

CATEGORY - III
PART - 3
Natural Science
Question Numbers 71 to 150

71. Which one of the following is an example of mutualism ?
- (A) Barnacle and whale
 - (B) Sea anemone and hermit crab
 - (C) Sucker fish and shark
 - (D) Vanda and tree
72. Turner's syndrome is caused due to the :
- (A) Presence of an additional copy of X-chromosome
 - (B) Presence of an additional copy of chromosome number 21
 - (C) Presence of an additional copy of chromosome number 14
 - (D) Absence of one of the X-chromosomes
73. Choose the correctly matched pair :
- (A) Yellow spot - Aperture of the iris
 - (B) Pupil - Point of maximum visual clarity
 - (C) Blind spot - Part of the choroid seen behind the cornea
 - (D) Cornea - Anterior part of the sclera
74. _____ attach skeletal muscles to bones.
- (A) Cartilage
 - (B) Ligaments
 - (C) Tendons
 - (D) Joints
75. A mineral element which is a component of nitrogenase is :
- (A) Molybdenum
 - (B) Chlorine
 - (C) Cobalt
 - (D) Nitrogen
76. Scutellum is a :
- (A) Proteinaceous layer
 - (B) Sheath that encloses radicle
 - (C) Sheath that encloses plumule
 - (D) A shield shaped cotyledon
77. T.O. Diener discovered :
- (A) Prions
 - (B) Virus
 - (C) Plasmid
 - (D) Viroids
78. Columns of Bertini is associated with :
- (A) Liver
 - (B) Pituitary gland
 - (C) Kidney
 - (D) Ear
79. The gaps between two adjacent myelin sheaths are called :
- (A) Schwann cells
 - (B) Nodes of Ranvier
 - (C) Cyton
 - (D) Nissil's granules

80. A dry indehiscent fruit is :
(A) Capsule
(B) Siliqua
(C) Follicle
(D) Caryopsis
81. The golden age of reptiles is :
(A) Mesozoic
(B) Cenozoic
(C) Paleozoic
(D) Proterozoic
82. Polytene chromosomes are joined at a point called :
(A) Centrosome
(B) Chromocentre
(C) Chromomere
(D) Kinetochore
83. Identify the organelle which is not involved in photorespiration :
(A) Chloroplast
(B) Peroxisome
(C) Mesosome
(D) Mitochondria
84. Which one of the following is a bacterial disease ?
(A) Brown rust of wheat
(B) Black rot of crucifers
(C) Late blight of potato
(D) Red rot of sugarcane
85. Choose the option that does not come under "The Evil Quartet" :
(A) Alien species invasion
(B) Co-extinction
(C) Latitudinal gradients
(D) Over exploitation
86. Choose the statement which is not true about gel electrophoresis :
(A) DNA fragments are forced to move towards the anode under an electric field
(B) Exposure to UV radiation is required
(C) DNA fragments can be visualized by adding agarose
(D) DNA fragments separate according to their size
87. A nucleoside includes :
(A) Nitrogen bases only
(B) Nitrogen bases and sugar
(C) Nitrogen bases and phosphate
(D) Phosphate and sugar
88. Which one of the following is not a four carbon compound formed during krebs' cycle ?
(A) Succinic acid
(B) Malic acid
(C) Fumaric acid
(D) Citric acid
89. The fruiting body of *Agaricus* is :
(A) Ascocarp
(B) Pseudocarp
(C) Cremocarp
(D) Basidiocarp
90. Which one of the following is not used for the industrial production of acids ?
(A) *Acetobacter aceti*
(B) *Lactobacillus*
(C) *Clostridium butylicum*
(D) *Streptococcus*

91. The dental formula in human is :
(A) 2132/2132
(B) 1223/1223
(C) 1232/1232
(D) 2123/2123
92. Blood group with no antibodies in plasma is :
(A) B group
(B) A group
(C) AB group
(D) O group
93. Most primitive member of the human race is :
(A) *Homo habilis*
(B) *Australopithecus afarensis*
(C) *Homo neanderthalensis*
(D) *Ardipithecus ramidus*
94. Choose the correct statement regarding halophiles :
(A) They live in salty areas
(B) They are eubacteria
(C) They live in marshy areas
(D) They produce biogas
95. Synapsis occurs during :
(A) Diplotene
(B) Leptotene
(C) Zygotene
(D) Diakinesis
96. Which one of the following represents wrinkled seed shape and green seed colour ?
(A) RRYy
(B) rryy
(C) RyRy
(D) rryy
97. Which one of the following is not true about bulliform cells ?
(A) Helps to minimize water loss
(B) They are colourless cells
(C) Present in abaxial epidermis
(D) They make the leaves curl inwards
98. Grasslands in South America are known as :
(A) Steppes
(B) Tussocks
(C) Velds
(D) Pampas
99. Which one of the following represents the gametophytic stage of pteridophytes ?
(A) Strobilus
(B) Prothallus
(C) Protonema
(D) Spores
100. Restriction enzymes are isolated from :
(A) Bacteriophage
(B) Bacteria
(C) Fungus
(D) Virus
101. Choose the group which includes haploid parts only :
(A) Embryo sac, microspore
(B) Egg, ovule
(C) Pollen grain, ovule
(D) Embryo sac, tapetum

102. Which one of the following is not a modification of stem ?
- (A) Thorn
 - (B) Pneumatophores
 - (C) Runner
 - (D) Bulbil
103. Which one of the following is not true about active transport ?
- (A) Requires energy
 - (B) Requires membrane proteins
 - (C) Downhill transport
 - (D) Highly selective
104. A plant growth regulator which helps to achieve respiratory climactic during the ripening of fruit is :
- (A) Cytokinin
 - (B) Ethylene
 - (C) Auxin
 - (D) Gibberellins
105. _____ provides nutrition to the male germ cells.
- (A) Interstitial cells
 - (B) Leydig cells
 - (C) Sertoli cells
 - (D) Goblet cells
106. Which one of the following guards the opening between the left atrium and the left ventricle ?
- (A) Mitral valve
 - (B) Inter atrial septum
 - (C) Tricuspid valve
 - (D) Inter ventricular septum
107. Identify the correct statement regarding pineal gland :
- (A) Located on either side of the trachea
 - (B) It is a composite gland
 - (C) Secretes melatonin
 - (D) Helps in the development of immune system
108. Formation of seeds without fertilization is called :
- (A) Parthenogenesis
 - (B) Pseudocarp
 - (C) Parthenocarp
 - (D) Apomixis
109. A chemical which does not cause seed dormancy is :
- (A) Abscissic acid
 - (B) Gibberellic acid
 - (C) Phenolic acid
 - (D) Para-ascorbic acid
110. Which one of the following is a single cell protein ?
- (A) *Lactobacillus*
 - (B) *Nostoc*
 - (C) *Spirulina*
 - (D) *Anabaena*
111. A gregarious pest is :
- (A) Caterpillar
 - (B) Locust
 - (C) Sand fly
 - (D) Aphids

112. Which one of the following is not a vector borne disease ?
- Swine Flu
 - Malaria
 - Chikungunya
 - Leptospirosis
113. Which one of the following is not a phloem fiber ?
- Hemp
 - Cotton
 - Flax
 - Jute
114. The number of polypeptide chains in human haemoglobin is :
- One alpha chain and one beta chain
 - Two alpha chains
 - Two alpha chains and two beta chains
 - One alpha chain and two beta chains
115. Eutrophication is :
- Natural aging of a lake by nutrient enrichment
 - Excessive growth of planktonic forms
 - Increase in concentration of the toxicant at successive trophic levels
 - Increased demand for oxygen by microorganisms
116. Choose an example for syncytium from the following :
- Liquid endosperm in coconut
 - Coleoptile in grasses
 - Aleurone layer in monocots
 - Coleorhiza in grasses
117. Choose the statement which is not true about Bt cotton :
- Insect resistant plant
 - Produces cry protein
 - Contains genes from *Bacillus amyloliquefaciens*
 - Toxic protein produced in the plant is insect specific
118. Agar is obtained from :
- Gracilaria*
 - Chara*
 - Oscillatoria*
 - Chlorella*
119. Choose the correct statement about cerebrospinal fluid :
- Provides nutrients and oxygen to the tissues of the brain
 - It is filled within the ventricles of the brain only
 - Formed from blood
 - Protect the brain from injuries
120. Choose the option which includes bisexual organisms only :
- Nereis, Leech
 - Ascaris*, Earthworm
 - Ascaris*, Nereis
 - Earthworm, Leech
121. Which of the following is an example of a kinesthetic approach to reading ?
- Listening to a lecture class on vocabulary
 - Reciting a poem
 - Using models of letters to form words
 - Visually identifying syllables on alphabet cards

122. Test which measures pupil's attainments and progression in a specific subject or topic over a set period of time.
- (A) Achievement tests
 - (B) Diagnostic test
 - (C) Formative tests
 - (D) Prognostic test
123. "A whole hearted purposeful activity proceeding in a social environment" :
- (A) Dalton plan
 - (B) Experiment
 - (C) Lecture
 - (D) Project
124. Which is the advisory body for the Central and State Governments on all matters pertaining to teacher education ?
- (A) NCTE
 - (B) NCERT
 - (C) SCERT
 - (D) UGC
125. Which domain involves visualizing and formulating experiments, designing instruments and machines, relating objects and concepts in new ways ?
- (A) Application Domain
 - (B) Attitudinal Domain
 - (C) Creativity Domain
 - (D) Process Domain
126. Which among the following is one of the five basic principles of NCF 2005 ?
- (A) Connecting knowledge to life outside the school
 - (B) Developing school infrastructure
 - (C) Providing teacher training and incentives
 - (D) Promoting integrated curriculum
127. The main function of NCERT is an extension work with State Education Departments centering around the improvement of :
- (A) Higher Education
 - (B) School Education
 - (C) Vocational Education
 - (D) Technical Education
128. A teaching outline of the important points of a lesson arranged in the order in which they are to be presented ?
- (A) Action plan
 - (B) Lesson plan
 - (C) Unit plan
 - (D) Year plan
129. Among the following statements which one comes under Four Pillars of education ?
- (A) Learning to act
 - (B) Learning to earn
 - (C) Learning to think
 - (D) Learning to be
130. Who developed Taxonomy of Science Education ?
- (A) Anderson and Krathwohl
 - (B) Biggs and Collis
 - (C) B.S. Bloom
 - (D) McCormack and Yager
131. Who is the founder of Dalton Method ?
- (A) Armstrong
 - (B) D.W. Allen
 - (C) Helen Parkhurst
 - (D) John Dewey

132. Which among the following will come under the Principles of Curriculum Construction ?
- (A) Principle of Utility
 - (B) Principle of Discipline
 - (C) Principle of Planning
 - (D) Principle of co-operation
133. Which is NOT a part of Pedagogical Analysis ?
- (A) Content analysis
 - (B) Curriculum designing
 - (C) Diagnostic testing
 - (D) Learning Experiences
134. IT@school was formed in :
- (A) 2003
 - (B) 2005
 - (C) 2004
 - (D) 2001
135. One among the following is NOT in the six different validities of a good science curriculum as envisaged by NCF 2005.
- (A) Cognitive validity
 - (B) Content validity
 - (C) Construct validity
 - (D) Process validity
136. Versatile ICT enabled resource for students is :
- (A) Entertainment channel only
 - (B) Edutainment channel
 - (C) Game channel only
 - (D) Science channel only
137. Which is NOT a part of the Curriculum ?
- (A) Evaluation
 - (B) Learning experiences
 - (C) Professional ethics
 - (D) Syllabus
138. Which situation is suitable for using lecture method ?
- (A) For formulating a tentative solution
 - (B) For giving individual attention to students
 - (C) For giving hands own experiences to students
 - (D) For introducing and summarising lessons
139. An approach of curriculum organisation where a continuous and unbroken learning of the subject matter through various levels of education is ensured :
- (A) Concentric approach
 - (B) Interdisciplinary approach
 - (C) Spiral approach
 - (D) Topical approach
140. An integrated process skill in science :
- (A) Classifying
 - (B) Experimenting
 - (C) Measuring
 - (D) Observing
141. Skills essential to learn and understand scientific information :
- (A) Computer skills
 - (B) Process skills
 - (C) Life skills
 - (D) Social skills

142. What helps a teacher to adopt effective instructional aids and strategies in teaching learning process ?
- (A) Competitive Analysis
 - (B) Content Analysis
 - (C) Pedagogic Analysis
 - (D) Swot Analysis
143. Who is considered as the father of Cognitive Constructivism ?
- (A) Bruner
 - (B) Gagne
 - (C) Piaget
 - (D) Vygotsky
144. Which agency published NCF 2005 ?
- (A) CBSC
 - (B) NCTE
 - (C) SCERT
 - (D) NCERT
145. Inquiry based learning approach begins with :
- (A) A question to answer
 - (B) Exploration
 - (C) Laboratory tests
 - (D) Observation
146. Year in which NCERT was established ?
- (A) 1963
 - (B) 1961
 - (C) 1964
 - (D) 1962
147. Science-A process approach or SAPA is an outcome of :
- (A) AAAS
 - (B) ESS
 - (C) NCF
 - (D) SCIS
148. Mode of grading where grades are given based on predetermined cut off levels is :
- (A) Absolute grading
 - (B) Mastery grading
 - (C) Norm reference grading
 - (D) Relative grading
149. What gives us a detailed account of the subject content to be transacted and the skills, knowledge and attitudes which are to be deliberately fostered together with subject specific objectives ?
- (A) Curriculum
 - (B) Objectives
 - (C) Principles
 - (D) Syllabus
150. According to McCormack and Yager's taxonomy, collection and compilation of data comes under :
- (A) Knowledge domain
 - (B) Process domain
 - (C) Creativity domain
 - (D) Application domain

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