In the case of suspected filarial patients, blood samples are collected during night time because the
1) patients do not feel much pain
2) filarial worms enter into blood from lymph during night time
3) microfilariae exhibit nocturnal periodicity
4) adult worms are active in blood circulation during night time

The drug cocaine produces a sense of euphoria and increased energy levels as it
1) acts as amphetamine
2) stimulates adrenal glands to produce steroids
3) causes the inhibition of cholinergic nerves
4) interferes with the transport of dopamine

Which of the following is not a symptom of chronic malaria?
1) Splenomegaly
2) Hypertrophy of RBC
3) Cirrhosis of liver
4) Anaemia

In cockroach, the structures that help in locomotion on smooth surface are
1) claws and arolium
2) pulvillus and bristles of podomeres
3) plantulae on tarsus
4) plantulae, claws

Incorrect statement about the mushroom shaped gland of *Periplaneta americana* from the following
1) Helps in storage and excretion of uric acid
2) Secretes the innermost layer of spermatophore
3) Stores the sperms in the form of spermatophores
4) Nourishes the sperms

In a biological community Gauses principle explains
1) competition among different species under unlimited resources
2) competitive exclusion of an inferior species due to the limited natural resources
3) coexistence of closely related species due to resource partitioning
4) intra specific competition due to limited natural resources

In India, grassland ecosystems are found mainly in
1) Ladakh region
2) Himalayan region
3) Deccan plateau
4) Western ghats
143. The influence of light on non-directional movement of animals is known as
   1)phototaxis  2)photoperiodism  3)photokinesis  4)phototropism

144. According to the study of molecular systematics, the kingdom replaced by the two
    kingdoms bacteria and archebacteria is
   1)Fungi  2)Protista  3)Monera  4)Metaphyta

145. Identify the correct match from the following
   1)Earth summit-Johannesburg, South Africa
   2)Biosphere reserves-Norman Myers
   3)Jim Corbett National park-first Indian national park in Gujarat
   4)Cryopreservation-ex-situ conservation

146. In humans mucous connective tissue is present mainly in the
   1)mucosa lining of gut  2)lining of alveoli of lungs
   3)umbilical chord of newly born infants
   4)walls of trachea, bronchi and bronchioles

147. Cardiac muscles are highly resistant to fatigue mainly due to the presence of
   1)intercalated discs  2)branched muscle fibres and communication junctions
   3)specialised autorhythmic muscle fibres
   4)numerous sarcosomes and myoglobin molecules

148. Identify the correct combination from the following

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Respiratory organs</th>
<th>Excretory organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Astacus</td>
<td>Dermal branchiae</td>
<td>Green glands</td>
</tr>
<tr>
<td>2) Aplysia</td>
<td>Ctenidia</td>
<td>Meta nephridia</td>
</tr>
<tr>
<td>3) Aphrodite</td>
<td>Parapodia</td>
<td>Protonephridia</td>
</tr>
<tr>
<td>4) Ascidian</td>
<td>Pharyngeal gill slits</td>
<td>Proboscis gland</td>
</tr>
</tbody>
</table>

149. Echinoderm with elongated body and without arms, spines is
   1) Gorgonocephalus  2) Thyone  3) Clypeaster  4) Antedon

150. Incorrect statement about "great white shark" from the following
   1) Sharks exhibit physiological uraemia
   2) They have placoid scales and heteroceracal caudal fin
   3) Fertilization internal and viviparous in nature
   4) Lobe finned fishes with air bladder acting as hydrostatic organ
151. Identify the correct match from the following
   1) Gavialis - Vascular cloacal wall           2) Corvus - Urinary bladder present
   3) Cervus - Intra abdominal testes          4) Trichechus - Six cervical vertebrae

152. Identify the uricotelic animal from the following
   1) Land leech  2) Land snail  3) Desert fox  4) Camel

153. Incorrect match from the following
   1) Paneth cells - lysozyme
   2) Schwann cells - myelin sheath
   3) Dendritic cells - afferent neurons
   4) Mast cells - inflammation

154. Which of the following is an exotic carp?
   1) Tunas  2) Common carp  3) Cat fish  4) Oil sardine

155. Follicular hyperkeratosis is a/an
   1) sex influenced trait
   2) holandric character
   3) sex linked dominant trait
   4) autosomal recessive character

156. Amniocentesis test is developed mainly to
   1) confirm the pregnancy
   2) determine the sex of the foetus
   3) detect the chromosomal abnormalities
   4) find out the correct position of foetus

157. Which of the following disorder is not caused by trisomy (2n + 1) in human beings?
   1) Down syndrome
   2) Turner's syndrome
   3) Kline felter syndrome
   4) Patau syndrome

158. In a family, blood groups of children are entirely different from that of parents only if
     the blood groups of the parents are
     1) A and B  2) AB and AB  3) AB and O  4) O and A or B

159. Correct match from the following
     1) Mutation theory - Bateson
     2) Survival of the fittest - Herbert Spencer
     3) Principles of geology - Alfred Wallace
     4) Biochemical recapitulation - Ernst Haeckel

160. The first human like being frugivorous in habit and hunted with sharp stony objects
     was named
     1) Australopithecus
     2) Homo neanderthalensis
     3) Homo habilis
     4) Homo erectus

ROUGH
161. Incorrect match from the following
   1) MRI-aneurysm  2) EEG-epilepsy  
   3) PSA test-cervical cancer  4) PCR-HIV detection

162. The technique of attenuating or weakening of a microbe was developed by
   1) Edward Jenner  2) Alexander Fleming  3) Louis Pasteur  4) Jonas Salk

163. Ampulla of vater is formed by the union of
   1) common hepatic duct and pancreatic duct  2) common bile duct and pancreatic duct
   3) cystic duct and common hepatic duct  4) infundibulum and isthmus of fallopian tube

164. Adenoids are present in
   1) nasopharynx  2) oropharynx  3) below the tongue  4) laryngopharynx

165. In human development, most of the organ systems are developed by the end of
   1) first month  2) 24 weeks  3) first trimester  4) 8 weeks

166. The cells that provide nutrition to developing spermatozoa in testes are called
   1) Kupffer cells  2) Leydig cells  3) Sertoli cells  4) Oxyntic cells

167. Rima glottidis is the narrow space between the
   1) true vocal folds and false vocal cords  2) true vocal cords and arytenoids
   3) corniculate cartilages and cuneiform cartilages  4) arytenoids and thyroid cartilages

168. Pneumoconiosis is caused by the
   1) bacterium *Streptococcus pneumoniae*  
   2) inhalation of coal dust and sulphur particles  
   3) release of vasodilator substances due to allergens  
   4) deposition of iron particles in alveoli of lungs

169. The specialised myocytes present in inner ventricular walls of heart beneath endocardium are called
   1) Chorde tendinae  2) Papillary muscles  3) Purkinje fibres  4) Columnae carneae

170. In human heart, the non functional valve in the right atrium is present at the opening of
   1) coronary sinus  2) superior venacava  
   3) inferior venacava  4) right atrioventricular aperture
171. Which of the following hormones are not antagonistic to each other in their actions?
   1) Parathormone and calcitonin  
   2) Somatocrinin and somatostatin  
   3) Cortisol and Catecholamines  
   4) Aldosterone and atrial natriuretic peptide

172. Prostaglandins are derivatives of
   1) tryptophan  
   2) tyrosine  
   3) glycoproteins  
   4) eicosanoids

173. The vestibular apparatus concerned with body equilibrium is constituted by
   1) saccule and utricle  
   2) ampullae and crista  
   3) maculae and vestibule  
   4) semicircular canals and otolith organ

174. Inter ventricular foramina are connecting the
   1) atria and ventricles in heart  
   2) paracoels and diocoel in brain  
   3) 3rd and 4th ventricles of brain  
   4) right and left ventricles of heart

175. Joint between two adjacent vertebrae of mammals is an example of
   1) symphysis and synarthrosis  
   2) synchondrosis and syndesmosis  
   3) diarthrose and syndesmosis  
   4) symphysis and amphiarthrosis

176. Hensen's disc is
   1) part of primitive streak  
   2) part of sarcomere made of only myosin  
   3) primitive knot through which chordamesodermal cells involute to form notochord  
   4) bilaminar embryonic disc with epiblast and hypoblast

177. Autoimmune disease from the following
   1) Glomerulo nephritis  
   2) Osteo arthritis  
   3) Rheumatoid arthritis  
   4) Meningitis

178. In the conduction of nerve impulse, relative refractory period coincides with the phase of
   1) depolarisation  
   2) repolarisation  
   3) hyperpolarisation  
   4) polarisation

179. In kidneys, renal columns are made of
   1) renal calyces  
   2) medullary pyramids  
   3) renal cortex  
   4) renal papillae

180. In the process of urine formation, selective reabsorption is minimum in this part of nephron
   1) Proximal convoluted tubule  
   2) Distal convoluted tubule  
   3) Henle's loop  
   4) Collecting duct

**ROUGH**