POULTRY NUTRITION AND PHYSIOLOGY
(Theory)

1. Define vitamins and classify the same. Enumerate the functions, deficiency symptoms and sources of Vitamin A. 1+2+3=6

2. Fill up the blanks (any seven) : 1×7=7
   (a) Chickens have no _______ gland.
   (b) Bones of the chicken are _____and related to _______ system.
   (c) The auditory apparatus of the bird is anatomically of _______ type.
   (d) The chicken has_______ pairs of air sacs.
   (e) In chicken, evaporative cooling takes place through the____ and ______.
   (f) ______ and _______are the most commonly used as vegetable protein supplement.
   (g) ______ and ______are the most commonly used as animal protein supplement.
   (h) Each avian kidney has_______ distinct lobes.
Enumerate the criteria to select the feed ingredients. Name the components for which usual chemical analysis is done.  

Give the requirement of broiler starter and broiler finisher diets in terms of energy, crude protein, calcium, available phosphorus, lysine and methionine based on BIS specifications.

Define balanced ration. Enumerate four points to be considered for feed formulation.

Enlist the methods of feeding. How is restricted feeding beneficial?

(a) संतुलित रशन की परिभाषा लिखिए। भोज्य (चारा) बनाने के लिए विचारणीय चार बिन्दु लिखिए।

(क) भरण (चारा खिलाने) की विधियों बताएं। निर्मित भरण किस प्रकार लाभदायक है?
6. Write true (T) or false (F) for the following statements :

(a) Broken rice can be used as a good substitute for maize.
(b) Rice bran and rice polish are excellent sources of many water-soluble vitamins.
(c) Molasses can be used to replace cereal grains upto 20 - 25% of the ration.
(d) Mustard meal is deficient in Lysine.
(e) Silkworm pupae meal is a good source of energy.