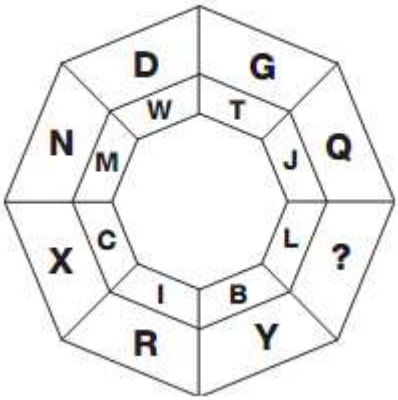
c. 250

d. 271

ans: c

19.

Which letter replaces the question mark?



a. O

b. J

c. P

d. M

ans: a

20. Marathon is to race as hibernation is to

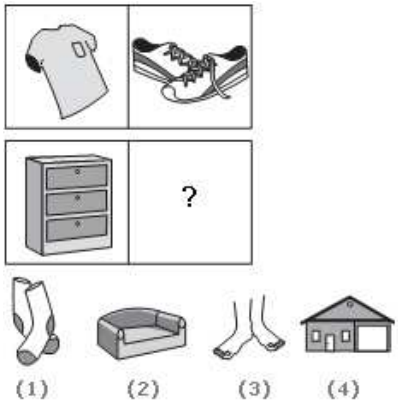
A. Sweet

B. Bear

C. Sleep

D. Dream ans: c

21. Find the thing that could replace the question mark.



a. 1

b. 2

c. 4

d. 3 ans: b

22. A can do a work in 15 days and B in 20 days. If they work on it together for 4 days, then the fraction of the work that is left is:

a. 8/15

b. 4/7

c. $4\ ^{2}/3$

d. 6/9 ans: a

23. Which of the following numbers are in the scientific notation?

a. 1.26×10^{-5}m

b. 15.35×10^{3}km

c. $.18\times10^{-7}$km

d. $.0013\times10^{-8}$ km ans: a

24. How many times do the hands of a clock coincide in a day?

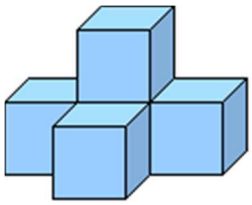
a. 18

b. 24

c. 12

d. 22 ans: d

25. What is the surface area of the following structure made of 5 cubes glued together? The side of each cube is 1 inch. Only consider the surfaces that are exposed.



a. 25^2 units

b. 16^2 units

c. 22^2 units

d. 19^2 units ans: c

26. A 5- digit number begins with ____ place.

a. Lakh b) Units

c) Thousand's d) Ten Thousand's

ans: d

27. Which of the following is meaningless?

a. XV b) XIX c) IXIV d) XXIV

ans: c

28. Riya had four numbers. She used each number only once to make a larger number.

8 9 4 6

If Riya put the 9 in the ten's place, what would be the largest number she could make?

a. 8496 b) 9898 c) 8694 d) 9999

ans: c

29. The city bus left the terminal and picked up 6 people at the first stop. At the second stop, 4 people got off and 3 people got on. At the third stop, 3 people got off and 7got on. How many passengers were now on the bus?

a. 7 b) 9 c) 8 d) 10

ans: b

30. A company paid 86886 rupees as fare for 18 tickets to travel from New Delhi to Chennai. What was the fare of one ticket?

a. 4800 b) 4892 c) 5297 d) 4827

ans: d

31. 27,36 ,81, 63 all are _____

a. Multiples of 7 b) Multiples of 9

c) Multiples of 10 d) None of these

ans: b

32. Rahul started working at 5:04 and finishes at 7:11. How long did Bret work for? In hours and minutes?

a. 2 hours & 7 minutes b) 2 hours & 2 minutes

c) 1 hours & 15 minutes d) 3 hours and 11 minutes

ans: a

33. Replace the 'x' by a number 2/5 = x/15.

a. 6 b) 7 c) 5 d) 30

ans: a

34. Christina puts these letters given below into an empty bag and mixed them up.

C E L E S T I N E

In what fraction of letters are vowels?

a. 4/10 b) 4/9 c) 5/9 d) 2/9

ans: b

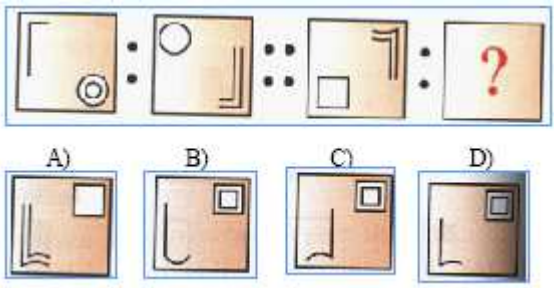
35. 135 hours = _____

a. 5 days b) 5 days and 10 hours

c) 5 days and 15 hours d) 5 days and 20 hours

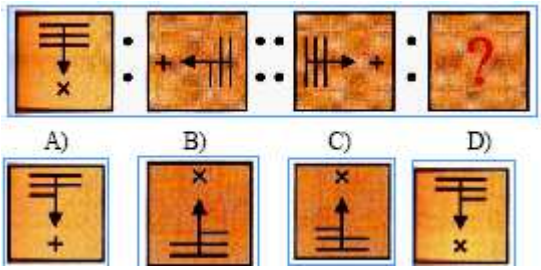
ans: c

36. Find the figure which replaces the question mark



Ans: d

37.



ans: d

38. NT is to HP as WE is to?

a. QA b) BY c) SB d) SA

ans: a

39. Complete the series.

U , B , W , Z , Y , X , A , ?

ans: b

40. If the second day of a 30 day month is Friday, which of the following would be the last day of the next month which has 31 days?

a. Sunday b) Monday

c) Tuesday d) Data inadequate

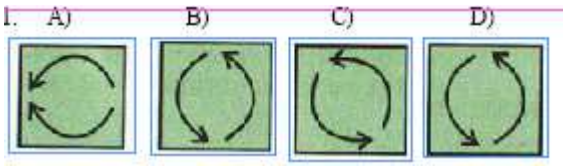
ans: b

41. Saturday was a holiday for republic day. 14Th of the next month is again a holiday for sivarathri. What day was it on 14th?

a. Monday b) Tuesday c) Friday d) Thursday

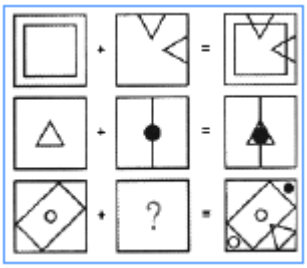
ans: d

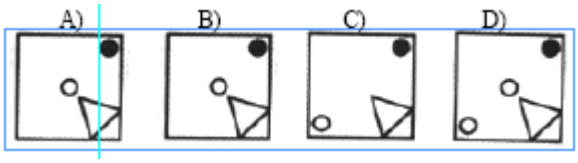
42. Find the odd one out.



ans: c

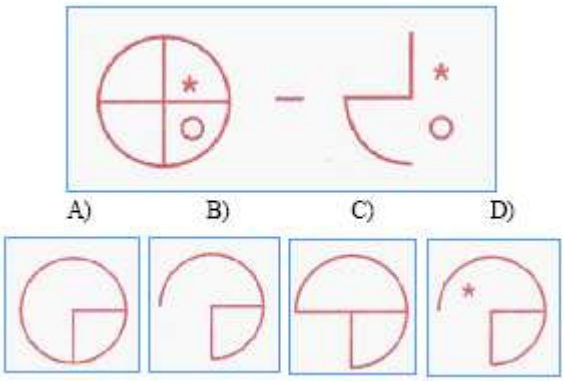
43.





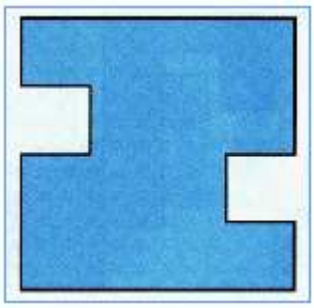
ans: b

44.



Ans: a

45. Find how many squares like  are in the following shape.



a.11 b.15 c.9 d.14

ans: c

46. 7528: 5306 : : 4673 : ?

A. 2367 B. 2451 C. 2531 D. None of these

ans: b

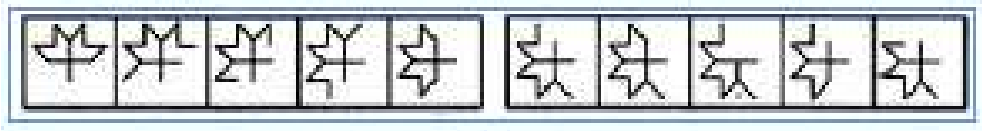
47. Complete the series

A I P V A E 

(A. F (B) G (C) H (D) I

48. Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.

Problem Figures: Answer Figures:



(A. (B) (C) (D) (E) (1) (2) (3) (4) (5)

A. 1 B) 2 C) 3 D) 4

Ans: a

49. If South-East becomes North, North-East becomes West and so on. What will West become?

A. North-East B) North-West C) South-East D) South-West

Ans: c

50. How many days are there in x weeks x days?

A. $7x^2$ B) 8x C) 14x D) 7

Ans: b

BIOLOGY

1. Which of these diseases is a major cause of death of a large number of children in our country every year?

   a) Diarrhoea

   b) Smallpox

   c) Tuberculosis

   d) Typhoid

Answer: a

2. Which of these diseases can be prevented by controlling mosquitoes?

   a) Polio and measles

   b) Chickenpox and cholera

   c) Malaria and filarial

   d) Measles and dysentery

Answer: d

3. Which of the following disease is correctly matched?

   a) Cholera – bacteria

   b) Common cold – protozoa

   c) Malaria – fungi

   d) Ringworm – Virus

Answer: a

4. Which of the following disease is wrongly matched?

a) Conjuctivitis - eyes

b) Gastroenteritis – stomach

c) Tonsillitis – throat

d) Pneumonia – Lungs

Answer: c

5. Which of the following is NOT a disease caused by bacteria

a) Tuberculosis

b) Leprosy

c) Typhoid

d) Measles

Answer: d

6. Linnaeus is credited with introducing

a) The concept of inheritance

b) Law of limiting factor

c) Theory of heredity

d) Binomial nomenclature

Answer d

7. 'Systema Naturae' written by Linnaeus contains a list of

a) 4000 species of plants

b) 2000 species of plants

c) 4200 species of plants

d) 4200 species of animals

Answer d

8. Natural system of classification of plants differs from artificial system of classification in

a) Taking into account only one vegetative character

b) Taking into account only one floral character

c) Taking into account all the similarities between plants

d) all of these

Answer c

9. The group of similar plants which breed freely among themselves constitute

a) Species

b) Family

c) Order

d) Genus

Answer a

10. The five kingdom arrangements of organisms was proposed by

a) Whittakar

b) John Ray

c) Whitter

Answer a

11. Which of the following definitions covers a greater number of organisms?

a) Class

b) Genus

c) Order

d) Family

Answer d

12. Basic taxonomy unit is

A) Kingdom

b) Genus

c) Species

d) Order

Answer c

13. The replacement of two kingdom classification by five kingdom classification was proposed by the year

a) 1853

b) 1859

c) 1969

d) 1863

Answer c

14. An example for the artificial system of classification

a) Bentham and Hooker

b) Linnaeus system

c) Engler and Prantl

d) Hutichson

Answer b

15. First step in taxonomy

a) Naming

b) Description

c) Identification

d)classification

Answer c

16. Binomial nomenclature means writing the name of plant in two words which designate

a) Order and family

b) Family and genus

c) Species and variety

d)Genus and species

Answer d

17. A small group of individuals or organisms which resemble closely in structure as well as function is called

a) Phylum

b) Family

c) Species

d) Genus

Answer c

18 'System nature' was written by

a) Linneaus

b) Charles Darwin

c) Aristole

d) Wallace

Answer a

19. A system of classification based on all important morphologically characters is termed as

a) Artificial system

b) Natural system

c) Genetic system

d) Both and b

Answer b

20. The bacteria were first observed in the year 1675 by

a) Carolus Linnaeus

b)Alexander Fleming

c) Anton Von Leenuwenhock

d) Robert Brown

Answer c

21. Bacteria are classified on the basis of

a) Method of reproduction

b) Nucleus

c) Cell wall

d) Pigments

Answer c

22. Bacteria do not need sunlight to grow because

a) They prepare their food without the help of light

b) They do not like sunlight brightness

c) Due to the absence of chlorophyll they are incapable of manufacture their own food

d) They use other kinds of light for manufacturing their own food.

Answer c

23. Organism a regarded as “Joker’s in microbiological park”

a) Bacteria

b) Virus

c) Mycoplasma

d) Rickettsia

Answer c

24. Which of the following is not present in Bacteria?

a) RNA

b) Cell wall

c) Flagella

d) Mitochondria

Answer d

25. All the bacteria fix nitrogen except

a) Rhizobium

b) E.coli

c) Azotobacter

d) cyanobacteria

Answer b

26. Which among the following is called as filamentous bacteria?

a) Mycoplasmas

b) Spirochetes

c) Actinomycetes

d) Vibrios

Answer c

27. Which of the following group of bacteria is considered as a link between bacteria and virus?

a) Mycoplasmas

b) Spirochaetes

c) Actinomycetes

d) Vibrios

Answer a

28. Corkscrew shaped forms of bacteria are

a) bacilli

b) stalked bacteria

c) spirochaetes

d) actinomycetes

Answer c

29. Bacterial cell wall is made up of

a) Chitin

b) Cellulose

c) dextran

d) peptidoglycan

Answer d

30. Bacterial flagella is made up of

a) Microtubules

b) tubulin

c) flagellin

d) spinin

Answer c

31. Bacteria reproduce vegitatively by

a) Fission only

b) Fission and fragmentation

c) Fission, fragmentation and budding

d) None of the above answer c

32. Bacteria reproduce asexually by

a) Conjugation

b) Amitosis

c) Meiosis

d) Transformation answer b

33. Binary fission in bacteria involves all except

a) Cell elongation

b) Cytokinesis

c) DNA duplication

d) Spindle formation answer d

34. Highest degree of differentiation of the body is reached in

a) Parameceium

b) Euglena

c) Trypanosoma

d) Amoeba

Answer a

35. African sleeping sickness is caused by

a) Giardia intestinalis

b) Leishmania donovani

c) Trypanosoma gambiense

d) Entamoeba histolytica

Answer c

36. The intermediate host of malarial parasite is

a) Man

b) culex

c) Female anopheles

d) Monkeys

Answer c

37. The most widely accepted theory of locomotion in

a) Rolling movement theory

b) Surface tension theory

c) Contraction hydraulic theory

d) Mast's solgel theory

Answer d

38. Entamoeba can be identified from amoeba due to the absence of

a) Pseudopodia

b) Nucleus

c) Food vacuoles

d) Contractile vacuole

Answer d

39. The mode of nutrition in Paramecium

a) Saprozoic

b) Saprophytic

c) Holophytic

d) Holozoic

Answer d

40. Fungi can be stained by

a) Saffranine

b)Cotton blue

c) Glycerine

d) Lactophenol

Answer b

41. Fungi usually store the reserve food material in the form of

a) Starch

b) Lipid

c) Glycogen

d) Protein

Answer c

42. Fungi can be distinguished from algae in fact that

a) Cell wall is cellulosoic cell wall and chlorophyll is absent

b) Nucleus is present

c) Mitochondria are absent

d) Cell wall is chitinous and chlorophyll is absent

Answer d

43. Fungi which grow on dung are termed as

a) Coprophilous

b) Terricolous

c) Sacxicolous

d) Saxiphilous Answer a

44. All fungi are

a) autrophs

b) Saprophytes

c) Parasites

d) Heterotrophs Answer d

45. One of the common fungal diseases of man is

a) Cholera

b) Plague

c) Ringworm

d) Typhoid Answer c

46. Aflatoxin is produced by

a) Bacteria

b) Virus

c) Fungi

d) Nematode Answer c

47 .The discovery that led to the development of first antibiotic was made by

a) Jenner

b) Pasteur

c) Fleming

d) Pauling

Answer c

48. Spirulina is a

a) Edible fungus

b) biofertilizer

c) biopesticide

d) Single cell protein

Answer d

49. Biogas is

a) Methane rich fuel

b) ecofriendly and pollution free source

c) Propane rich fuel

d) Both a and c

Answer d

50. High value of B O D (Biochemical Oxygen Demand) shows

a) Water is normal

b) Water is highly polluted

c) Water is less polluted

d) None of these Answer b

51. Which of the following is fermentation process?

a) Batch process

b) Continuous process

c) Both a and b

d) None of these Answer c

52. A bioreactor is

a) hybridoma

b) Culture containing radioactive isotopes

c) Culture for synthesis of new chemicals

d) Fermentation tank Answer d

53. Humulin is

a) Carbohydrate

b) Protein

c) Fat

d) Antibiotics A nswer b

54. Which of the following can be application of fermentation?

a) Tanning of leather

b) Curing of tea

c) Production of vine

d) all of these Answer d

55. Biogas is produced by

a) Aerobic breakdown of biomass

b) Anaerobic break down of biomass

c) With the help of methanogenic bacteria

d) both b and c Answer d

56. Name the first organic acid produced by microbial fermentation

a) Citric acid

b) Lactic acid

c) Acetic acid

d) None of the above Answer b

57. Vinegar is obtained from molasses with the help of

a) Rhizopus

b) Acetobacter

c) Yeast

d) Both b and c

Answer d

58. The major pollutant from automobile exhaust is

a) NO

b) CO

c) SO2 Answer b

59. The greenhouse gases, otherwise called radioactively active gases includes

a) Carbon dioxide

b) CH4

c) N2O

d) All of these Answer a

60. Algal bloom results in

a) Global warming

b) Salination

c) Eutrophication

d) Biomagnification

Answer c

61. A high Biological Oxygen Demand (BOD) indicates that:

a) Water is pure

b) Absence of microbial action

c) Low level of microbial pollution

d) High level of microbial pollution

Answer d

62. The effects of radioactive pollutants depends upon

a) Rate of diffusion

b) Energy releasing capacity c) rate of deposition of the contaminant

d) All of these Answer d

63. The range of normal human hearing is in the range of

a) 10 Hz to 80 Hz

b) 50 Hz to 80 Hz

c) 50Hz to 15000 Hz

d) 15000 Hz and above

Answer c

64. The pollution which does not persistent harm to life supporting system is

a) Noise pollution

b) Radiation pollution

c) Organochlorine pollution

d) All of these

Answer a

65. Soap and detergents are the source of organic pollutants like:

a) Glycerol

b) Polyphosphates

c) sulphonated hydrocarbons

d) All of these Answer d

66. Growing agricultural crops between rows of planted trees is known as

a) Social forestry

b) Jhum

c) Taungya system

d) Agroforestry Answer c

67. The main atmospheric layer near the surface of earth is

a) Troposphere

b) Mesosphere

c) Ionosphere

d) Stratosphere

Answer a

68. Populations are said to be sympatric when _____.

a. Two populations are physically isolated by natural barriers.

b. Two populations live together and freely interbreed to produce sterile offspring.

c. Two populations share the same environment but cannot interbreed.

d. Two populations are isolated but occassionally come together to interbreed.

Answer: C

69. Populations are said to be allopatric when _____.

a. they are physically isolated by natural barriers

b. they live together and breed freely to produce viable offspring

c. they are isolated but often come together for breeding

d. none of the above Answer: a.

70. Pieces of plant tissue used in tissue culture is called

a. Explant

b. Somaclone

c. Inoculant

d. Clone

Answer: a.

71. Ovule integument gets transformed into

a. seed

b. fruit wall

c. seed coat

d. cotyledons

Answer: c.

72. Osteomalacia is a deficiency disease of

a. Infants due to protein energy malnutrition

b. Adults due to protein energy malnutrition

c. Adults due to Vitamin D deficiency

d. Infants due to Vitamin K deficiency Answer: c.

73. Nosema bombycis which causes pebrine in silk worms is a

a. Virus

b. Bacterium

c. Protozoan

d. Fungus Answer: c.

74. Name the hormone that has no role in menstruation.

a. LH

b. FSH

c. GH

d. TSH

Answer: c.

75. Pick the mammal with true placenta

a. Kangaroo

b. Echidna

c. Platypus

d. Mongoose Answer: d.

76. Most of the endangered species are the victims of

a. Habitat destruction

b. Overhunting

c. Acid rain

d. Competition with introduced species Answer: a.

77. Bovine spongiform encephalopathy is a disease caused by prions in a _____.

a. cow

b. sheep

c. man

d. potato ` Answer: a.

78. BT brinjal is an example of transgenic crops. In this, BT refers to

a. Bacillus tuberculosis

b. Biotechnology

c. Betacarotene

d. Bacillus thuringiensis

Answer: d.

79. Which one of the following is NOT the function of insulin?

a. Increase the oxidation of glucose in the cells.

b. Increases the permeability of cell membrane to glucose.

c. Initiates the formation of hepatic glycogen from excess of glucose.

d. Initiates the conversion of glycogen to glucose.

Answer: d.

80. Which one of the following is not related to guttation?

a. Water is given out in the form of droplets

b. Water given out is impure

c. Water is given out during daytime

d. none of the above

Answer: c.

81. Which one of the following is NOT a method of soil conservation?

a. Overgrazing

b. Mulching

c. Crop rotation

d. Strip cropping Answer: a.

82. Which one of the following is mainly responsible for green house effect?

a. SO_2

b. CO_2

c. CO

d. O_2

Answer: b.

83 Which one of the following human cells do not contain mitochondria?

a. Nerve cell

b. Red blood cell

c. Liver cell

d. White blood cell Answer: b.

84. Which of the following species is restricted to a specific area?

a. Sibling species

b. Allopathic species

c. Sympatric species

d. Endemic species

Answer: d.

85. Which one of the following is a driving force for the process of 'passive absorption of water in roots'?

a. Root pressure

b. The increase in imbibitional pressure in root cells.

c. Transpiration in leaves

d. Activity of aquaporins Answer: c.

86. Which one is amino acid?

a. Pepsin

b. Proline

c. Cysteine

d. Renin. Answer: b.

87. Which of the following substances can cure Parkinson's disease?

a. GABA

b. Acetylcholine

c. Dopamine

d. Glutamic acid Answer: c.

88 Which of the following hormones is a steroid?

a. Estrogen

b. Insulin

c. Glucagon

d. Thyroxine Answer: a.

89. Which of the following hormones does not naturally occur in plants?

a. IAA

b. GA

c. ABA

d. 2, 4 D Answer: d.

90. When the two ecosystems overlap each other, the area is called

a. Habitat

b. Niche

c. Ecotone

d. Ecotype Answer: c.

91. When the blood contains a high percentage of CO2 and a very low percentage of O2, the breathing stops and the person becomes unconscious. This condition is known as

a. suffocation

b. asphyxia

c. emphycema

d. eupnoea

Answer: b.

92. A balanced diet does NOT include _____.

a. Carbohydrates and fats

b. Nucleic acids and enzymes

c. Proteins and vitamins

d. Minerals and salts Answer: b.

93. Transpiration facilitates

a. Opening of stomata

b. Absorption of water by roots

c. Excretion of minerals

d. Electrolyte balance

Answer: b.

94. The World Intellectual Property Day is observed on _____.

a. February, 29t th

b. June, 30 th

c. April, 26 th

d. September, 5 th

Answer: c.

95: There is no life on the moon due to the absence of

a. oxygen

b. water

c. light

d. temperature

Answer a

96: Praying Mantis is the example of

a. warning coloration

b. social insects

c. camouflage

d. Mullerian mimicry

Answer b

97: More than 70% of world's fresh water is contained in

a. Antartica

b. Greenland

c. Glaciers and Mountains

d. Polar Ice

Answer d

98 Homeostasis is

a. tendency to change with change in environment

b. tendency to resist change

c. disturbance in regulatory control

d. plants and animals extracts used in homeopathy

Answer b

99. Who developed polio vaccine?

a.. Jonas Salk

b. Edward Jenner

c. Louis Pasteur

d. Alexander Fleming Answer a

100. Which date is observed as the 'WORLD NO TOBACCO DAY'

a April 7

b June 6

c. May 31

d April 9

Answer c

HEALTH SCIENCE

1. An exercise performing daily 30 minutes at the rate of one kcal/minute for 5days a week is considered as:

A. Short term exercise
B. Midterm exercise
C. Long term exercise
D. Specific exercise

Ans: C

2. Anaerobic endurance training related with

A. ATP-CP energy systems
B. ATP energy systems
C. PC energy systems
D. ADP energy systems

Ans: A

3. The flexometer test is to measure?

A. Dynamic flexibility
B. Static flexibility
C. Agility
D. Validity

Ans: B

4. The total volume of air that can be voluntarily moved in one breath from full inspiration to maximum expiration is called?

A. Tidal volume
B. Inspiratory reserve volume
C. Vital capacity
D. Total lung volume

Ans: C

5. The amount of oxygen consumed during recovery from an exercise, above that ordinarily consumed at rest in the same period is referred as?

A. Fatigue
B. Excess post exercise oxygen consumption (epoc)
C. Second wind
D. Lung volume

Ans: B

6. A stretch or tear of a ligament, the fibrous band of connective tissue that joins the one bone with another

A. Strain
B. Stretch
C. Sprain
D. Fracture

Ans: C

7. If the skin breaks and bleeds, the injury is called

A. Abrasion
B. Contusion
C. Bruise
D. Dislocation

Ans: C

8. What is the reason for drying your hands after washing them?

A. So that you don't drip water everywhere
B. Because germs and bacteria are more easily spread with wet hands
C. Your hands are slippery when wet, and you will not be able to hold kitchen utensils properly
D. None of these

Ans: B

9. Which of the following is true about bacteria?

A. A bacterium multiplies and grows faster in warm environments.
B. A bacterium needs air to survive.
C. Every type of bacteria can give people food poisoning.
D. By freezing food you can kill bacteria.

Ans: A

10. The lateral epicondylitis is a common sports injury to

A. Football players

B. Chess players

C. Ball and racquet players

D. Athletes

Ans: C

11. Motor qualities are the foundation for

A . Behavior

B. Habits.

C. Sports skills

D. Communication skills

Ans: C

12. The Olympic motto “Fortius “means

A. higher

B. faster

C. stronger

D. slower

Ans: C

13. How can you tell if food has enough bacteria to cause food poisoning?

A . It will smell.

B. You can’t, it will appear normal.

C. It will have a different colour.

D. It will taste different.

Ans: B

14. Which of the following powers do environmental health officers not have?

A . Authority to close down premises.

B. The power of arrest.

C. Authority to enter premises without appointment.

D. The power to seize foods.

Ans: B

15. It is important to prepare food safely because;

A . It helps to prevent food poisoning.

B. Prepared food looks better.

C. Prepared food tastes better.

Ans: A

16. Which of the following does bacteria need to assist it to grow and multiply?

A . Water.

B. Food.

C. Warm temperatures.

D. All of the above.

Ans: D

17. High altitude (over1524 meters) sports training mainly effects the performance of

A. Endurance athletes

B. Speed athletes

C. Middle distance athletes

D. Throwers Ans: A

18. If an athlete wishes to run faster, he should

A. Move his arms faster
B. Keep his head bent forward
C. Raise the knee higher
D. Run on toes

Ans:C

19.pushing against

A. isometric

B. isotonic

C. isokinetic

D. polymetric

Ans:A

20. How much calories intake recommended by scientists for an average man at rest

A. 2000 kcl/day

B. 1800kcl/day

C. 1500 kcl/day

D. 1000 kcl/day

Ans:A

21. Chronological age of an individual determined by

A. Intelligence test

B. Ossification of bones

C. Calendar years and months

D. Sign of puberty Ans:C

22. The instrument to measure percentage of body fat is called

A. Spreading caliper

B. Vernier caliper

Skinfold caliper

D. Dynamometer

Ans: C

23. A protein that speeds up chemical reactions

A. Glycogen

B. Enzyme

C. Myoglobin

D. None

Ans: B

24. The amount of air inspired or expired per breath is called

A. Lung volume

B. Tidal volume

C. Vital capacity

D. None

Ans: B

25. Aerobic capacity contributes to

A. Endurance development

B. Strength development

C. Agility development

D. Power development

Ans. A

26. White or pink muscle fiber has

A. High aerobic capacity

B. High anaerobic capacity

C. Both (a) and (b)

D. None

Ans: B

27. Athlete's is foot is a disease caused by

A. Bacteria

B. Fungus

C. Virus

D. Protozoa

Ans. B

28. Name the scheme launched by the Indian railways under which hot milk, hot water and baby food will be available at railway stations?

A. Jan Seva

B. Swachbarath

C. Janani Sewa

D. Swachatha

Ans. C

29. The primary source of energy for brain is from?

A. Glucose

B. Vitamins

C. Minerals

D. None of these

Ans. A

30. Ice massage in treatment commonly known as

A. Hydrotherapy

B. Electro therapy

C. Cryotherapy

D. Thermo therapy

Ans. C

31. A sprain is an injury involving

A. Muscle

B. Bone

C. Spine

D. Ligament

Ans. D

32. Whose concept of health focuses on

A. Freedom from diseases

B. Physical health

C. Mental health

D. Health as a sense of total well being

Ans. D

33. Living things consume food for

A. Oxygen

B. Water

C. Energy

D. Organic matter

Ans. C

34. The shape of the body is largely determined by

A. Muscles

B. Skeleton

C. Skin

D. Organs

Ans. B

35. The condition of painful muscular contraction caused by prolonged exposure of environmental heat is called

A. Heat exhaustion

B. Heat stroke

C. Heat cramps

D. Muscle cramp

Ans. C

36. The ability to maintain equilibrium while moving is called

A. Dynamic balance

B. Static

C. Potential ability

D. Kinetic ability

Ans . A

37. The fastest period of growth in human being is during

A. Childhood

B. Infancy

C. Adolescence

D. Puberty

Ans . C

38. The period of growth and development from 11-14 years of age is known as

A. Adolescence

B. Childhood

C. Puberty

D. Youth

Ans. C

39. Factors influencing growth are

A. Heredity

B. Nutrition

C. Exercise

D. All the above

Ans . D

40. Psychology deals with

A. functions of the body

B. construction of the body

C. behavior of man

D. structure of the body

Ans. C

41. Which disease is known as Christmas disease?

A. Hemophilia
B. Multiple sclerosis
C. Scleroderma
D. Lupus

Ans: A

42. The seat of memory in the human brain is located in the _____?

A. Cerebrum
B. Cerebellum
C. Hypothalamus
D. Thymus

Ans: A

43. Which hormone is known as emergency hormone?

A. Adrenalin
B. Cortisol
C. Calcitonin
D. Corticotrophin

Answer: A

44. . Total number of bones in human body ?

A. 206
B. 187
C. 199
D. 207

Answer: A

45. Total number of muscles in human body?

A. 639
B. 640
C. 641

D. 638

Answer: A

46. What is the enzyme present in saliva ?

A. Trypsin
B. Ribo nuclease
C. Sucrose
D. Ptyalin

Answer: D

47. Covering of brain is called as _____ ?

A. Meninges
B. Pericardium
C. Pleura
D. Tunica

Answer: A

48. Covering of lungs is called as _____ ?

A. Meninges
B. Pericardium
C. Pleura
D. Tunica

Answer: C

49. Covering of heart is called as _____ ?

a. Meninges
b. Pericardium
c. Pleura
d. Tunica

Ans: B

50. Who prepared the first cholera vaccine?

A. Louis Pasteur

B. Alexander Fleming

C. Michael faraday

D. Albert Einstein

Ans: A

51. Who discovered rabies vaccine?

A. Louis Pasteur

B. Alexander Fleming

C. Michael faraday

D. Albert Einstein

Ans: A

52. Blood pressure is the pressure exerted by blood on the walls of _____ ?

a. Vein

b. Artery

c. Organs

d. Heart

Ans: b

52. Most spoilage bacteria grow at

a. Acidic pH

b. Alkaline pH

c. Neutral pH

d. Any of the pH

Ans: C

53. Which of the following acid will have higher bacteriostatic effect at a given ph?

a. Acetic acid

b. Tartaric acid

c. Citric acid

d. Maleic acid

Ans: A

54. Which of the following is not true for the thermal resistance of the bacterial cells?

a. Cocci are usually more resistant than rods

b. Higher the optimal and maximal temperatures for growth, higher the resistance

c. Bacteria that clump considerably or form capsules are difficult to kill

d. Cells low in lipid content are harder to kill than other cells

Ans: D

55. What is known as building blocks of the body?

a. Carbohydrates

b. Minerals

c. Protein

d. Fat

Ans: C

56. Name the vitamins which can be made by our body?

a. Vitamin d & k

b. Vitamin e & k

c. Vitamin a & b

d. Vitamin & k

Ans: A

57 The principal energy source of our body?

A. fat

B. carbohydrate

C. proteins

D. minerals

Ans. B

58. The science of food is called?

A. bio technology

B. food science

C. nutrition

D. physiology

Ans:C

59. The energy value of food is measured in?

A. gram

B. kilogram

C. litre

D. kilocalorie

Ans: D

60. Which is sunshine vitamin?

A. Vitamin D.

B. Vitamin A

C. Vitamin B

D. Vitamin K

Ans: A

61. Deficiency of vitamin d causes

A. Rickets

B. Bery bery

C. Scurvy

D. Goiter

Ans: A

62. Scoliosis is an abnormal ---------curvature of the spine

A. Lateral

B. Medial

C. Posterior

D. Anterior Ans: A

63. The major cause of hypokinetic diseases?

A. Junk food

B. Insufficient activity and lack of regular exercise

C. Over consumption of food

D. Heredity

Ans: A

64. The removal and examination of tissue from the living cell is called?

A. Biopsy

B. M R I

C. X ray

D. C T scan

Ans: A

65. The smallest functional unit of muscle

A. Sarcomere

B. Sarcolemma

C. Sarcoplasm

D. H zone

Ans: A

66. The amount of air inspired or expired per breath

A. Tidal volume

B. Lung volume

C. Vital capacity

D. None

Ans: A

67. Finger stick blood glucose test is to diagnose?

A. Liver cirrhosis

B. Diabetes mellitus

C. Hepatitis

D. Blood group

Ans: B

68. A person with blood pressure ranging from 140/90 or above is called

A. Low pressure

B. Pre hyper tension

C. Hypertension

Ans: C

69. Pedograph is used to measure

A. Flat foot

B. Kyphosis

C. Scoliosis

D. Lordosis

Ans A

70. The method of estimation of body fat

A. Densitometry

B. Skin fold caliper

C. Bmi

D. Waist hip ratio

Ans: A

71. Body mass index is found by

A. Body weight (kg)/height ^{2}

B. Height /weight

C. Weight^2/height

D. Waist circumference/hip circumference

Ans:A

72. Osteoporosis is a condition in which

A. Increase in bone density

B. Decrease in bone density

C. Stagnation of excess calcium

D. Presence of fracture

Ans: B

73. An individual is said to be obese when his body mass index falls in

A. > 30

B. < 30

C. Below 18.5

D. 18.5 – 24.9

Ans: A

74. Which of the following is known as the voice box?

A. Trachea

B. Pharynx

C. Epiglottis

D. Larynx

Ans: D

75. The contractile proteins in a muscle are

A. Actin and myosin

B. Actin and tropomyosin

C. Myosin and troponin

D. Troponin and tropomyosin

Ans: A

76. Compared to warm air, cool air can hold

A. More water vapour

B. Less water vapour

C. The same amount of water vapour

D. Temperature is unimportant here

Ans: B

77. The contribution of water while determining the body weight

A. 70%

B. 50%

C. 80%

D. 90%

Ans: A

78. Caloric value of a boiled egg.

A. 80 kcl

B. 100 kcl

C. 150 kcl

D. 120 kcl

Ans: A

79. To stay healthy we need how many litres of water everyday?

A. 3 l

B. 8 l

C. 6 l

D. 2.5 l

Ans: D

80. Find out the vitamin which helps in recovery of muscle cramps?

A. Vitamin a

B. Vitamin b

C. Vitamin d

D. Vitamin e

Ans: D

81. Name the essential mineral which is needed for muscle and nerve function

A. Chloride

B. Calcium

C. Phosphorous

D. Fluoride

Ans: A

82. The recommended fat percentage for men for optimum health

A. 30% of total body weight

B. 20% of total body weight

C. 10% of total body weight

D. 80% of total body weight

Ans: A

83. Pyorrhea affects which part of the body

A. Ear

B. Eyes

C. Tongue

D. Teeth Ans: D

84. Radiant is the main physical hazard in _____ industries

A. Jute & cotton

B. Glass & steel

C. Mining

D. Petroleum

Ans: B

85. The common disease due to prolonged exposure to polluted air

A. Asthma

B. Chronic bronchitis

C. Skin diseases

D. Chest pain

Ans: B

86. Deficiency of vitamin b1 causes?

A. Beriberi

B. Scurvy

C. Rickets

D. Jaundice

Ans: A

87. Strongest muscles of man found in:

A. Wrist
B. Finger
C. Jaw
D. Leg

Ans: C

88. Hepatitis a virus attacks which organ of the human body?

A. Heart

B. Lungs

C. Liver

D. Kidney

Ans: C

89. What element is added to water to prevent tooth decay?

A. Chlorine
B. Fluoride
C. Sugar
D. None of these

Ans: B

90. Hydrophobia effects which part of the human body

A. Cardio vascular system
B. Central nervous system

C. Skeletal system

D. Respiratory system

Ans: B

91The amount of blood pumped by the left or right ventricle of the heart per beat is called

A. Blood flow

B. Stroke volume

C. Blood volume

D. Cardiac out put

Ans: B

92Study of science of human motion

A. Bio mechanics

B. Kinesiology

C. Physiology

D. Psychology

Ans: B

93 Which of the following does not relate with muscle function

A. Antagonist

B. Agonist

C. Stabilizer

D. Activator Ans: D

94. Which part of the brain controls respiration?

A. Cerebral cortex

B. Medulla oblongata

C. Cerebellum

D. Cerebrum

Ans: B

95. Muscle fatigue is caused by the accumulation of

A. Pyruvic acid

B. Lactic acid

C. Oxalic acid

D. Uric acid

Ans: B

96. Which one of the following organs excretes water, fat and various catabolic wastes?

A. Kidney

B. Skin

C. Spleen

D. Salivary glands

Ans: A

97. Metabolism is the term used to indicate

A. the exchange of gases in the lungs

B. the store of oxygen in the muscles

C. the chemical changes take place in the body

D. internal respiration

Ans:C

98. Heart failure is due to

A. excess of cardiac output

B. lack of cardiac output

C. both a&b

D. none of these

Ans: B

99. Fast twitch muscle fibers are

A. white muscle fibers

B. red muscle fibers

C. both a&b

D. black muscle fibers

Ans:A

100. The fuel food of human body are

A. fat & protein

B. fat & carbohydrate

C. protein& carbohydrate

D. vitamins & minerals

Ans: B

101.A rich source of carbohydrate is

A. cereals

B. pulse

C. wheat

D. milk

Ans:A

102. The shape of the heart is

A. round

B. cone

C. triangular

D. shapeless

Ans:C

103.The deficiency of vitamin k causes

A. rickets

B. anemia

C. prolonged blood clotting time

D. none of these

Ans:C

104. Veins carry blood

A. from the heart

B. in to the heart

C. both a& b

D. none of these

Ans: B

105.The study of joints is called

A. osteology

B. arthrology

C. myology

D. neurology

Ans: B

106. The study of the functions of the normal human body is called

A. physiology

B. botany

C. anatomy

D. zoology

Ans:A

107. Biceps muscles are situated at

A. upper limb

B. lowerlimb

C. back

D. neck

Ans:A

108. Cerebellum is a part of

A. Digestive system

B. Muscular system

C. Brain

D. Endocrine system

Ans:C

109. The strongest muscle of the human body is

A. rectus femoris

B. soleus

C. biceps

D. triceps

Ans:A

110. Diarthosis is

A. freely movable joint

B. slightly movable joint

C. immovable joint

D. sliding joints

Ans:A

111. It has been observed that the astronauts lose substantial quantity of calcium through urine during space flight. This is due to

A. Hyper gravity

B. Microgravity

C. Intake of dehydrated food tablet

D. Low temperature in cosmos

Ans: B

112. Cutting and peeling of onion bring tears to the eyes because of the presence of

A. Sulfur in the cell

B. Carbon in the cell

C. Fat in the cell

D. Amino acid in the cell

Ans:A

113.the contractile proteins in a muscle are

A. Actin and myosin

B. Actin and tropomyosin

C. Myosin and troponin

D. Troponin and tropomyosin

Ans:A

114. Which of the following is not an enzyme?

A. Amylase

B. Pepsin

C. Somatotropin

D. Trypsin

Ans:C

115. Cartilage present in body is

A. A muscular tissue

B. An epithelial tissue

C. A connective tissue

D. A germinal tissue

Ans:C

116. Which one of the glands in human body produces the growth hormone (somatotropin)?

A. Adrenal

B. Pancreases

C. Pituitary

D. Thyroid

Ans:C

117. Cell or tissue death within a living body is called as

A. Neutrophilia

B. Nephrosis

C. Necrosis

D. Neoplasia

Ans:C

118. Sweating during exercise indicates operation of which one of the following processes in the human body?

A. Enthalpy

B. homeostasis

C. Phagocytosis

D. Osmoregulation

Ans: B

119. In which part of the human body is the smallest bone found?

A. Wrist

B. Palm

C. Nose

D. Ear

Ans :D

120. The other name for knee cap is -

A. Clavicle

B. Patella

C. Radius

D. Femur

Ans: B

121. If bilirubin is high in human body, which of the following organs is affected?

A. Pancreas

B. Liver

C. Kidney

D. Small intestine

Ans: B

122. About how many bones does a newborn baby have?

A. 206

B. 270

C. 225

D. 190

Ans: B

123. The function of trypsin is to

A. Break down fats

B. Synthesize proteins

C. Break down proteins

D. Break down carbohydrates Ans:C

124. Muscle fatigue is caused by the accumulation of

A. Pyruvic acid

B. Lactic acid

C. Oxalic acid

D. Uric acid

Ans: B

125. Dehydration in human body is caused due to the loss of -

A. Vitamins

B. Salts

C. Hormones

D. Water

Ans:D

126. The least distance of distinct vision (near point) of normal human eye is

A. 25 cm

B. 50 cm

C. 10 cm

D. 40 cm

Ans:A

127. In which of the following are antibodies formed?

A. Red blood cells

B. Platelets

C. Plasma cells

D. Donnan's membrane

Ans:C

128. Headquarters of world health organization?

A. Geneva,

B. Vienna,

C. Newyork

D. Washington

Ans:A

129. World health day?

A. April 7

B. May 7

C. Aril 8

D. May 8

Ans:A

130. Theme of world health day 2016?

A. Beat diabetes

B. Beat cancer

C. Prevent hepatitis

D. beat polio

Ans:A

131. When was first world health day celebrated?

A. 1950

B. 1960

C. 1955

D. 1948

Ans: D

132. The common disease due to prolonged exposure to polluted air?

A. Lung cancer

B. Chronic bronchitis

C. Hepatitis B

D. Cough

Ans: B

133. Which is the first asian country to eliminate mother – to – child hiv transmission?

A. India

B. Thailand

C. Japan

D. Singapore

Ans: B

134. Most polluted country in the world?

A. China

B. USA

C. Brazil

D. Indonesia

Ans:A

135. Day against child labor?

A. June 12

B. April 1

C. July 1

D. May 12

Ans:A

136. Cleanest country in the world?

A. Iceland

B. Sweden

C. Singapore

D. Malaysia

Ans:A

137. Hepatitis a disease caused by

A. Bacteria

B. Virus

C. Fungus

D. Amoeba

Ans: B

138. The term rabies is related to

A. Malaria
B. Tuberculosis
C. Hepatitis
D. Hydrophobia

Ans:D

139. Monovalent vaccination is to prevent

A. HIV

B. Tetanus,

C. Chickenpox,

D. Diphtheria

Ans: B

140. Vitamin b1 is also known as

A. Calcium,

B. Phosphorous

C. Potassium

D. Thiamine Ans:D

141. Fetal alcoholic syndrome is associated with which of the following

A. Leukemia,

B. Hepatitis,

C. Tetanus,

D. Developmental disabilities

Ans:D

142. Other than spreading malaria, anopheles mosquitoes are also vectors of

A. Dengue fever

B. Filariasis

C. Encephalitis

D. Yellow fever

Ans: B

143. Pyorrhea is a disease of the

A. Nose,
B. Gums,
C. Heart,
D. Lungs

Ans: B

144. Normal adult human male has

A. 10 gram of hemoglobin/100 gram of blood,

B. 14 gram of hemoglobin/100 gram of blood,

C. 18 gram of hemoglobin/100 gram of blood,

D. 24 gram of hemoglobin/100 gram of blood

Ans: B

145. Night blindness is cause by lack of which vitamin?

A. Vitamin a,

B. Vitamin b,

C. Vitamin c,

D. Vitamin d

Ans:A

146. Oxygen in our blood is transported by a protein named

A. Hemoglobin,

B. Keratin,

C. Collagen,

D. Myoglobin

Ans:A

147. The project 'sankalp' is associated with the elimination of

A. Polio,

B. HIV, AIDS,

C. Tetanus

D. Malaria

Ans: B

148. Clotting of blood required for which vitamin?

A. Vitamin b,

B. Vitamin c,

C. Vitamin d,

D. Vitamin k

Ans:D

149. The longest bone in the human body is-

A. Femur
B. Humerus
C. Radius
D. Tibia

Ans:A

150. Which of the following virus is responsible for diarrhea among infants and young children?

A. Zika virus,
B. Junin virus,
C. Rota virus,
D. Mega virus

Ans:C

151. The smallest bones in the human body are found in the

A. Ear
B. Eyes,
C. Stomach,
D. Leg

Ans:A

152. What is the approximate time required for a heart-beat?

A. 0.5 second,

B. 0.8 second,

C. 0.5 minute

D. 1 minute

Ans: B

153. Barbell curl muscle exercises mainly effects

A. A. full biceps/fore arms muscles

B. B. inner biceps muscles

C. C. Triceps muscles

D. D. hamstrings muscles. ans: A

154. During the warmer days, heat is absorbed by the body through

A. A. conduction

B. B. evaporation

C. C. radiation

D. D. convection

Ans: C

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