Total No. of Questions: 25

Enrollment No : _____

MEDICAPS UNIVERSITY

Faculty of Agriculture

End Semester Examination May 2025

AG3CO47 Management of Beneficial Insects

Programme	:	B. Sc. (Hons.)	**Branch/Specialisation**	:	AG
Duration	:	3 hours	**Maximum Marks**	:	50

Note: *All questions are compulsory. Internal choices, if any, are indicated. Assume suitable data if necessary. Notations and symbols have their usual meaning.*

Section 1 (Answer all question(s))

Q1. The part of mouth of worker bee which is useful to lick the nectar- **Marks 1 CO 1 BL 1**

Rubric	Marks
Glossa	1

- ○ Galea
- ○ Lacinia
- ◉ Glossa
- ○ Paraglossa

Q2. Central Bee Research & Training Institute located at _____. **Marks 1 CO 1 BL 2**

Rubric	Marks
Pune	1

- ◉ Pune
- ○ Mumbai
- ○ Delhi
- ○ Kolkata

Q3. Silk glands are _____ in origin. **Marks 1 CO 2 BL 1**

Rubric	Marks
Ectodermal	1

- ○ Endodermal
- ◉ Ectodermal
- ○ Mesodermal
- ○ Epidermal

Q4. Danier is usually referred to weight of single filament of _____. **Marks 1 CO 2 BL 1**

Rubric	Marks
9000m	1

- ◉ 9000m
- ○ 7000m
- ○ 8000m
- ○ 6000m

Q5. Mother moth examination is done for silkworms to examine the disease- **Marks 1 CO 3 BL 1**

Rubric	Marks
Pebrine	1

- ○ Flacherie
- ◉ Pebrine
- ○ Septicemia
- ○ Grasserie

Q6. The number of generations or crops that are produced in one year by the silk worms is called as _____. 1 3 1

Rubric	Marks
Voltinism	1

- ○ Attacus
- ○ Mounting
- ○ Stifling
- ◉ Voltinism

Q7. The crops of Rangeeni Strains are Baisakhi & Katki which are inoculated in the month of _____ & _____ respectively. 1 4 1

Rubric	Marks
Octo. -Nov. & June-July	1

- ◉ Octo.-Nov. & June-July
- ○ Jan-Feb & June-July
- ○ June-July & Octo.-Nov.
- ○ June-July & Jan-Feb

Q8. The process of emergence of nymphs of lac insect is called as _____. 1 4 1

Rubric	Marks
Swarming	1

- ○ Molemma
- ○ Kiri
- ◉ Swarming
- ○ Passewa

Q9. _____ referred as father of biocontrol. 1 5 1

Rubric	Marks
H. S. Smith	1

- ◉ H. S. Smith
- ○ Paul Debac
- ○ C.V. Riley
- ○ Albert Koeble

Q10. Detailed account of lac insect was given by _____. 1 5 1

Rubric	Marks
J. Kerr	1

- ○ Boxburgh
- ○ TJ Watson
- ◉ J. Kerr
- ○ D. Lohot

Section 2 (Answer all question(s))

Marks CO BL

Q11. Explain bee pasturage and bee foraging. 2 1 1

Rubric	Marks
Briefly describe bee pasturage and bee foraging.	2

Q12. Write short note on Swarming and Bee language & communication. 2 1 1

Rubric	Marks
Write short note on the Swarming.	1
Write short note on the Bee Language and Communication.	1

Q13. (a) Describe the classification of bee species and its characters. **4 1 1**

Rubric	Marks
Classify the bee species with their characters.	4

(OR)

(b) Describe the seasonal management of Apiculture .

Rubric	Marks
Explain the seasonal management in commercial beekeeping.	4

Section 3 (Answer all question(s))

Marks CO BL

Q14. Enlist the mulberry verities with their scientific classification. **2 2 1**

Rubric	Marks
Classify the mulberry verities with Scientific classification.	2

Q15. Summarize the biology of silkworm with suitable diagram. **2 2 2**

Rubric	Marks
Describe the life cycle of silkworm with suitable diagram.	2

Q16. (a) How will you manage pests and diseases in beekeeping? **4 2 3**

Rubric	Marks
Insect pest management in apiculture.	2
Disease management in apiculture.	2

(OR)

(b) Classify the silkworm species with its characters.

Rubric	Marks
Classification of Silkworm species.	2
Characters of silkworm species.	2

Section 4 (Answer any 2 question(s))

Marks CO BL

Q17. Write short note on mounting, voltine, stifling and reeling. **4 3 2**

Rubric	Marks
Write short note on the Mounting.	1
Write short note on the Voltine.	1
Write short note on the Stifling.	1
Write short note on the Reeling.	1

Q18. How will you manage the Insect pest and diseases in Sericulture. **4 3 3**

Rubric	Marks
Management of Insect pest in Sericulture. 2 marks Management of disease in Sericulture. 2 marks	4

Q19. Describe the mulberry silkworm rearing equipment. Explain the disinfection methods in silk production. **4 3 1**

Rubric	Marks
Describe the mulberry silkworm rearing equipment. 2 marks Explain the disinfection methods in silk production. 2 marks	4

Section 5 (Answer all question(s))

Marks CO BL

Q20. Classify the lac species with scientific classification. **2 4 1**

Rubric	Marks
Scientific classification of lac species.	2

Q21. How will you identify the types of lac? **2 4 3**

Rubric	Marks
Types of lac.	2

Q22. (a) Summarize the life cycle of lac. **4 4 1**

Rubric	Marks
Life cycle/biology of lac with suitable diagram.	4

(OR)

(b) What do you understand by lac production? Explain in detail.

Rubric	Marks
Lac production, explain in detail.	4

Section 6 (Answer any 2 question(s))

Marks CO BL

Q23. Identify the Important species of pollinator, weed killers and scavengers with their importance. **4 5 1**

Rubric	Marks
Important species of pollinators.	1
Important species of weed killers.	1
Important species of scavengers.	1
Major importance of pollinators, weed killers and scavengers.	1

Q24. Classify of major parasitoid and predators commonly being used in biological control. **4 5 1**

Rubric	Marks
Classify of major parasitoid commonly being used in biological control.	2
Classify of major predators commonly being used in biological control.	2

Q25. State Mass Multiplication Techniques for Predators and Parasitoid in Biological Control. **4 5 1**

Rubric	Marks
Production of Predators by Mass Multiplication Techniques in biological control.	2
Production of Parasitoid by Mass Multiplication Techniques in biological control	2

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