

## 132 PU Ph.D Taxonomy

### 1 of 100

176 PU\_2016\_132\_E

Phragmoplast is:-

- ☐ Plastid capable of fragmentation
- ☐ Plastid capable of duplication
- ☐ Cell plate formed of ER and dictyosomes (Secretory vesicles ) during cytokinesis
- ☐ Cell plate formed by ER, dictyosome (secretory vesicles) and portion of spindle fibre

### 2 of 100

191 PU\_2016\_132\_E

Pedicellariae are modified:-

- ☐ Some other structures
- ☐ Tube feet
- ☐ Integumentary structures
- ☐ Spines

### 3 of 100

195 PU\_2016\_132\_E

Muscle fatigue sets in due to non availability of:-

- ☐ actin binding site
- ☐ ATP
- ☐ Calcium
- ☐ Mg cofactor

### 4 of 100

106 PU\_2016\_132\_E

IA new taxonomic code, PhyloCode, has been proposed as an alternate to Linnean taxonomy.

PhyloCode is based on:-

- ☐ Acquired characters
- ☐ Numerical taxonomy
- ☐ Cladistic principles
- ☐ Evolutionary systematic

### 5 of 100

173 PU\_2016\_132\_E

The Red Data Book which lists endangered species is maintained by:-

- ☐ WHO
- ☐ IUCN
- ☐ UNO

- ☐ WWF

#### 6 of 100

174 PU\_2016\_132\_E

Most dangerous threat to wildlife is by:-

- ☐ Overgrazing
- ☐ Hunting
- ☐ Habitat destruction
- ☐ Introduction of exotic species

#### 7 of 100

193 PU\_2016\_132\_E

Which of the following compound is efflorescent?

- ☐ Baking soda
- ☐ Soda-Lime
- ☐ Soda ash
- ☐ Washing soda

#### 8 of 100

112 PU\_2016\_132\_E

The current status of taxonomy is in transition. It is changing from a focus on \_\_\_\_\_ toward a focus on \_\_\_\_\_.

- ☐ Phylogenetic taxa, numerical taxa
- ☐ Evolutionary taxa, cladistics taxa
- ☐ Numerical taxa, evolutionary taxa
- ☐ Cladistics taxa, phylogenetic taxa

#### 9 of 100

100 PU\_2016\_132\_E

Which of the following species is restricted to a given area?

- ☐ Sibling species
- ☐ Sympatric species
- ☐ Endemic species
- ☐ Allopatric species

#### 10 of 100

103 PU\_2016\_132\_E

A taxonomic system based only on the traits that reflect the order in time in which branches arose in a phylogenetic tree is called:-

- ☐ Phenetics
- ☐ Cladistics

- ☐ Phylogeny
- ☐ Classical evolutionary taxonomy

**11 of 100**

184 PU\_2016\_132\_E

Descriptive systematic botany was called by Turrill as:-

- ☐ Beta taxonomy
- ☐ Biosystematics
- ☐ Omega taxonomy
- ☐ Alpha taxonomy

**12 of 100**

159 PU\_2016\_132\_E

Light-sensitive sense organs in the flatworms are called:-

- ☐ Rheoreceptors.
- ☐ Auricles.
- ☐ Statocysts
- ☐ Ocelli.

**13 of 100**

147 PU\_2016\_132\_E

The two individuals who established the mathematical formula for calculating allelic frequency were:-

- ☐ Watson and Crick
- ☐ Laurel and Hardy
- ☐ Hardy and Weinberg
- ☐ Darwin and Wallace

**14 of 100**

125 PU\_2016\_132\_E

Two or more species occupying identical or overlapping areas are known as:-

- ☐ Subspecies
- ☐ Sibling species
- ☐ Sympatric
- ☐ Allopatric

**15 of 100**

175 PU\_2016\_132\_E

The central legislative measures called 'Wildlife (Protection) Act' was passed in:-

- ☐ 1980
- ☐ 1951

- ☐ 1977
- ☐ 1972

**16 of 100**

172 PU\_2016\_132\_E

Six-Kingdom classification is based on the sequence of:-

- ☐ Transfer RNA genes
- ☐ Messenger RNA genes
- ☐ Nitrogenous bases in DNA
- ☐ Ribosomal RNA genes

**17 of 100**

131 PU\_2016\_132\_E

Natural classification is based on:-

- ☐ Morphology
- ☐ Ontogeny'
- ☐ Both morphology and phylogeny
- ☐ Phylogeny

**18 of 100**

186 PU\_2016\_132\_E

The type of cleavage in frog's egg is:-

- ☐ Meroblastic
- ☐ Holoblastic equal
- ☐ Discoidal
- ☐ Holoblastic unequal

**19 of 100**

167 PU\_2016\_132\_E

Binomial nomenclature was introduced by:-

- ☐ Darwin
- ☐ John ray
- ☐ Carlous Linnaeus
- ☐ De candolle

**20 of 100**

111 PU\_2016\_132\_E

If a hypothesis is very powerful in explaining many related phenomena and is widely supported, it becomes known as a:-

- ☐ Conclusion

- ☐ Theory
- ☐ Suitable answer
- ☐ Deduction

**21 of 100**

124 PU\_2016\_132\_E

Starfishes are:-

- ☐ Omnivorous
- ☐ Herbivorous
- ☐ Filter feeders
- ☐ Carnivorous

**22 of 100**

141 PU\_2016\_132\_E

The first person to propose the concept of species was:-

- ☐ Linnaeus
- ☐ Charles Darwin
- ☐ Tournefort
- ☐ John Ray

**23 of 100**

156 PU\_2016\_132\_E

The crustaceans are the only arthropods with:-

- ☐ Biramous appendages
- ☐ Two pairs of antennae.
- ☐ Head, thorax, and abdomen.
- ☐ Mandibles.

**24 of 100**

196 PU\_2016\_132\_E

Correct sequence of stages in cell cycle is:-

- ☐ G1, S, G2, M
- ☐ G2, G1, M, S
- ☐ M, S, G1, G2
- ☐ G1, G2, S, M

**25 of 100**

163 PU\_2016\_132\_E

African sleeping sickness and Chagas's disease are both caused by protozoa in the genus \_\_\_\_\_.

- ☐ *Plasmodium*.

- ☐ *Noctiluca.*
- ☐ *Toxoplasma.*
- ☐ *Trypanosoma*

**26 of 100**

154 PU\_2016\_132\_E

Which of the following traits are unique to spiders?

- ☐ Silk glands
- ☐ Book lungs.
- ☐ Simple eyes.
- ☐ Malpighian tubules.

**27 of 100**

157 PU\_2016\_132\_E

Which of the following classes contains the crabs, shrimp, and krill?

- ☐ Malacostraca.
- ☐ Chilopoda.
- ☐ Branchiopoda.
- ☐ Maxillopoda.

**28 of 100**

105 PU\_2016\_132\_E

A taxonomic system that uses phenotypic similarities as well as judgment of homologies along a branching sequence is called:-

- ☐ Cladistics
- ☐ Classical evolutionary taxonomy
- ☐ Phenetics
- ☐ Phylogeny

**29 of 100**

101 PU\_2016\_132\_E

The term 'Systematics' was coined by:-

- ☐ Carlous Linnaeus
- ☐ Ernst Haecker
- ☐ De Candolle
- ☐ Copeland

**30 of 100**

102 PU\_2016\_132\_E

Which of the following terms best describes a cladogram?

- ☐ Polyphyly
- ☐ Phylogenetic tree
- ☐ Nested hierarchy
- ☐ Branching tree

**31 of 100**

136 PU\_2016\_132\_E

Who proposed phylogenetic classification of plants?

- ☐ Hutchinson
- ☐ De candolle
- ☐ Bentham and Hooker
- ☐ Linnaeus

**32 of 100**

140 PU\_2016\_132\_E

A flying bird lands by:-

- ☐ Folding the wings above and back of the body and coming down
- ☐ Folding the wings back and dropping on the grounds or other substratum
- ☐ Pronation and forward movements of wings
- ☐ Lowering and fanning out the rectrices

**33 of 100**

115 PU\_2016\_132\_E

The serum diagnosis method in plant taxonomy was pioneered by:-

- ☐ Hegenaeuer
- ☐ K.C.Mez
- ☐ Heywood
- ☐ Alston and Turner

**34 of 100**

132 PU\_2016\_132\_E

Natural system of classification differs from artificial system is:-

- ☐ Employing only one floral trait
- ☐ Taking only one vegetative trait
- ☐ Developing evolutionary trends
- ☐ Bringing out similarities and dissimilarities

**35 of 100**

128 PU\_2016\_132\_E

Static concept of species was put forward by:-

- ☐ Linnaeus
- ☐ Darwin
- ☐ De candolle
- ☐ Theophrastus

**36 of 100**

138 PU\_2016\_132\_E

A complicated process of growth and change converts the spermatid into a:-

- ☐ Secondary spermatocyte
- ☐ Function sperm
- ☐ Primary spermatocyte
- ☐ Spermatogonia

**37 of 100**

177 PU\_2016\_132\_E

Species which are able to exchange genes freely without loss of fertility or vigour is known as:-

- ☐ Superspecies
- ☐ Ecospecies
- ☐ Semispecies
- ☐ Coenospecies

**38 of 100**

183 PU\_2016\_132\_E

Duplication of names is avoided by the application of:-

- ☐ Homonyms
- ☐ The principal of priority
- ☐ Type concept
- ☐ Synonyms

**39 of 100**

146 PU\_2016\_132\_E

The term "Taxonomy" was first proposed by the French Botanist:-

- ☐ Linnaeus
- ☐ Lamarck
- ☐ Nageli
- ☐ De candolle

**40 of 100**

160 PU\_2016\_132\_E



Cladistic analysis indicates that the class \_\_\_\_\_ is paraphyletic and will therefore probably be further divided into many more taxa.

- ☐ Trematoda.
- ☐ Cestoda.
- ☐ Turbellaria
- ☐ Monogenea.

**41 of 100**

130 PU\_2016\_132\_E

Linnaeus system of classification was based on:-

- ☐ Cytology
- ☐ Embryology
- ☐ Morphology
- ☐ Ecology

**42 of 100**

143 PU\_2016\_132\_E

Taxonomy based on identification of evolutionary units within species by determining their genetical interrelationship is called:-

- ☐ Numerical taxonomy
- ☐ Biochemical taxonomy
- ☐ Experimental taxonomy
- ☐ Chemotaxonomy

**43 of 100**

135 PU\_2016\_132\_E

Who is the author of 'Species Plantarum'?

- ☐ Carlous Linnaeus
- ☐ John Ray
- ☐ Charles Darwin
- ☐ Julian Huxley

**44 of 100**

161 PU\_2016\_132\_E

Sponge bodies do not have organs, instead they have masses of cells supported by:-

- ☐ Oscula or spicules.
- ☐ Ostia or oscula.
- ☐ Spicules or sponging.
- ☐ Spongin or ostia

**45 of 100**

120 PU\_2016\_132\_E

Which one of the following sets of ions are necessary in the chemical events for muscle contraction?

- ☐ Na<sup>+</sup> and Mg<sup>++</sup> ions
- ☐ Na<sup>+</sup> and K<sup>+</sup>
- ☐ Ca<sup>+</sup> and Mg<sup>++</sup> ions
- ☐ Na<sup>+</sup> and Ca<sup>++</sup> ions

**46 of 100**

113 PU\_2016\_132\_E

The most widely accepted parts of Darwin's theory include:-

- ☐ Perpetual change
- ☐ inheritance of acquired characteristics
- ☐ Natural selection
- ☐ Gradualism

**47 of 100**

148 PU\_2016\_132\_E

The structure that is used for feeding in most molluscs is the:-

- ☐ Mouth
- ☐ buccal cavity
- ☐ Odontophore
- ☐ Radula

**48 of 100**

199 PU\_2016\_132\_E

*Ascaris lumbricoides* lives in the intestine of:-

- ☐ Homo sapiens
- ☐ Monkey
- ☐ Pig
- ☐ Sheep and goat

**49 of 100**

109 PU\_2016\_132\_E

A specimen or element selected by a competent worker as a substitute for an undesignated, missing or destroyed holotype is called:-

- ☐ Paratype
- ☐ Neotype
- ☐ Cotype
- ☐ Leucotype

**50 of 100**

144 PU\_2016\_132\_E

The first invertebrates to develop a true nervous system are:-

- ☐ Flat worms
- ☐ Sponges
- ☐ Coelenterates
- ☐ Annelids

**51 of 100**

104 PU\_2016\_132\_E

Phylogeny describes a species:-

- ☐ Geographic distribution
- ☐ Morphological similarities with other species
- ☐ Evolutionary history
- ☐ Reproductive compatibilities with other species

**52 of 100**

134 PU\_2016\_132\_E

Phylogenetic system brings about:-

- ☐ Grouping according to evolutionary trends
- ☐ Reproductive similarities
- ☐ Grouping according to morphological characters
- ☐ Grouping on the basis of increasing complexities

**53 of 100**

168 PU\_2016\_132\_E

Which of the taxa is not recognized by a botanist?

- ☐ Family
- ☐ Subspecies
- ☐ Species
- ☐ Order

**54 of 100**

200 PU\_2016\_132\_E

The life span of *Ascaris* is:-

- ☐ About an year
- ☐ More than 30 days
- ☐ six months
- ☐ 8 to 10 months

**55 of 100**

150 PU\_2016\_132\_E

Which of the following structures do bivalves use in the process of digestion?

- ☐ Peristaltic muscles
- ☐ A jaw
- ☐ A crystalline style
- ☐ Byssal threads

**56 of 100**

151 PU\_2016\_132\_E

The \_\_\_\_\_ have been extinct for 250 million years but they show the basic pattern that started the arthropods.

- ☐ Pycnogonids.
- ☐ Xiphosurids
- ☐ Crustaceans.
- ☐ Trilobites.

**57 of 100**

119 PU\_2016\_132\_E

In the Linnaean system of naming, a single species is identified by a binomial, which consists of the following two parts:-

- ☐ Phylum and class
- ☐ Family and genus
- ☐ Genus and species epithet
- ☐ Class and order

**58 of 100**

158 PU\_2016\_132\_E

Cells that secrete mucus in the epidermis of the Turbellaria are called:-

- ☐ Teguments.
- ☐ Cuticle cells.
- ☐ Parenchyma.
- ☐ Rhabdites.

**59 of 100**

188 PU\_2016\_132\_E

One of the following ratio is constant in DNA's of different species:-

- ☐ A+U/C+G
- ☐ A+C/T+G
- ☐ A+T/C+G

- ☐ A+G/T+C

**60 of 100**

123 PU\_2016\_132\_E

Egg of eutherian mammals is:-

- ☐ Centrolecithal  
☐ Macrolecithal  
☐ Microlecithal  
☐ Telolecithal

**61 of 100**

246 PU\_2016\_132\_M

Free living platyhelminthes forms belong to the class:-

- ☐ Cestoda  
☐ Trematoda  
☐ Nematoda  
☐ Turbellaria

**62 of 100**

230 PU\_2016\_132\_M

The mode of feeding in Leech is:-

- ☐ Omnivorous  
☐ Sanguinivorous  
☐ Herbivorous  
☐ Carnivorous

**63 of 100**

236 PU\_2016\_132\_M

Six septa or six mesenteries are characteristic of:-

- ☐ Hydra  
☐ Obelia  
☐ Sea anemone  
☐ Aurelia

**64 of 100**

235 PU\_2016\_132\_M

Ephyra is the larval form of:-

- ☐ Obelia  
☐ Sea anemone  
☐ Hydra

- ☐ Aurellia

**65 of 100**

256 PU\_2016\_132\_M

Head. Foot and visceral mass-this combination of characters is diagnostic of:-

- ☐ Echinoderms  
☐ Arthropods  
☐ Molluscs  
☐ Annelida

**66 of 100**

244 PU\_2016\_132\_M

Platyhelminthes are best described as:-

- ☐ Flatworms, diploblastic, acoelomates  
☐ Flatworms, triploblastic, acoelomate animals  
☐ Flatworms, triploblastic, coelomates  
☐ Flatworms, triploblastic, pseudocoelomates animals

**67 of 100**

248 PU\_2016\_132\_M

*Fasciola hepatica* is an endoparasite that lives in the:-

- ☐ Spleen of sheep  
☐ Liver of sheep  
☐ Intestine of sheep  
☐ Blood of sheep

**68 of 100**

225 PU\_2016\_132\_M

Total marine annelids belong to the class:-

- ☐ Chaetopoda  
☐ Oligochaeta  
☐ Hirudinea  
☐ Polycheta

**69 of 100**

255 PU\_2016\_132\_M

Which of the following includes coelomate unsegmented organisms?

- ☐ Arthropoda  
☐ Chordata  
☐ Annelida

- ☐ Mollusca

**70 of 100**

227 PU\_2016\_132\_M

Pronounced cephalisation is a characteristic:-

- ☐ Arthropoda  
☐ Annelida  
☐ Mollusca  
☐ Echinoderms

**71 of 100**

239 PU\_2016\_132\_M

The first invertebrates to develop a true nervous system are:-

- ☐ Annelids  
☐ Coelenterates  
☐ Sponges  
☐ Flat worms

**72 of 100**

222 PU\_2016\_132\_M

A common feature between cockroach and earthworm is:-

- ☐ Ventral nerve cord  
☐ Cocoon formation  
☐ Ommatidia  
☐ Nephridia

**73 of 100**

257 PU\_2016\_132\_M

Internal shell is present in:-

- ☐ Pila  
☐ Sepia  
☐ Lamellidens  
☐ Chiron

**74 of 100**

252 PU\_2016\_132\_M

Salamander belongs to the class:-

- ☐ Aves  
☐ Reptiles  
☐ Amphibian

- ☐ Pisces

#### 75 of 100

241 PU\_2016\_132\_M

Parazoa includes:-

- ☐ Acidaria
- ☐ Porifera
- ☐ Cnidaria
- ☐ Echinodermata

#### 76 of 100

242 PU\_2016\_132\_M

Most common method of reproduction in sponges is:-

- ☐ Budding
- ☐ Binary fission
- ☐ Multiple fission
- ☐ Sexual reproduction

#### 77 of 100

233 PU\_2016\_132\_M

Chromophil cells in earthworm are concerned with the secretion of:-

- ☐ Amylase
- ☐ Cocoon
- ☐ Protease
- ☐ Lipases

#### 78 of 100

224 PU\_2016\_132\_M

Leech belongs to the class:-

- ☐ Oligochaeta
- ☐ Chaetopoda
- ☐ Hirudinea
- ☐ Polycheta

#### 79 of 100

249 PU\_2016\_132\_M

Which of the following habitats show the highest diversity of living species?

- ☐ Tropical rainforest
- ☐ Grassland
- ☐ Temperate forest



- ☐ Desert

### 80 of 100

253 PU\_2016\_132\_M

Vertebrates and tunicates share:-

- ☐ The formation of structures from the neural crest
- ☐ A high degree of cephalisation
- ☐ A notochord and a dorsal, hollow nerve cord
- ☐ Jaws adapted for feeding

### 81 of 100

295 PU\_2016\_132\_D

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

- ☐ Spleen
- ☐ Bone marrow
- ☐ Thymus
- ☐ Lymphoid nodes

### 82 of 100

264 PU\_2016\_132\_D

Which of the following cellular organelles breaks down complex macromolecules, such as polysaccharides and proteins?

- ☐ Rough endoplasmic reticulum
- ☐ Golgi complex
- ☐ Mitochondria
- ☐ Lysosome

### 83 of 100

285 PU\_2016\_132\_D

Ink glands as a means of escape from predators are present in:-

- ☐ Unio (Pelecypoda)
- ☐ Dentalium (Scaphopoda)
- ☐ Sepia (Cephalopoda)
- ☐ Pila (Gastropoda)

### 84 of 100

287 PU\_2016\_132\_D

The largest *Invertebrate* is:-

- ☐ Octopus
- ☐ Architeuthis

- ☐ Sepia
- ☐ Loligo

**85 of 100**

268 PU\_2016\_132\_D

Some of the enzymes which are associated in converting fats into carbohydrates are present in:-

- ☐ Glyoxysomes
- ☐ Golgi bodies
- ☐ Liposomes
- ☐ Microsomes

**86 of 100**

274 PU\_2016\_132\_D

Which of the following systems is found in echinoderms?

- ☐ Excretory system
- ☐ Respiratory system
- ☐ Nervous system
- ☐ System of internal skeleton

**87 of 100**

262 PU\_2016\_132\_D

Cell membrane in animals is composed mainly of the molecules of:-

- ☐ Lipids
- ☐ Proteins
- ☐ Carbohydrates
- ☐ Lipids and proteins

**88 of 100**

280 PU\_2016\_132\_D

Flying frog is:-

- ☐ Pipa
- ☐ Hyla
- ☐ Rhacophorus
- ☐ Bufo

**89 of 100**

286 PU\_2016\_132\_D

'Pearl mother layer' is:-

- ☐ Periostracum
- ☐ Prismatic layer

- ☐ Mantle
- ☐ Nacre

**90 of 100**

266 PU\_2016\_132\_D

The two types of cellular organelles that transform energy are:-

- ☐ Mitochondria and chromoplasts
- ☐ Chlooplasts and leucoplasts
- ☐ Chloroplasts and leucoplasts
- ☐ Mitochodria and chloroplasts

**91 of 100**

283 PU\_2016\_132\_D

The disease caused by the hook worm is called:-

- ☐ Ascariasis
- ☐ Elephantiasis
- ☐ Ancylostomiasis
- ☐ Enterobiasis

**92 of 100**

261 PU\_2016\_132\_D

Sepia is commonly known as:-

- ☐ Cuttle fish
- ☐ Star fish
- ☐ Silver fish
- ☐ Jelly fish

**93 of 100**

267 PU\_2016\_132\_D

Which of the following is a type of intracellular junction between animal cells?

- ☐ Middle lamella
- ☐ Glycocalyx
- ☐ Plasmodesmata
- ☐ Desmosome

**94 of 100**

291 PU\_2016\_132\_D

Which of the following is called 'Blood fluke' of man?

- ☐ Schistoma
- ☐ Fasciola

- ☐ Paragonium
- ☐ Taenia

**95 of 100**

278 PU\_2016\_132\_D

The only fresh water species of sponges is:-

- ☐ Scypha
- ☐ Euspongia
- ☐ Oscarella
- ☐ Spongilla

**96 of 100**

281 PU\_2016\_132\_D

Croaking of frog is:-

- ☐ Hunger cell
- ☐ Danger cell
- ☐ Sex call for female
- ☐ Blood cell

**97 of 100**

289 PU\_2016\_132\_D

Mammals and living birds share all of the following characteristics except:-

- ☐ Endothermy
- ☐ Descent from a common amniotic ancestor
- ☐ An archosaur common ancestor
- ☐ A dorsal, hollow nerve cord

**98 of 100**

265 PU\_2016\_132\_D

Proteins that are to be used outside the cell are synthesized:-

- ☐ On the smooth endoplasmic reticulum
- ☐ On free ribosomes
- ☐ In the mitochondria
- ☐ On the rough endoplasmic reticulum

**99 of 100**

293 PU\_2016\_132\_D

Multiple fission occurs in:-

- ☐ Planaria
- ☐ Plasmodium

- ☐ Hydra
- ☐ E. coli

100 of 100

270 PU\_2016\_132\_D

Which of the following statements proves that mitochondria and chloroplasts are semi-autonomous bodies:-

- ☐ They are essential for respiration and photosynthesis
- ☐ They contain DNA and ribosomes
- ☐ They contain DNA
- ☐ They contain RNA

Sr No.	PhD Taxonomy
1	Which term will replace the question mark in the series: ABD,DGK,HMS,MTB,SBL, ?
Alt1	ZKU
Alt2	ZKW
Alt3	ZAB
Alt4	XKW

2	Choose word from the given options which bears the same relationship to the third word, as the first two bears: Illiteracy: Education:: Flood:?
Alt1	Rain
Alt2	Bridge
Alt3	Dam
Alt4	River

3	Select the lettered pair that has the same relationship as the original pair of words: Sip : Gulp
Alt1	Touch: Push
Alt2	Cup: Class
Alt3	Tent: Hut
Alt4	Soup: Water

4	Select the lettered pair that has the same relationship as the original pair of words: Low : Cattle
Alt1	Sheep: Beef
Alt2	Gaggle: Chicken
Alt3	Grunt: Hogs
Alt4	Flock: Goat

5	Find out the number that has the same relationship as the numbers of the given pair: 8 : 81 :: 64 : ?
Alt1	125
Alt2	137
Alt3	525
Alt4	625

6	Spot the defective segment from the following:
Alt1	It's time
Alt2	the students dispersed
Alt3	to go to home
Alt4	after study hours

7	There is no ----- in our car and it is already crowded.
Alt1	room
Alt2	place
Alt3	seat

Alt4	space
------	-------

8	Newton ----- loved his pet dog very much.
Alt1	a scientist
Alt2	the scientist
Alt3	scientist
Alt4	one scientist

9	Choose the option closest in meaning to the given word: JINGOISM
Alt1	deism
Alt2	chauvinism
Alt3	extremism
Alt4	pacifism

10	Choose the antonymous option you consider the best: QUACK
Alt1	bizarre
Alt2	procurer
Alt3	charlatan
Alt4	authority

11	In a village there are 1000 persons. Out of which 800 are literates. Out of 1000,700 are criminals. There are 550 literate criminals in that village. How many Illiterate non criminals are there?
Alt1	150
Alt2	250
Alt3	50
Alt4	200

12	Average weight of A,B,C is 45; Average weight of A&B is 40; Average weight of B&c is 43, Weight of B is
Alt1	17
Alt2	20
Alt3	26
Alt4	31

13	Which of the following cannot be the Median of the three positive Integers X,Y & Z ?
Alt1	X
Alt2	Z
Alt3	X+Z
Alt4	$(X+Z)/3$

14	How many Zero's are there in the product $1*2*3*-----*10$
Alt1	2
Alt2	10
Alt3	5

Alt4	6
------	---

  

15	A,B,C,D work on a project. Together A,B & C can complete in 100 days; Together B,C & D can complete in 101 days; Together C,D & A can complete in 102 days; together D,A & B can complete in 103 days . Rank them from the best to the worst performer.
Alt1	C>B>A>D
Alt2	C>A>B>D
Alt3	D>B>A>C
Alt4	D>A>B>C

  

16	22 Students are evenly spaced on the circumference of a big circle. They are numbered 1 to 22. which number is opposite to 17?
Alt1	8
Alt2	5
Alt3	7
Alt4	6

  

17	The fare of a luxury cab is Rs. X for the first five Kilometres and Rs,13/- per Kilometre thereafter. If a passenger pays Rs.2402/- for a journey of 187 kilometres, what is the value of X ?
Alt1	Rs.29
Alt2	Rs.39
Alt3	Rs.36
Alt4	Rs.31

  

18	An HR Company employs 4800 people out of which 45 per cent are males and 60 per cent of males are either 25 years or older. How many males are employed in that company who are younger than 25 years ?
Alt1	2640
Alt2	2160
Alt3	1296
Alt4	864

  

19	A person buys a shirt with marked price Rs.400/- at 20% discount. In order to make a profit of 20% the person should sell the shirt for
Alt1	Rs.400/-
Alt2	Rs.384/-
Alt3	Rs.320/-
Alt4	Rs.480/-

  

20	The following information is given:(i) Five friends P, Q, R, S and T travelled to five different cities of Chennai, Calcutta, Delhi, Bangalore and Hyderabad by five different modes of transport of Bus, Train, Aeroplane, Car and Boat from Mumbai. (ii) The person who travelled to Delhi did not travel by boat. (iii) R went to Bangalore by car and Q went to Calcutta by aeroplane.(iv) S travelled by boat whereas T travelled by train. (v) Mumbai is not connected by bus to Delhi and Chennai. Which of the following combinations of place and mode is not correct ?
----	--



Alt1	Delhi — Bus
Alt2	Calcutta — Aeroplane
Alt3	Bangalore — Car
Alt4	Chennai — Boat

21	Classification given by Bentham and Hooker is:-
Alt1	Numerical
Alt2	Artificial
Alt3	Phylogenetic
Alt4	Natural

22	Which of the following orders contains members who have a cephalothorax and abdomen with no external segmentation, and these tagmata are joined by a narrow pedicel?
Alt1	Araneae.
Alt2	Acari
Alt3	Scorpionida.
Alt4	Opiliones.

23	The concept of evolutionary change was first proposed by:-
Alt1	Early Greek philosophers
Alt2	Lamarck
Alt3	Lyell
Alt4	Wallace

24	The degeneracy of genetic code means that:-
Alt1	Genetic code varies with different organisms
Alt2	The same amino acid can be coded by two or more codes
Alt3	All the living organisms on the earth have the same codes
Alt4	The same code may code more than one amino acid

25	Nematocysts are the specialized cells found in the members of the phylum:-
Alt1	Mollusca
Alt2	Annelida
Alt3	Cnidaria
Alt4	Porifera

26	When a person becomes infected with the protist Plasmodium, sporozoites enter the liver cells and undergo a process known as _____, producing merozoites which then enter red blood cells.
Alt1	Gametogeny.
Alt2	Exogeny.
Alt3	Schizogony.
Alt4	Sporogony

27	Binomial nomenclature means:-
Alt1	Every organism is having one scientific name with a combination of genus and species
Alt2	Organism contains generic name

Alt3	Organism contains specific name
Alt4	None of the above

28	Division of the body into head, thorax and abdomen is a characteristic of:-
Alt1	Insecta
Alt2	Insecta and Myriapoda
Alt3	Insecta and Crustacea
Alt4	Insecta and Archnida

29	Hydra is put under the phylum cnidaria because it has:-
Alt1	Cnidoblasts
Alt2	Interstitial cells
Alt3	Tentacles
Alt4	Hypostome

30	For the chemical change A-B, it is found that the rate of reaction doubles when the concentration is increased four times. The order of the reaction is:-
Alt1	zero
Alt2	Half
Alt3	Two
Alt4	one

31	Most primitive arthropods belong to the class:-
Alt1	Insecta
Alt2	Myriapoda
Alt3	Onychophora
Alt4	Archnida

32	Gemmules are helpful in:-
Alt1	Sexual reproduction
Alt2	Secretion of spicules
Alt3	Survival in drought
Alt4	Digestion

33	Most of the sponges are:-
Alt1	Colonial
Alt2	Fresh water forms
Alt3	Solitary
Alt4	Cold water inhabitants

34	The first phylogenetic system of plant classification to be ever put fourth was that of:-
Alt1	Eichler
Alt2	Engler and Prantl
Alt3	Hutchinson
Alt4	Bentham and Hooker'

35	Measurement of the rate of O <sub>2</sub> consumption in unit volume of water over a period of time is done to find out:-
Alt1	Biosynthetic path ways
Alt2	Fermentation
Alt3	Biogas generation
Alt4	Biological oxygen demand

36	Animal of phylum Porifera are characterized by:-
Alt1	Diploblastic organisation
Alt2	Coelenteron
Alt3	Coelom
Alt4	Canal system

37	Metamerically segmented, bilaterally symmetrical animals bearing jointed appendages. These are characteristic of:-
Alt1	Mollusca
Alt2	Arthropoda
Alt3	Helminthes
Alt4	Annelida

38	Taxonomy without the phylogeny is like bones without flesh is a statement of:-
Alt1	Bentham and Hooker
Alt2	John Hutchinson
Alt3	Takhtajan
Alt4	Oswald Tippo

39	Authors of the book Principles of Numerical Taxonomy are:-
Alt1	Hansen and Rahn
Alt2	Sokal and Sneath
Alt3	Alston and Turner
Alt4	Engler and Prantl

40	The largest and the most powerful adductor muscles in flying bird is the:-
Alt1	Tensor longus
Alt2	Coracobrachialis longus
Alt3	Pectoralis minor
Alt4	Pectoralis major

41	The infected stage of Ascaris is:-
Alt1	Fourth Juvenile
Alt2	Adult worm itself
Alt3	Second Juvenile
Alt4	Egg

42	Related species which are reproductively isolated but morphologically similar are called:-
Alt1	Sibling species
Alt2	Allopatric

Alt3	Sympatric
Alt4	Morpho species

43	The first laws of botanical nomenclature was framed by:-
Alt1	Augustine P. de Candolle
Alt2	Linnaeus
Alt3	Alphonse de Candolle
Alt4	Casimir de candolle

44	Of all the taxa, the only one that exists in nature as a biologically cohesive unit is the:-
Alt1	Phylum
Alt2	Species
Alt3	Genus
Alt4	Kingdom

45	The characteristics of four pairs of walking legs, a pair of pedipalps, and no mandible or antennae are found in which of the following?
Alt1	Chelicerata.
Alt2	Eurypterida.
Alt3	Xiphosurida.
Alt4	Pycnogonida.

46	Which one of the following ERs originates first?
Alt1	Granular type ER
Alt2	Round ER
Alt3	Fragmented ER
Alt4	Smooth ER

47	Nematocysts are the organs of:-
Alt1	Respiration
Alt2	Sensation
Alt3	Defence and offence
Alt4	Reproduction

48	Choanocytes in sponges are present:-
Alt1	Line the gastric cavity
Alt2	Located between the outer and inner layers
Alt3	On the external body surface
Alt4	In the mesodermal layer

49	Sycon belong to the class:-
Alt1	Desmospongia
Alt2	Hexactinellida
Alt3	Porifera
Alt4	Calcarea

50	Species is:-
----	--------------

Alt1	Specific unit of evolution
Alt2	Specific class of evolution
Alt3	Specific unit of the evolutionary
Alt4	History of a race

51	Larva of sponge is known as:-
Alt1	Amphiblastula larva
Alt2	Trochophore larva
Alt3	Planula larva
Alt4	Glochidium larva

52	A resistant, quiescent stage in the life cycle of a protozoan is called a:-
Alt1	Cyst.
Alt2	Gamete.
Alt3	Sporozoite.
Alt4	Merozoite

53	Who has suggested six-kingdom classification?
Alt1	Whittaker
Alt2	Carl Woese
Alt3	Haeckel
Alt4	Huxley

54	Species most vulnerable to extinction from human activities are those with:-
Alt1	Many natural predators
Alt2	Low carrying capacities
Alt3	Large niches
Alt4	High population growth rates

55	Species which are able to exchange genes freely without loss of fertility or vigour is known as:-
Alt1	Semispecies
Alt2	Coenospecies
Alt3	Ecospecies
Alt4	Superspecies

56	Hemocoelic body cavity is a characteristic of:-
Alt1	Leech
Alt2	Cockroach
Alt3	Snails
Alt4	Ascaris

57	A topotype is:-
Alt1	A specimen used by a second author
Alt2	A specimen other than the holotype referred to in the original publication
Alt3	A specimen collected at the type locality
Alt4	A specimen selected to serve as a substitute for the holotype

58	Birds have wings, as do beetles. However, they do not share a recent, common ancestor. Therefore the possession of wings is known as:-
Alt1	Homoplasy
Alt2	Polarity
Alt3	Ancestry
Alt4	Homology

59	When cilia are fused into a sheet of material that can be used for locomotion or for moving food particles toward the cytopharynx, the sheet is called a(n) ____.
Alt1	Undulating membrane.
Alt2	Flagella.
Alt3	Infraciliature.
Alt4	Pellicle

60	The particular specimen or element designated by the author of a taxon is designated as:-
Alt1	Neotype
Alt2	Holotype
Alt3	Paratype
Alt4	Lectotype

61	The poisonous fluid present in the nematocysts of Hydra is:-
Alt1	Haematin
Alt2	Venom
Alt3	Hypnotoxin
Alt4	Toxin

62	Who has introduced five kingdom system of biological classification?
Alt1	Linnaeus
Alt2	Robert N. Whittaker
Alt3	Ernst Mayr
Alt4	Copeland

63	The organs of taste in cockroach are present in:-
Alt1	Hypopharynx
Alt2	Pharynx
Alt3	Epipharynx only
Alt4	Palps and epipharynx

64	When was 'Man and the Biosphere' programme launched by the UNESCO?
Alt1	1986
Alt2	1965
Alt3	1968
Alt4	1971

65	Emerson enhancement proves that:-
Alt1	There are light and dark reactions in photosynthesis
Alt2	Photorespiration

Alt3	Photophosphorylation
Alt4	There are two photochemical reactions in light reaction

66	The trochophore larva indicates a common ancestry for which of the following pairs?
Alt1	Mollusca-Cnidaria
Alt2	Mollusca-Annelida
Alt3	Mollusca-Cephalopoda
Alt4	Mollusca-Nematoda

67	Which of the following is the contractile protein of a muscle?
Alt1	Tubulin
Alt2	Myosin
Alt3	Tubuleen
Alt4	Actin

68	One of the two more specimens or elements designated simultaneously as the type is called:-
Alt1	Isotype
Alt2	Neotype
Alt3	Paratype
Alt4	Syntype

69	The body cavity of Ascaris pseudocoel because:-
Alt1	It is bound externally by muscle layer and internally by intestines
Alt2	It contains large cells termed pseudocoelocytes
Alt3	It is filled with pseudocoelomic fluid
Alt4	It has very little parenchyma

70	Which one is known as Nature's plough man:-
Alt1	Cattle leech
Alt2	Nereis
Alt3	Earthworm
Alt4	Polygordius

71	The first body segment of earthworm is:-
Alt1	Protostomium
Alt2	Peristomium
Alt3	Peristome
Alt4	Protostome

72	The distal parts of Malpighian tubules in Cockroach:-
Alt1	Are attached to alimentary canal
Alt2	Open into coelomic cavity
Alt3	Open into haemolymph
Alt4	Float freely in haemolymph

73	The most primitive invertebrate to possess musculo- epithelial cells and nerve cells is:-
Alt1	Hydra

Alt2	Sycon
Alt3	Fasciola
Alt4	Spongilla

74	The excretory units of Annelids are:-
Alt1	Nephridia
Alt2	Flame cells
Alt3	Nephrostomes
Alt4	Uriferous tubules

75	Skeleton of sponges is produced by:-
Alt1	Thesocytes
Alt2	Choanocytes
Alt3	Sclerocytes
Alt4	Pinacocytes

76	Polymorphic cnidarians are the members of the class:-
Alt1	Actinozoa
Alt2	Hydrozoa
Alt3	Scyphozoa
Alt4	Anthozoa

77	The mode of respiration in earthworm is:-
Alt1	Gills
Alt2	Subcutaneous
Alt3	Pulmonary
Alt4	Cutaneous

78	The nitrogenous waste in cockroach is mainly excreted as:-
Alt1	Urea
Alt2	Urea and uric acid
Alt3	Uric acid
Alt4	Ammonia

79	Which class has the largest number of animals?
Alt1	Fishes
Alt2	Insects
Alt3	Mammals
Alt4	Reptiles

80	Identify the larva which is present only in members of gastropods:-
Alt1	Muller's larva
Alt2	Veliger
Alt3	Trochophore
Alt4	Glochidium

81	Osphradium is to test the purity of water in:-
----	--



Alt1	Earth worm
Alt2	Housefly
Alt3	Pila
Alt4	Starfish

82	In helminthes, flame cells are component of their:-
Alt1	Respiratory system
Alt2	Excretory system
Alt3	Reproductive system
Alt4	Nervous system

83	Sea anemone is:-
Alt1	Diploblastic, radially symmetrical animal
Alt2	Triploblastic, radially symmetrical animal
Alt3	Diploblastic, bilaterally symmetrical animal
Alt4	Triploblastic, bilaterally symmetrical animal

84	Bath sponge belongs to the class:-
Alt1	Calcarea
Alt2	Porifera
Alt3	Desmospongia
Alt4	Hexactinellida

85	In earthworm fertilization occurs in:-
Alt1	Ootheca
Alt2	Coon
Alt3	Oviduct
Alt4	Water

86	Devil fish is the common name of:-
Alt1	Teredo
Alt2	Sepia
Alt3	Loligo
Alt4	Octopus

87	Nereis is commonly called:-
Alt1	Round worm
Alt2	Calm worm
Alt3	Earthworm
Alt4	Ring worm

88	The respiratory organs in a freshwater mussel are:-
Alt1	Gills
Alt2	Book lungs
Alt3	Pulmonary sacs
Alt4	Respiratory siphons

89	The cell organelle involved in the glycosylation of protein is:-
Alt1	Endoplasmic reticulum
Alt2	Peroxisome
Alt3	Ribosomes
Alt4	Mitochondria

90	Role of typhlosole in the intestine of earthworm is:-
Alt1	To control flow of blood
Alt2	To kill bacteria
Alt3	To produce digestive enzymes
Alt4	To increase absorptive surface

91	Most advanced molluscs belong to the class:-
Alt1	Monopacophora
Alt2	Cephalopoda
Alt3	Gastropoda
Alt4	Amphineura

92	In which of the following the heart is not ventral in position?
Alt1	Lamprey
Alt2	Frog
Alt3	Fish
Alt4	Crabs

93	In chloroplasts proteinaceous granules surrounded by starch form a compact body called:-
Alt1	Eyespot
Alt2	Paramylum
Alt3	Volutin
Alt4	Pyrenoid

94	Males are produced parthenogenetically in:-
Alt1	Silk moth
Alt2	Lac insect
Alt3	Butterfly
Alt4	Honey bee

95	Elephantiasis caused by:-
Alt1	Fasciola hepatica
Alt2	Wucheria bancrofti
Alt3	Ascaris lumbricoides
Alt4	Enterobius vermicularis

96	In the life cycle of Liver fluke the sheep get infection when they ingest:-
Alt1	Encysted cerariae
Alt2	Miracidia
Alt3	Sporocysts
Alt4	Rediae

97	Common bath sponge is:-
Alt1	Spongilla
Alt2	Syon
Alt3	Euspongia
Alt4	Euplectella

98	The mouth parts of house fly are of :-
Alt1	Biting and chewing type
Alt2	Sucking and sponging type
Alt3	Piercing and sucking type
Alt4	Biting, sucking and lapping type

99	Which of the following combination of phylum and description is incorrect?
Alt1	Platyhelminthes- flatworms, gastrovascular cavity, acoelomate
Alt2	Nematoda-roundworms, pseudocoelomate
Alt3	Calcarea-gastrovascular cavity, coelom present
Alt4	Echinodermata-bilateral symmetry as larva, coelom present

100	A frog with body temperature of 20°C is transferred to an area with 30°C temperature. What will be the body temperature of frog in the new environment?
Alt1	25°C
Alt2	30°C
Alt3	20°C
Alt4	Fluctuates between 20°C-30°C