



KERALA AGRICULTURAL UNIVERSITY
B.Tech. (Ag. Engg.) 2016 Admission
V Semester Final Examination-January 2019

Fape.3104 Agricultural Structures and Environmental Control (2+1)

Marks: 50
Time: 2 hours

I Fill up the following **(10x1=10)**

- 1 In a stall barn, the floor area (in m²) required for each cow is _____
- 2 Mangers used in barns should have width ranging from _____
- 3 Bag storage structures are often used to store grains from _____ to _____ tonnes.
- 4 Safe grain moisture content for storage is about _____ percent.
- 5 The stored fodder is known as _____

State whether following statements are true or false

- 6 Barbed wire fencing is preferred on dairy farms
- 7 A floor area of 0.36m² per bird is usually provided.
- 8 Deep litter poultry housing aims at keeping poultry inside a shed all the time.
- 9 In loose housing barn, the cows are housed and milked in the same building.
- 10 The minimum slope which should be provided in the gutter so that there is unrestricted flow of drainage water into manure pit outside the barn is 3.5%.

II Write Short notes on any FIVE of the following **(5x2=10)**

- 1 Loose Housing Barn
- 2 Farmstead
- 3 Rural Roads
- 4 Silo
- 5 Bag storage structure
- 6 Sources of water supply at farmstead
- 7 Stanchion Barn

III Answer any FIVE of the following. **(5x4=20)**

- 1 What factors should be considered for location of Farmstead?
- 2 What do you understand by fencing? Enlist the types of fencing and Explain Barbed wire fencing with figure.
- 3 Enlist types of silo. Explain pit silo in brief.
- 4 Sources of farmstead water supply.
- 5 What are the storage structures? Explain Bukhari type storage structure with neat figure.
- 6 Physiological reaction of livestock to solar radiation and environmental factors.
- 7 Different components of deep litter poultry system.

IV Answer any ONE of the following **(1x10=10)**

- 1 Importance of aeration during moisture and temperature changes in stored grain.
- 2 What are the requirements of good storage structure? Differentiate between deep bin and shallow bin.
