



KERALA AGRICULTURAL UNIVERSITY
B.Sc (Hons.) Forestry 2017 Admission
III Semester Final Examination-January 2019

Narm.2104

Forest Entomology (1+1)

Marks: 50
Time: 2 hours

I State True or False: (10x1=10)

- 1 The white grub infestation is more in sandy soil.
- 2 *Asphondylia tectonae* produces canker in the stem of teak.
- 3 *Alectrogystia cadambae* lays its eggs on tender leaves of teak.
- 4 Thick coating of seedbeds with wood ash reduces the damage by cut worms.
- 5 *Sitophilus rugicollis* under go hibernation in the soil.
- 6 The white ants are harmful as well as helpful insects.
- 7 A pure even aged plantation is less prone to insect damage.
- 8 Sal heart wood borer, *Hoplocerambyx spinicornis* oviposits and breeds in felled and wind throw sal trees.
- 9 EIL is always higher than the ETL.
- 10 *Hypsipyla robusta* in India consists of five generations in a year.

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

- 1 Natural and Applied control of insects
- 2 Termite mound poisoning
- 3 Bark beetles
- 4 Legal control
- 5 Non insect pests of Forest nursery
- 6 Uses of Lac
- 7 Species of honeybees

III Answer ANY FIVE of the following (5x4=20)

- 1 Enlist the major and minor insect pests of forest nursery. Explain the biology and nature of damage by white grubs.
- 2 Control measures for forest seed pests in the storage.
- 3 Biological control- definition, advantages and disadvantages.
- 4 Different bee hive products and explain the methods of wax extraction.
- 5 Insect pests of teak and explain the various control measures against *Hyblea puera*
- 6 Mulberry and non mulberry silkworms and differentiate between reelable and non reelable silk
- 7 Bio ecology, nature of damage and management of Eucalyptus gall wasp

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

- 1 Silvicultural methods of pest control
- 2 Sal heart wood borer
