

AVES

Multiple-Choice Questions

1. *Orinthology is the study of:*
 - a) Reptiles
 - b) Birds
 - c) Migration of birds
 - d) Birds' eggs
2. *Study of birds' eggs is called:*
 - a) Odology
 - b) Odontology
 - c) Osteology
 - d) Phenology
3. *Phenology is the study of:*
 - a) Habit of birds
 - b) Migration of birds
 - c) Fossil history of birds
 - d) Movement of birds
4. *Archaeopteryx is a connecting link between:*
 - a) Amphibians and reptiles
 - b) Reptiles and birds
 - c) Birds and mammals
 - d) Reptiles and mammals
5. *Fossil of Archaeopteryx was discovered in:*
 - a) Central Asia
 - b) England
 - c) Germany



- d) Africa
6. *Archaeopteryx became extinct during the:*
- a) Permian period
 - b) Jurassic period
 - c) Cretaceous period
 - d) Devonian period
7. *The correct statement regarding birds:*
- a) Their body temperature does not change
 - b) Their anterior part of the body is concerned with flight and the posterior part is concerned with the movement on land
 - c) Respiratory system is specialised to perform double respiration
 - d) All
8. *In birds, jaws are:*
- a) Muscular and powerful
 - b) Modified into beak
 - c) Poorly developed
 - d) Absent
9. *Sunbird is famous for:*
- a) Laying eggs in other bird's nest
 - b) Migrating into India from Siberia
 - c) Sucking flower nectar
 - d) Its peculiar beak
10. *Smallest bird is:*
- a) Humming bird
 - b) Weaver bird
 - c) Sparrow
 - d) Stork
11. *Which one of the following is a flightless bird?*



- a) Emu
 - b) Sunbird
 - c) Swan
 - d) Pelican
12. *Largest living bird is:*
- a) Dodo
 - b) Ostrich
 - c) Albatross
 - d) Swift
13. *The bird which can fly backwards is:*
- a) Swift
 - b) Humming bird
 - c) Wagtail
 - d) Arctic tern
14. *Fastest flying bird is:*
- a) Albatross
 - b) Wagtail
 - c) Arctic tern
 - d) Swift
15. *Smallest living flightless bird is:*
- a) Emu
 - b) Tinamus
 - c) Kiwi
 - d) Flamingo
16. *Largest animal egg is of:*
- a) Crocodile
 - b) Echidna



- c) Ostrich
 - d) Tortoise
17. *The bird that lays eggs on ice is:*
- a) Arctic tern
 - b) Humming bird
 - c) Albatross
 - d) Penguin
18. *Sense of smell is well developed in:*
- a) Crows
 - b) Cuckoos
 - c) Kiwis
 - d) Penguins
19. *The national bird of India is:*
- a) Crow
 - b) Cuckoo
 - c) Sparrow
 - d) Peacock
20. *Cuckoo is famous for:*
- a) Its beak's colour
 - b) Its sweet sound
 - c) Its habit of laying eggs in a crow's nest
 - d) None
21. *Paddle-like wings are found in:*
- a) Penguins
 - b) Swans
 - c) Albatrosses
 - d) Sunbirds

22. *Characteristic of avian eye is the presence of:*
- a) Retina
 - b) Pecten
 - c) Comb plates
 - d) Iris
23. *Pecten is present in the eye of all birds except:*
- a) Ostriches
 - b) Crows
 - c) Cuckoos
 - d) Kiwis
24. *Syrinx is found in:*
- a) Pisces
 - b) Amphibia
 - c) Birds
 - d) None
25. *The only cutaneous gland found in birds is the:*
- a) Uropygial gland
 - b) Femoral gland
 - c) Green gland
 - d) Coxal gland
26. *Which one of the following is absent in pigeons?*
- a) Syrinx
 - b) Pecten
 - c) Uropygial gland
 - d) Gall bladder
27. *The statement "Birds are glorified reptiles" was given by:*
- a) Young

- b) Huxley
 - c) Nobel
 - d) Goldstein
28. *Tail vertebrae of birds fused to form:*
- a) Synsacrum
 - b) Furcula
 - c) Pygostyle
 - d) Urostyle
29. *Consider the following statements about ratites:*
- (A) Hindlimbs are adapted to cursorial life*
- (B) Syrinx is present*
- (C) Skull is dromaeognathous*
- (D) Youngs altricial*
- The correct statements are:
- a) None
 - b) A and B
 - c) Band C
 - d) C and D
30. *Pterylae is not applicable to:*
- a) Pigeon
 - b) Ratites
 - c) Ratites and penguins
 - d) Penguins and kiwis
31. *Ratites lack:*
- a) Down feathers
 - b) Furcula
 - c) Functional tail

d) All

33. Match column I with column II and select the correct answer using answer codes:

Column I

Column II

(A) Protrusible tongue

1. Guinea fowl

(B) Monogamous

2. Penguin

(C) Air sacs are absent

3. Emu

(D) Polygamous

4. Humming bird

Answer codes:

	A	B	C	D
a)	3	1	2	4
b)	4	3	2	1
c)	2	3	1	4
d)	3	4	2	1

33. Feathers help in:

- a) Heat regulation
- b) Sexual display
- c) Flight
- d) All

34. In which one of the following birds do feet help in thermoregulation?

- a) Sand grouse
- b) Kingfisher
- c) Woodpecker
- d) Hawk

35. Birds lack:

- a) Nictitating membrane
- b) Organ of corti
- c) Harderian gland



- d) Ear ossicles
36. *Copulatory organ is present in:*
- a) Ducks
 - b) Geese
 - c) Ratites
 - d) Sphenodon
37. *Airsacs, which are characteristic of birds, are also found in:*
- a) Draco
 - b) Crocodiles
 - c) Chamaeleon
 - d) All
38. *What is incorrect about the circulatory system of aves?*
- a) Heart is four chambered
 - b) Well-developed renal portal system
 - c) Sinus venosus and truncus arteriosus are lacking
 - d) RBCs are nucleated
39. *Match column I with column II and select the correct answer using answer codes:*

Column I

Column II

(A) Lumbricalis

1. Activity of biceps

(B) Gastrocnemius

2. Acts as the flexor of third digit

(C) Ectepicondyloradialis

3. Activity of triceps

(D) Anconeus

4. Extension of tarso-metatarsus

Answer codes:

	A	B	C	D
(a)	3	1	2	4
(b)	4	3	2	1
(c)	2	3	1	4



(d) 3 4 2 1

40. *Which one of the following is an unpaired air sac?*
- a) Cervical
 - b) Interclavicular
 - c) Posterior thoracic
 - d) Anterior thoracic
41. *Pigeon lacks:*
- a) Sexual dimorphism
 - b) Terminal nerve
 - c) Gall bladder
 - d) All
42. *Which one of the following is found in pigeons?*
- a) Crypts of Leiberkuhn
 - b) Caecal gland
 - c) Crop gland
 - d) All
43. *Which one of the following is applicable to birds?*
- a) Endothermic
 - b) Bipedal
 - c) Oviparous
 - d) All
44. *Which one of the following is not a pleognathae?*
- a) Penguin
 - b) Ostrich
 - c) Emu
 - d) Kiwi
45. *Most birds have poor sense of smell except:*



- a) Ostriches
- b) Kiwis
- c) Pitohuis
- d) Penguins

46. *Generally birds' scales do not overlap significantly except in:*

- a) Sparrows and pigeons
- b) Ostriches and kiwis
- c) Parrots and sparrows
- d) Kingfishers and woodpeckers

47. *Match column I with column II and select the correct answer using answer codes:*

<i>Column I</i>	<i>Column II</i>
<i>A) Geese</i>	<i>1. Kleptoparasitism</i>
<i>B) Some ducks</i>	<i>2. Nectar feeders</i>
<i>C) Sunbirds</i>	<i>3. Mainly grazers</i>
<i>D) Gulls</i>	<i>4. Filter feeders</i>

Answer codes:

	A	B	C	D
a)	2	4	3	1
b)	3	2	4	1
c)	4	1	3	2
d)	3	4	2	1

48. *Which one of the following is an incorrect match?*

- a) Cutting beak - Sparrows
- b) Fruit-eating beak - Parrots
- c) Insectivorous beak - Swifts
- d) Tearing and piercing - Vultures

49. *Which one of the following birds lays the largest egg in proportion to the size of its body?*

- a) Ostrich
 - b) Emu
 - c) Kiwi
 - d) Cassowary
50. *Which one of the following is not applicable to birds?*
- a) Tetrachromatic
 - b) Cranial sutures
 - c) Nictitating membrane
 - d) Loop of Henle
51. *What is incorrect about cloaca of birds?*
- a) Waste is expelled through it
 - b) Helps in thermoregulation
 - c) Birds mate through it
 - d) Females lay eggs through it
52. *A prominent keel in the sternum is lacking in:*
- a) Rheas
 - b) Emus
 - c) Ostriches
 - d) All
53. *Foramen triosseum (triosseal) canal is formed by the articulation of:*
- a) Humerus, scapula and coracoid
 - b) Humerus, scapula and clavicle
 - c) Femur, radio-ulna and interclavicle
 - d) Humerus scapula and coracoid
54. *Which one of the following is a set of flightless birds of neognathae?*
- a) Kiwis, rails and penguins
 - b) Penguins, rails and puffins



c) Ostriches, kiwis and emus

d) Rails, kiwis and emus

55. *Consider the following statements:*

(A) Flamingos are not pink at the time of birth, but when they feed on cyanobacteria (growing in water) they become pink

(B) Neognathae have mobile palate

(C) All flightless birds have been included in palaeognathae

(D) Aves are the largest group of vertebrates

The correct statements are:

a) All

b) B, C and D

c) A, B and D

d) B and D

56. *A bony ring of plate is present in the eyes of:*

a) Ostriches and kiwis

b) Eagles and hawks

c) Owls and eagles

d) Penguins and owls

57. *Pecten is lacking in the eye of:*

a) Owls

b) Bulbuls

c) Cassowaries

d) Kiwis

58. *Consider the following statements about birds:*

(A) Teeth are lacking in all tertiary and recent birds

(B) At the junction between large and small intestines, a pair of caeca are present

(C) The lungs are spongy and distensible

(D) The temperature of the blood is low



The incorrect statements are:

- a) A and B
- b) Band C
- c) C and D
- d) Band D

59. *Which one of the following is not a monogamous bird?*

- a) Kea
- b) Bobwhite
- c) Penguin
- d) Emu

60. *All palaeognathes are flightless, except:*

- a) Kiwis
- b) Rheas
- c) Tinamous
- d) Cassowaries

61. *The upper jaw is movably articulated with cranium in:*

- a) Parrots
- b) Gulls
- c) Puffins
- d) Gallus

62. *Which one of the following is an incorrect statement about galliformes?*

- a) Terrestrial and nonmigratory
- b) Sexual dimorphism is distinct
- c) Polygamous
- d) Beak is provided with a tactile organ

63. *Match column I with column II and select the correct answer using answer codes:*

Column I (Birds) Column II (Skulls)



- (A) *Schizognathous* 1. Parrots
 (B) *Desnognathous* 2. Ratites
 (C) *Aegithognathous* 3. Crows
 (D) *Dromaeognathous* 4. Penguins

Answer codes:

	A	B	C	D
a)	3	2	4	1
b)	2	3	1	4
c)	4	2	3	1
d)	4	1	3	2

64. *Birds showing an inherent capacity of mimicry:*

- a) Mynas
- b) Parrots
- c) Mocking birds
- d) All

65. *Bird having both ovaries:*

- a) Hawk
- b) Ostrich
- c) Rhea
- d) Penguin

66. *Humming bird:*

- a) Sucks nectar
- b) Can fly backwards
- c) Also known as sunbird
- d) All

67. *Furcula of bird is formed by:*

- a) Interclavicle
 - b) Clavicle
 - c) Both clavicle and interclavicle
 - d) Pelvic and pectoral girdle
68. *Flight muscles of birds are attached to:*
- a) Keel of sternum
 - b) Scapula
 - c) Coracoid
 - d) Pygostyle
69. *What is true about birds?*
- a) Their nitrogenous waste product is urea.
 - b) They are omnivorous
 - c) They possess diaphragm.
 - d) They are warm-blooded feathered bipeds.
70. *In birds:*
- a) Heart is four chambered
 - b) Sinus venous is absent
 - c) Only one ovary (left) is functional
 - d) All
71. *The wishbone of bird is derived from:*
- a) Pelvic girdle
 - b) Pectoral girdle
 - c) Vertebrae
 - d) Skull
72. *The skull of bird is:*
- a) Monocondylic
 - b) Dicondylic



- c) Tricondylic
 - d) Tetracondylic
73. *In birds:*
- a) There are 12 pairs of cranial nerves
 - b) Eye power is sharp but smelling power is poor
 - c) Only right aortic arch is present
 - d) All
74. *In birds, dentition is:*
- a) Homodont
 - b) Heterodont
 - c) Acrodont
 - d) Teeth are absent
75. *Birds arose from reptiles and exhibit a significant advancement over reptiles by having:*
- a) Regulated body temperature
 - b) High metabolic rate
 - c) Highly developed sense organs and care of young ones
 - d) All
76. *One of the unique features of avian life is that:*
- a) In them, basic organisation remains fairly uniform
 - b) The basic organisation varies with seasonal change
 - c) The basic organisation may be uniform or variable
 - d) Their eggs are shelled
77. *Birds show differences in:*
- a) Body form and shape of beak
 - b) Flying ability
 - c) Instinctive behaviour
 - d) All

78. *In birds, the tail is used:*
- a) For steering and brake during flight
 - b) Works as a balancing organ during walking or perching
 - c) Both a and b
 - d) None
79. *Air sacs of birds:*
- a) Act as balloons
 - b) Function as bellows
 - c) Regulate and maintain body temperature
 - d) All
80. *The reptilian characters of Archaeopteryx are:*
- a) Nonpneumatic solid bone
 - b) Jaws contain teeth in sockets
 - c) Vertebrae without a pygostyle
 - d) All
81. *The avian characters of Archaeopteryx are:*
- a) Forelimbs modified into wings
 - b) Monocondylic skull
 - c) Presence of merry thought bone
 - d) All
82. *Tail feathers are absent in:*
- a) Eagles
 - b) Vultures
 - c) Kiwis
 - d) Pelicans
83. *Which one of the following birds are monogamous?*
- a) Penguin and Emu

- b) Ostrich and Penguin
 - c) Ostrich and Emu
 - d) Bobwhite and Ostrich
84. *Which one of the following is the national bird of New Zealand?*
- a) Emu
 - b) Ostrich
 - c) Kiwi
 - d) Rhea
85. *The kidney of birds is:*
- a) Metanephric
 - b) Mesonephric
 - c) Both mesonephric and metanephric
 - d) Pronephric
86. *Furcula is found only in:*
- a) Amphibians
 - b) Reptiles
 - c) Aves
 - d) Mammals
87. *Which one of the following is a group of predatory birds?*
- a) Eagle, sparrow hawk, king vulture, kite
 - b) Kite, king vulture, sand piper, crow
 - c) Penguin, sunbird, duck, rhea
 - d) Ostrich, eagle, parrot, pelican, wood pecker
88. *Which one of the following statements is incorrect?*
- a) The heart of birds is four chambered.
 - b) Ostrich is a polygamous bird.
 - c) All birds have copulatory organs.



- d) In birds, the right ovary and oviduct are vestigial.
89. *In ostrich, feet are adapted for:*
- a) Perching
 - b) Swimming
 - c) Running
 - d) Wading
90. *The feet are not adapted for perching in:*
- a) Ducks
 - b) Sparrows
 - c) Owls
 - d) Fowls
91. *In woodpeckers, the feet are adapted for:*
- a) Perching
 - b) Climbing and clining
 - c) Wading
 - d) Raptorial
92. *Oil glands are absent in all flightless birds except:*
- a) Ostriches
 - b) Emus
 - c) Kiwis
 - d) Rheas
93. *Beak is adapted for tearing and piercing in:*
- a) Eagles
 - b) Spoonbills
 - c) Humming birds
 - d) Kingfishers
94. *Tinamus is found in the:*

- a) Oriental region
 - b) Australian region
 - c) Neotropical region
 - d) All
95. *Eggs of birds are:*
- a) Cleidoic
 - b) Megalecithal
 - c) Telolecithal
 - d) All
96. *The posterior part of the body of birds is not adapted for:*
- a) Climbing
 - b) Perching
 - c) Flying
 - d) Swimming
97. *Wing skeleton is lacking in:*
- a) Moas
 - b) Hesperonis
 - c) Penguins
 - d) All
98. *Members of the families accipitridae, falconidae and pandionidae are found in every continent except:*
- a) Europe
 - b) Antarctica
 - c) Australia
 - d) Asia
99. *Which one of the following is applicable to Penguins?*
- a) Bergmann's rule
 - b) Camouflage

- c) Supra-orbital gland that filters excess salt from the blood stream
- d) All
100. *All members of this order have webbed toes:*
- a) Falconiformes
- b) Anseriformes
- c) Gruiformes
- d) Cuculiformes
101. *Consider the following statements with reference to palaeognthae:*
- (A) *Uropygial glands are present*
- (B) *Well-developed pygostyle*
- (C) *Furcula is lacking*
- (D) *Air sac is lacking or ill developed*
- The correct statements are:
- a) All
- b) B, C and D
- c) CandD
- d) None
102. *In birds, the vertebrae are:*
- a) Acoelous
- b) Heterocoelous
- c) Procoelous
- d) Amphicoelous
103. *In which one of the following birds is the double fovea present?*
- a) Sparrows
- b) Parrots
- c) Kingfishers
- d) Mynas

104. *Ducks can:*
- a) Swim
 - b) Walk
 - c) Fly
 - d) All
105. *In which one of the following birds is the urinary bladder present?*
- a) Emus
 - b) Penguins
 - c) Ostriches
 - d) Cassowaries
106. What is incorrect about kiwis?
- a) Well-developed power of smell
 - b) Nocturnal and carnivorous
 - c) Down feathers are present
 - d) Syrinx is lacking
107. The largest order of the class Aves is:
- a) Passeriformes
 - b) Apodiformes
 - c) Trogoniformes
 - d) Falconiformes
108. *Herons belong to the order:*
- a) Gruiformes
 - b) Cuculiformes
 - c) Pelecaniformes
 - d) Ciconiiformes
109. *A bird having a 5th digit is:*
- a) Emu

- b) Rhea
 - c) Moas
 - d) None
110. A bird that does not perch:
- a) Tinamou
 - b) Wood pecker
 - c) Partridges
 - d) Turkeys
111. *Which bird feeds on its own feathers during preening?*
- a) Hornbill
 - b) Snipe
 - c) Grebes
 - d) Bulbul
112. *What is common between dinosaurs, crocodiles and birds?*
- a) Beaks
 - b) Scales
 - c) Air sacs
 - d) Muscular gizzard
113. *In the members of this order, all four toes are united by webbing:*
- a) Pelecaniformes
 - b) Passeriformes
 - c) Procellariiformes
 - d) Ciconiiformes
114. *Totipalmate foot is found in:*
- a) Ostriches
 - b) Crows
 - c) Sparrows

- d) Ducks
115. *Which one of the following is incorrect about air sacs?*
- a) In birds there are nine air sacs
 - b) Air sacs store air
 - c) Allow lungs to maintain constant volume of air
 - d) Directly involved in gaseous exchange
116. *Oil glands, keel, pygostyle and syrinx are absent in:*
- a) Kiwis and humming birds
 - b) Ostriches and swifts
 - c) Wagtails and arctic terns
 - d) Ostriches and Emus
117. *Filoplume and downfeather:*
- a) Work as a balancing organ during walking or perching
 - b) Used as steering brake during flight
 - c) Help in insulation of the body
 - d) All
118. *The copulatory organ is absent in all birds except:*
- a) Ducks
 - b) Geese
 - c) Ratitae
 - d) All
119. *Birds are the first group of vertebrates:*
- a) Which are warm-blooded and adapted for the aerial mode of life
 - b) With developed parental care and body temperature regulation
 - c) Have extra embryonic membranes and shelled eggs
 - d) All
120. *The arrangement of feathers on the body is called:*

- a) Pterylosis
 - b) Pterylae
 - c) Apteria
 - d) Guano
121. *Pigeon milk is secreted from:*
- a) Crop glands
 - b) Gizzard glands
 - c) Intestinal glands
 - d) Liver
122. *Ostrich, kiwi and penguin are:*
- a) Running birds
 - b) Flightless birds
 - c) Predatory birds
 - d) Arboreal birds and are not found in India
123. *Which one of the following is correct about ratites?*
- a) Tail is functionless
 - b) Down feathers are absent
 - c) Penis is present
 - d) All
124. *The syrinx is absent in all ratites except:*
- a) Kiwis
 - b) Rheas
 - c) Ostriches
 - d) Emus
125. *The upper jaw is movably articulated with the cranium in:*
- a) Parrots
 - b) Gulls

- c) Pigeons
 - d) Bob whites
126. *The tongue is protrusible in:*
- a) Crows
 - b) Humming birds
 - c) Wood nightjars
 - d) Snowy owls
127. *The retina contains only rod cells in:*
- a) Owls
 - b) Parrots
 - c) Pigeons
 - d) Bulbuls
128. *Which one of the following is an extinct bird?*
- a) Snowy owl
 - b) Lyre bird
 - c) Pittas
 - d) Dodo
129. *Birds differ from bats due to the absence of:*
- a) Diaphragm
 - b) Homoiothermy
 - c) Sinus venous
 - d) Four chambered heart
130. *The longest annual migration is covered by:*
- a) Wagtails
 - b) Hoopoes
 - c) Flamingos
 - d) Artic terns



131. *Which one of the following an incorrect match?*
- a) Flurcula - Ratites
 - b) Uropygial gland... Kiwi.
 - c) Syrinx - Rhea
 - d) Functionless tail...Ostrich
132. *The feet of heron are:*
- a) Wading type
 - b) Raptorial type
 - c) Swimming
 - d) Scratching
133. *Who is popularly known as the 'Bird's Man of India'?*
- a) Birbal Sahni
 - b) Salim Ali
 - c) J C Bose
 - d) Lalji Singh
134. *If a bird is transferred from 28°C to 8°C, its body temperature will change to:*
- a) 28°C
 - b) 8°C
 - c) 18°C
 - d) Remain unchanged
135. *Perching mechanism is a characteristic of:*
- a) Aquatic birds
 - b) Terrestrial birds
 - c) Aerial birds
 - d) Flight birds
136. *In birds, the beaks are adapted to feed on:*
- a) Insects and larvae



- b) Grains
 - c) Fish and flesh
 - d) All
137. *The ability of young birds to return to the original ground of their parents is due to:*
- a) Intuition
 - b) Instinct
 - c) Intuition and instinct
 - d) Intelligence
138. *Which one of the following is not a characteristic of birds?*
- a) Feathers
 - b) Pecten
 - c) Pneumatic bones
 - d) Copulatory organ
139. *Which one of the following is well developed in young birds, but may become extremely reduced or disappear in adults?*
- a) Bursa of fabricius
 - b) Pecten
 - c) Olfactory lobes
 - d) Urinary bladder
140. *In birds:*
- a) Crop, liver and ovary are absent
 - b) Teeth, gall bladder and urinary bladder are absent
 - c) Forelimbs, copulatory organ and sound box are absent
 - d) Jaws, teeth and pectoral girdle are absent
141. *Sparrows are found all over the world except:*
- a) Tropical South America and Antarctica
 - b) New Zealand
 - c) Andaman and Nicobar Island



- d) Africa
142. *Pigeon's milk is rich in:*
- a) Minerals
 - b) Protein
 - c) Fat
 - d) Vitamin
143. *Tinamus is an endemic genus of flightless birds found in the:*
- a) Oriental region
 - b) Neotropical region
 - c) Australian region
 - d) Ethiopian region
144. *Unique characteristics of birds are:*
- a) Endothermal
 - b) Presence of feathers and modification of forelimbs into wings
 - c) Development of extra embryonic membranes
 - d) Cleidoic eggs
145. *The common feature among ducks, geese and swans is:*
- a) They lack a syrinx
 - b) All toes are webbed
 - c) They are incapable of flying well
 - d) They are vegetarian
146. *The skeleton is solid and air sacs are absent in:*
- a) Rheas
 - b) Kiwis
 - c) Penguins
 - d) Ducks
147. *Young ones of birds are:*



- a) Precocial
 - b) Altricial
 - c) Both (a) and (b)
 - d) None
148. *Feathers of birds are made up of:*
- a) Keratin
 - b) Chromo protein
 - c) Fibroin
 - d) Protein and polysaccharide
149. *Which one of the following statements is incorrect about the members of the class aves?*
- a) Renal portal system is well developed
 - b) Oviparous
 - c) Eggs develop by external incubation
 - d) Sexual dimorphism is found in some birds like parrot and peacock
150. *The largest and most powerful flight muscle is:*
- a) Pectoralis major
 - b) Pectoralis minor
 - c) Coraco-branchialis longus
 - d) Coarco-branchialis brevis
151. *In birds, bones are:*
- a) Solid having bone marrow
 - b) Pneumatic having bone marrow
 - c) Pneumatic and without bone marrow
 - d) Solid and without bone marrow
152. *What is common between crocodiles and birds?*
- a) Pecten
 - b) Twelve pairs of cranial nerves

- c) Cerebellum divided into a median vermis and lateral flocculi
d) All
153. *Birds lack:*
- a) Accommodation power
b) Parental care
c) Alveoli
d) None
154. *The only vertebrates having fused collar bones:*
- a) Amphibia
b) Reptilia
c) Aves
d) Mammalia
155. *Uncinate processes of the ribs are a characteristic of:*
- a) Sharks
b) Reptiles
c) Aves
d) Mammals
156. *Consider the following statements with reference to birds:*
- (A) Olfactory lobes are rudimentary*
(B) Cerebral hemispheres are large
(C) Neopallium is well developed
(D) There are 12 pairs of cranial nerves
- The correct statements are:
- a) All
b) Band C
c) A, B and D
d) B, C and D

157. *During gliding, the wings of birds are held at an angle of:*
- a) 30°
 - b) 60°
 - c) 90°
 - d) 120°
158. *Which one of the following possesses good colour vision?*
- a) Fishes
 - b) Birds
 - c) Primates
 - d) All
159. *Amphicoelous vertebrae are a characteristic of:*
- a) Archaeopteryx
 - b) Ostrich
 - c) Kiwi
 - d) Humming bird
160. *The arrangement of pterylae varies in different:*
- a) Species
 - b) Families
 - c) Orders
 - d) All
161. *The skull of a pigeon lacks:*
- a) Vomer
 - b) Palatine
 - c) Pterygoid
 - d) Jugal
162. *Only the skull is pneumatic in:*
- a) Kiwis

- b) Penguins
 - c) Ostriches and rheas
 - d) Penguins and kiwis
163. *All four toes turn forward in:*
- a) Ostriches
 - b) Swifts
 - c) Parrots
 - d) Wooden peckers
164. *Zygodactylous condition is applicable to:*
- a) Rheas
 - b) Rheas and emus
 - c) Parrots and woodpeckers
 - d) Barn owls and parrots
165. *The only vertebrate known to be capable of extracting nourishment from bee wax:*
- a) Barbets
 - b) Honey guides
 - c) Toucans
 - d) Bee eaters
166. *Which one of the following activities is faster in birds in comparison with other animals?*
- a) Heart beat
 - b) Digestion
 - c) Breathing
 - d) Chewing
167. *The order having the largest living birds:*
- a) Struthioformes
 - b) Sphenisciformes
 - c) Passeriformes



d) Apodiformes

168. Consider the following statements:

(A) *Dromaeognathous* palate shows a number of reptilian features

(B) In *Apteryx*, the vomer is long and unites with the palatine and pterygoid behind

(C) In *schizognathous* palate, the vomer is either absent or small

(D) In *aegihognathous* palate, the vomer is broad and truncates in front

The correct statements are:

a) All

b) A and B

c) Band D

d) A and D

169. Which one of the following is not applicable to birds?

a) Pneumatic bones

b) Ectothermic

c) Feathers

d) Double circulation

170. A humming bird flies:

a) Up and Down

b) Forward and backward

c) Upside down

d) All

171. Fastest swimming bird is:

a) Gentoo penguin

b) King penguin

c) Adelie penguin

d) Cape pigeon

172. Match column I with column II and select the correct answer using answer codes:



<i>Column I</i>	<i>Column II</i>
<i>(A) Clinging feet</i>	<i>1. Emu</i>
<i>(B) Wading feet</i>	<i>2. Humming bird</i>
<i>(C) Raptorial feet</i>	<i>3. Vulture</i>
<i>(D) Running feet</i>	<i>4. Heron</i>

Answer Codes:

	A	B	C	D
a)	3	2	1	4
b)	2	4	3	1
c)	4	2	1	3
d)	2	3	4	1

True or False

- Humming birds have split tongues. TRUE
- The heart of a humming bird beats 615 times in a minute. TRUE
- Ostriches are an endangered species. FALSE
- Ostriches lack keel in the sternum. TRUE
- Ostriches bury their head in the sand. FALSE
- Pigeons can see ultraviolet light. TRUE
- Young ones of neognathae are precocial. FALSE
- Kiwis and emus have the claws on the second digit. TRUE
- Nocturnal birds mainly have the rods in the retina. TRUE
- Humming birds have the highest metabolism of all the animals during the course of flight (except insects). TRUE
- In birds, the volume of air changes with inhalation and exhalation. FALSE

12. Air flow in birds is bidirectional. FALSE
13. Air sacs participate in gaseous exchange. FALSE
14. Air sacs ventilate lungs. TRUE
15. Birds can breathe through mouth or nostrils. TRUE
16. The number of hollow bones in different species of birds remains the same. FALSE
17. The ability of an avian kidney to concentrate urine is as good as a mammalian kidney. FALSE
18. In a majority of birds, transfer of sperms occurs through the cloaca. TRUE
19. Cardiac output in birds is typically greater than that of mammals for the same body mass. TRUE
20. In birds, both upper and lower jaws move when the bird opens its mouth. TRUE