

CERTIFICATE IN SERICULTURE

Term-End Examination

June, 2010

BLPI-003 : SILKWORM REARING

Time : 2 hours

Maximum Marks : 50

Note : This paper has three questions. Answer any two questions. Marks for each question are indicated against it.

1. (a) Answer the following in one sentence each : 15x1=15
- (i) The silkworm larval body is divided into how many regions ?
 - (ii) Define univoltine silkworm breeds ?
 - (iii) Give 4 examples for mulberry multivoltine silkworm breeds.
 - (iv) What is disinfection ?
 - (v) What is brushing of silkworm larvae ?
 - (vi) What are the commonly used disinfectants in sericulture.
 - (vii) What is metamorphosis ?
 - (viii) Explain what is diapoure.
 - (ix) Name the different methods of late age silkworm rearing.
 - (x) What is mounting ?
 - (xi) What are the common types of mountages used in sericulture ?

- (xii) How newly hatched tasar larvae are transferred to food plants ?
 - (xiii) What are the different rearing methods used in eri silkworm rearing.
 - (xiv) What is the meaning of cost of production.
 - (xv) What is renditta.
- (b) Write short notes on *any five* in 3-4 sentences each : **5x2=10**
- (i) Bed cleaning and it's importance
 - (ii) Moulting care
 - (iii) Double Cocoons
 - (iv) Flame gun
 - (v) Break even point
 - (vi) Location suitable for rearing house
 - (vii) Black boxing of silkworm eggs.

2. (a) Fill in the blanks with appropriate word : **15x1=15**
- (i) Mulberry shoots are preserved in _____ position.
 - (ii) _____ silkworm is the only fully domesticated vanya silkworm.
 - (iii) Muga rearing is done outdoors on _____ and _____ trees.
 - (iv) _____ stage is transient stage between larval and pupal.

- (v) _____ °C temperature and _____ % relative humidity are ideal for incubation.
- (vi) The eggs at _____ stage are kept under total darkness to get uniform hatching on single day.
- (vii) The mulberry leaves having _____ % moisture is considered good for brushing of silkworm larvae.
- (viii) Shoot feeding requires _____ % more rearing hour floor area compared to tray rearing method.
- (ix) Silkworms are photo sensitive and prefer dim light of _____ to _____ lux.
- (x) _____ litre of disinfectant solution is required to disinfect 1 sq.mt. floor area of rearing hour.
- (xi) Man-day refers to the quantum of work done by a human being in one day of _____ hours.
- (xii) Benefit cost ratio should be equal to _____ for continuing business.
- (xiii) Dupion silk can be reeled from _____ cocoons.
- (xiv) Removal of odd shaped and defective cocoons from the lot is called _____ of cocoons.

(xv) A silkworm can spin silk filament length ranging from _____ M to _____ M depending on breed.

(b) Write "True" or "False" : 10x1=10

- (i) The muga silkworm is Bivoltine in nature.
- (ii) Premature collection / early harvesting of cocoons improves quality of cocoons.
- (iii) Wooden harvester is used for quick harvesting of cocoons in rotary mountages.
- (iv) Reelability of thin shelled cocoons is very poor.
- (v) Freshly harvested cocoons with live pupa inside is called green cocoons.
- (vi) Dupion silk is a regular smooth silk reeled from good cocoons.
- (vii) Cost benefit ratio should be equal to zero for continuing the business.
- (viii) Cost incurred on equipments can be classified under fixed (non recurrings) costs.
- (ix) The CRC should be closer to the cluster of villages with large number of rearers.
- (x) Transportation of the chawki worms should be done during the day time.

3. (a) Answer the following in 5-6 sentences each.

Answer *any five* :

5x3=15

- (i) What are the qualities of a good mountage ?
- (ii) Describe the larval protection measures observed in silkworm rearing ?
- (iii) Write the recommended quantity of mulberry shoots / leaves required for III, IV and V instar of silkworm rearing of loodfes of CSR hybrids.
- (iv) Explain briefly the brushing method adopted during monsoon in muga silkworm.
- (v) List out the different variable cost items involved in mulberry sericulture (mulberry cultivation and silkworm rearing).
- (vi) Which location is suitable for establishment of CRC.
- (vii) What types of leaf is selected for feeding chawki worms and why ?

(b) Differentiate between the following

(3-4 sentences each) :

5x2=10

- (i) Tray rearing and shoot rearing.
- (ii) Out of moult and under moult larvae.

- (iii) Double cocoon and thin end cocoons.
 - (iv) Mono period and poly period resources.
 - (v) Rendilta and shell ratio.
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