

## SCHEME OF THEORY EXAMINATION

Sl.No.	Semester	Paper	Marks for theory	Marks for Internal Assessment	Total
1	I	I	60	10	70
2	II	II	60	10	70
3	III	III	60	10	70
4	IV	IV	60	10	70
5	V	V	80	20	100
6	V	VI	80	20	100
7	VI	VII	80	20	100
8	VI	VIII	80	20	100
<b>Total</b>			<b>560</b>	<b>+ 120</b>	<b>680</b>

## QUESTION PAPER PATTERN

### I-IV SEMESTER

Sl. No	Types of question	Marks /Question	No. of Questions to be asked	No of Questions to be answered	Total
1	Objective	1	05	05	05
2	Short answer	3	07	05	15
3	Medium Type	5	06	04	20
4	Long answer/ Essay	10	03	02	20
<b>Total</b>					<b>60</b>

### V- VI SEMESTER

Sl. No	Types of question	Marks /Question	No. of Questions to be asked	No of Questions to be answered	Total
1	objectives	1	6	6	6
2	Short answer	3	10	8	24
3	Medium Type	5	06	04	20
4	Long answer/ Essay	10	05	03	30
<b>Total</b>					<b>80</b>

### Distribution of Internal Assessment.

1. Three class test for 10 Marks each will be conducted at the end of each semester.

**OR**

One class test for 30 Marks will be conducted at the end of each Semester.

**Note:** Examination question paper pattern will be followed for every class test.

## **Scheme of Practical examination: -**

**a) Distribution of Marks (Semester wise):**

<b>Sl.No.</b>	<b>Semester</b>	<b>Marks for practical</b>	<b>Marks for Internal assessment</b>
1	I	20	10
2	II	20	10
3	III	20	10
4	IV	20	10
5	V	80	20
6	VI	80	20
<b>Total Marks for Practicals =240</b>		<b>+ 80</b>	<b>=320</b>

**b) Distribution of Marks for Practicals:**

<b>Semester</b>	<b>Marks</b>	<b>Type</b>	<b>Marks</b>
I-IV	a) 20 marks for practical b) 10 marks for internal assessment	a) One question from Sericultural Botany Part b) One question from Silkworm Biology Part c) Identification and Commenting (1.5X4)	07 07 06
V-VI	a) 40 marks for practical b) 10 marks for Internal assessment	a) One major question b) One minor question c) One minor question d) Identification and Commenting (5X4)	12 20 08 10

**Note: Questions will be covered from all sections**

### **Internal assessment for practicals:**

<b>Semester</b>	<b>Distribution</b>	<b>Marks</b>	<b>Duration</b>
<b>I-IV</b>	a) Based on the performance of students at every practical / field work b) Submission of practical records, herbarium and rearing / tour report	05 05	3 Hrs
<b>V-VI</b>	a) Based on the performance of every student in rearing work / mulberry cultivation and reports b) Submission of practical records and tour report	15 05	4 Hrs

### **Summary of distribution of Mark:**

<b>Theory</b>		<b>Practicals</b>		
<b>Semester</b>	<b>Examination proper</b>	<b>Internal assessment</b>	<b>Examination proper</b>	<b>Internal assessment</b>
<b>For each semester for I-IV</b>	60 Marks	10 marks (one class test and one assignment 05+05=10)	20	10 (5 for regular assessment, 5 for submission of records)
<b>For V-VI</b>	80	20 (one class test for 15 marks and one assignment for 05 marks) + 20 (one class test for 15 marks and one assignment for 05 marks).	40 40	20 20

## **SCHEME OF PRACTICAL EXAMINATION**

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### **Practical I**

**Max. Marks - 20**

**Q 1.** Taxonomic description of any one of the food plants of mulberry/non-mulberry silkworms.

- 07 marks

Note: Distribution of marks

- a) Identification of family / classification - 1.5
- b) Diagnostic features - 4.0
- c) Sericultural importance - 1.5

**OR**

Sectioning and Mounting of petiole, leaf lamina, stem and root.

Note: Distribution of marks

- a) Preparation - 2.0
- b) Identification - 03
- c) Procedure - 02

**Q 2.** Any one of the following:

- 07 marks

Male/ female reproductive system/ silk glands/ digestive system / nervous system/sex separation at larval/ pupal / moth stage.

Note: Distribution of marks

- a) Dissection/ sex separation - 4.0
- b) Labeled diagram - 3.0

**Q 3.** Identification:

06 marks ---1.5 marks each.

Any FOUR from the practical syllabus

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### **Practical II**

**Max. Marks - 20**

**Q 1.** Determination of soil pH/ grafting/ layering/ water holding capacity.

- 07 marks

Note: Distribution of marks

- a) Procedure - 2.0
- b) Diagramme - 1.0
- c) Experiment - 4.0

**Q 2.** Calculations and procedure about disinfection/ brushing/ bed cleaning/ hatching Percentage

-- 07 marks

Note: Distribution of marks

- a) Procedure - 2.0
- b) Experiment - 5.0

**Q 3.** Identification:

Any FOUR from the practical syllabus.

06 marks ---1.5 marks each.

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**Practical III****Max. Marks - 20**

- Q 1.** Separation of photosynthetic pigments/ water holding capacity of potato tubers / Stomatal index  
-- 07 marks

Note: Distribution of marks

- a) Procedure - 2.0
- b) Diagramme - 1.0
- c) Experiment - 4.0

- Q 2.** Mounting of silkworm embryo (7<sup>th</sup>/ 8<sup>th</sup>/ 9<sup>th</sup> day) -- 07 marks

Note: Distribution of marks

- a) Procedure - 2.0
- b) Experiment - 5.0

**Q 3. Identification:**

Any FOUR from the practical syllabus

06 marks —— 1.5 marks each.

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**Practical IV****Max. Marks - 20**

- Q 1.** Temporary mounting of any one of the following -- 07 marks  
Leaf spot/ leaf rust/ powdery mildew/ root knot nematode of mulberry.

Note: Distribution of marks

- a) Identification - 1.5
- b) Sectioning, staining and mounting - 4.0
- c) Labelled diagram - 1.5

- Q 2.** Temporary mounting of any one of the following. -- 07 marks  
Pebrine spore/ nuclear polyhedral bodies/ mycelia and conidial spores.

Note: Distribution of marks

- a) Identification - 1.0
- b) Staining and mounting - 4.0
- c) Procedure - 2.0

**Q 3. Identification:**

Any FOUR from the practical syllabus.

06 marks —— 1.5 marks each.

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**Practical V****Max. Marks - 40****Q 1. Temporary squash preparation of mitotic/ meiotic chromosomes**

Onion root tip/ grasshopper testis/ silkworm testis.

-- 12 marks

Note: Distribution of marks

- a) Procedure - 2.0
- b) Staining and preparation of chromosomes - 6.0
- c) Identification of stages - 2.0
- d) Labelled diagram - 2.0

**Q 2. Any one of the following:**

Mother moth examination/assessment of cocoons of pure races for cocoon weight, shell weight and other racial characters.

Note: Distribution of marks

- a) Procedure - 04.0
- b) Experiment - 06.0

**Q 3. Any one of the following:**

Evaluation of breeding parameters of different mulberry varieties/ mulberry hybridization

-- 8 marks

experiments.

Note: Distribution of marks

- a) Procedure - 03.0
- b) Experiment - 05.0

**Q 4. Identification:**

Any FIVE from the practical syllabus.

-- 10 marks -2.5 marks each

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**Practical VI****Max. Marks - 40****Q 1. Cold/Hot acid treatment of silkworm eggs.**

-- 12 marks

Note: Distribution of marks

- a) Procedure - 4.0
- b) Experiment - 8.0

**Q 2. Any one of the following**

Pupa/Mother moth examination

-- 10 marks

Note: Distribution of marks

- a) Procedure - 04.0
- b) Experiment - 06.0

**Q 3. Any one of the following:**

-- 8 marks

Sex separation of pupal or moth stage/loose eggs or laying preparation demonstration/hatching percentage

Note: Distribution of marks

- a) Procedure - 03.0
- b) Experiment - 05.0

**Q 4. Identification:**

Any FIVE from the practical syllabus.

-- 10 marks -2.5 marks each

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**Practical VII****Max. Marks - 40****Q 1.** Estimation of filament length/ reliability/ raw silk % recovery/ renditta/denier (any two)

From the given cocoons.

— 12 marks

Note: Distribution of marks

- a) Procedure - 5.0
- b) Experiment - 7.0

**Q 2.** Estimation of fibroin and sericin % from the cocoon shell/identification of textile fibers by

— 10 marks

physical and chemical Tests.

Note: Distribution of marks

- a) Procedure - 04.0
- b) Experiment - 06.0

**Q 3.** Any one of the following:

— 8 marks

Identification, sorting and percentage determination of different types of cocoons/

Estimation of shell weight, shell %/ Determination of total alkalinity/ Water pH.

Note: Distribution of marks

- a) Procedure - 03.0
- b) Experiment - 05.0

**Q 4.** Identification:

Any FIVE from the practical syllabus.

— 10 marks (2.5 marks each).

**Practical VIII****Max. Marks - 40****Q 1.** Taxonomy of non-mulberry food plants/dissection of any non-mulberry silkworms

— 12 mark

Note: Distribution of marks

- a) identification - 1.0
- b) classification - 2.0
- c) diagnostic features - 7.0
- d) sericultural importance - 2.0

**Q 2.** Preparation of bar charts/graphs/pie charts

— 10 marks

- a) calculation - 04.0
- b) preparation - 06.0

**Q 3.** Any one of the following:

Preparation of charts/handouts/pamphlets

Note: Distribution of marks

- a) Preparation - 08.0

— 8 marks

**Q 4.** Identification

Any FIVE from the practical syllabus.

— 10 marks — 2.5 marks each