MODEL PAPER ZOOLOGY C
Quaid-i-Azam University
Session 2012-2013

ROLL NO: ---------------

ZOOLOGY PAPER -C  B.Sc -PART-I

Time: 3 Hours

Max. Marks: 27

NOTE: Cutting and over writing is not allowed in objective part. In Part -I all questions are compulsory. Attempt SIX parts from Q 5 of Part-II and any two questions from Part-III.

Q NO.1: Correct the statement. Mark tick against the correct ones. (0.25 x 4 =1)

<table>
<thead>
<tr>
<th>Sr. #</th>
<th>Statement</th>
<th>True/False</th>
<th>Correct statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nails and hair are modification of Hypodermis</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>Pain receptors are also called Nociceptors.</td>
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<tr>
<td>3</td>
<td>Vitamin necessary for blood clotting in our body is Vitamin A</td>
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<tr>
<td>4</td>
<td>Regurgitation of food from stomach to esophagus is prevented by Pyloric sphincter.</td>
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Q NO.2: Choose the best choice for the statement from the multiple choices given below: (0.25 X 8 =2)

1: -------- promote synthesis of carbohydrates and break down of protein; initiates anti-inflammatory and antiallergic action; mediates response to stress
   a: Glucagon   b: Mineralocorticoids   c: Cortisol   d: Aldosterone

2: Which of the following characterize the evolution of the vertebrate nervous system?
   A: bilateral symmetry  b: a notochord  c: a tubular nerve cord  
   d: all of the above (a-c)

3: Rabbit, horses and rats digest cellulose by maintaining a population of microorganisms in their unusually large
   a: Rumen   b: Gizzard   c: Cecum   d: Appendix

4: The axial skeleton is made up of the
   a: Skull, vertebral column and sternum  b: Pectoral girdle and pelvic girdle
   c: Pectoral girdle, pelvic girdle and sternum  d: Skull, vertebral column, sternum and ribs

5: The kidneys produce the hormone __________.
   a. Erythropoietin  B. Gastrin   c. Secretin   d. HCG

6: The tympanum is modified ________ stretched over a cartilaginous ring
   a. receptors  b. integument  c. ossicles  d. Eustachian tube
7: Salivary glands are found in all of the following except most
a. fishes  b. snakes  c. birds  d. fishes and birds.

8: Which one of the following is purely motor nerve
A. Facial  b. Abducens  c. Facial  d. Vagus

Q NO.3 Fill in the blank by appropriate word. (0.25 X 8=2)

1. The outermost covering of parasitic flukes and tapeworms is a complete syncytium called a  
   ____________________________.
2. Dermis of cartilaginous fishes contain bone in the form of small placoid scales called  
   ____________________________.
3. Some arthropods possess highly elastic protein called  
   ____________________________.
4. The repolarization phase is characterized by an increase in ions towards outside of the  
   neuron.
5. The active ingredient in most flea sprays and powder is  
   ____________________________.
6. ____________________________ coordinates motor activities associated with limb movement and  
   maintain posture.
7. Compound eyes are best developed in  
   ____________________________.
8. ____________________________ digests proteins into peptides and amino acids.

Q.4 Label and comment the diagram (1+1= 2)

Diagram is to be pasted

ZOOCLOGY -C

Part-II (1X6=6)

Q.5
1. Differentiate between electrical and chemical synapse.
2. How amoeboid movement carried out.
3. Differentiate between hydrostatic and exoskeleton.
4. Name the hormones released by hypotalamus and anterior pituitary.
5. How ciliated protozoa obtained their heterotrophic nutrition?
6. What is sliding filament model of muscle contraction.
7. What is bile? What role it play in the digestion.
8. Differentiate between fixed receptor and mobile receptor mechanism.
9. Differentiate between sympathetic and parasympathetic nervous system

Part-III (2 X 7=14)

Q.6 Discuss in detail the hormonal control of ecdysis in crustaceans and insects. Support your answer with the help of flow sheet diagrams.

Q.7 Write brief notes on the following and draw labeled diagram to support your answer, (4+3=7)
   a. Mamalian Skin
   b. How resting membrane potential is converted into action potential. Transmission across a synapse

Q.8 a. Write a detailed note on photoreceptors of invertebrates. (3 ½ +3 ½=7)
   b. Explain role of small intestine in digestion.