

CERTIFICATE IN SERICULTURE (CIS)

Term-End Examination

June, 2013 00831

BLP-004 : CROP PROTECTION

Time : 2 hours

Maximum Marks : 50

Note : Answer *any five* questions. Question - 1 is *compulsory*.

1. Answer in *one* sentence. (*Any ten*) 10x1=10
- (a) Name the pathogen that causes leaf rust in mulberry.
 - (b) To which family *Exorista bombycis* belongs ?
 - (c) Which disease of muga silkworm is called Phularog ?
 - (d) What is the scientific name of the hairy caterpillar attacking eri silkworm host plants ?
 - (e) Which is the biocontrol agent of uzifly attacking *Bombyx mori* ?
 - (f) What is the name of the symptom caused by jassid attack in mulberry ?
 - (g) What is the chemical name of Dithane M-45 ?
 - (h) What is the common name of the pest, *Holotrichia serrata* ?

- (i) What is the causal organism of leaf spot disease in eri silkworm host plants ?
- (j) Which is the silkworm disease that transmits from one generation to another ?
- (k) Which is the pest prevalent in silkworm egg production centres ?
- (l) Which is the parasitoid that attacks muga silkworm ?

2. Tick (✓) the correct answer : **10x1=10**

- (a) Microsporidiosis (pebrine disease) in tasar silkworm is caused by :
 - (i) *Nosema Mylittensis*
 - (ii) *Beauveria bassiana*
 - (iii) *Nosema bombycis*
 - (iv) *Pleistophora sp.*
- (b) *Odontotermes sp.* is the scientific name of :
 - (i) Cutworm
 - (ii) Jassid
 - (iii) Termite
 - (iv) None of the above
- (c) Uzifly lays eggs :
 - (i) In the body of silkworm
 - (ii) On the body of silkworm
 - (iii) Away from the body of silkworm
 - (iv) None of the above

- (d) Nursery-Guard contains :
- (i) Dithane M-45
 - (ii) *Trichoderma Pseudokoningii*
 - (iii) Bavistin
 - (iv) Karathane
- (e) The signal word 'DANGER' indicates that the product is :
- (i) Highly toxic
 - (ii) Toxic
 - (iii) Slightly toxic
 - (iv) Moderately toxic
- (f) Chlorine dioxide is a :
- (i) Room disinfectant
 - (ii) Bed disinfectant
 - (iii) Silkworm growth promoter
 - (iv) None of the above
- (g) *Terminalia arjuna* is the food plant of :
- (i) Eri silkworm
 - (ii) Tasar silkworm
 - (iii) Muga silkworm
 - (iv) Mulberry silkworm
- (h) Preying mantis is a :
- (i) Predator
 - (ii) Pathogen
 - (iii) Parasitoid
 - (iv) None of the above
- (i) *Fusarium solani* attacks mulberry :
- (i) Shoot (ii) Stem
 - (iii) Leaf (iv) Root

- (j) *Tetrastichus howardi* is recommended for control of :
- (i) cutworm
 - (ii) Leaf roller
 - (iii) Bihar hairy caterpillar
 - (iv) Termite

3. Answer *any four* in 5-6 sentences : 4x2.5=10

- (a) Chemical control of root rot disease
- (b) Symptoms of virosis
- (c) Vijetha
- (d) Biological control of uzifly
- (e) Precautions to be taken after spraying fungicide

4. What are the different diseases affecting mulberry silkworm ? Identify one symptom/sign for each disease. Briefly discuss the disease management of mulberry silkworm. 10

5. Write notes on *any five* in 2-3 sentences : 5x2=10

- (a) Chemical control of uzifly
- (b) Symptoms of pebrine in *B.mori* larva
- (c) Soil injector
- (d) *Holotrichia serrata*
- (e) Fusarium wilt
- (f) *Blepharipa zebina*
- (g) Root knot disease.

6. Give an account of the factors responsible for mulberry pest outbreak. Explain the symptoms of tukra in mulberry. 10
 7. Enumerate the parasites and predators of tasar silkworm. Give an account on the occurrence, damage and management of *Blepharipa zebina*. 10
 8. Discuss about fungicides and their toxicity. Describe the equipments used for spraying of fungicides. 10
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