# KERALA AGRICULTURAL UNIVERSITY

B.Tech (Agrl.Engg.) 2014 Admission VI Semester Final Examination-July-2017

	Cat.	No:	Phpt.	3205
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Title: Agricultural Structures and Environmental Control (2+0)

Marks: 50

Time: 2 hours

#### I Fill up the blanks/State True or False

1. Location of milk house/ milk room is generally placed at about ----- m away from barn.

- 2. The primary purpose of the silo is to promote ----- of the silage.
- 3. Open air barn is also known as -----
- 4. The width of manger varies from----- To -----
- 5. ----is the ideal fencing for poultry houses, rabbits and goats.
- 6. The average capacity of the septic tank should not be less than -----
- 7. Earth roads are used in places where the traffic is ------
- 8. For poultry housing in warm climate, window area should be 25% of ------
- 9. Farm stead area usually varies form ----- % of total farm area.
- 10. Transverse slope given to road surface is called -----

# II Write short notes/answers on any FIVE of the following

(5x2=10)

- 1. Differentiate Trench silo and pit silo
- 2. What are the types of poultry houses being used in India?
- 3. Differentiate 'Head to Head 'and 'Tail to Tail' type barns
- 4. What are the environmental requirements of poultry?
- 5. Draw the cross section of an earth road.
- 6. What is composting of biomass?
- 7. Differentiate between BOD and COD.

#### III Write short answers on any FIVE

(5x4=20)

- 1. What are the factors affecting planning of a farm stead?
- 2. Explain the deep litter poultry housing.
- 3. Discuss the benefits of a good system of roads.
- 4. Discuss the design of a compost pit.
- 5. List the advantages and disadvantages of electric fencing
- 6. Discuss the primary and secondary treatment of food plant waste water.
- 7. Explain briefly the environmental factors to be considered while planning a dairy barn.

### IV Write essay on any ONE

(1x10=10)

- 1. Explain with figure the construction of a stanchion barn.
- 2. Design a trench silo for a small farm having the following herd. The silage is fed 160 days in a year at the rate of 3.4 kg per 100 kg of animal body weight.

Animal Breed	Body weight per animal (kg)	Total number of animals	Rate of feeding per 100 kg of body
1. 1			weight (kg)
Murrah buffaloes	600	50	4.0
Hariana cows	400	40	3.0
Bullocks	500	- 30	3.5
Heifers	200	20	3.0

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