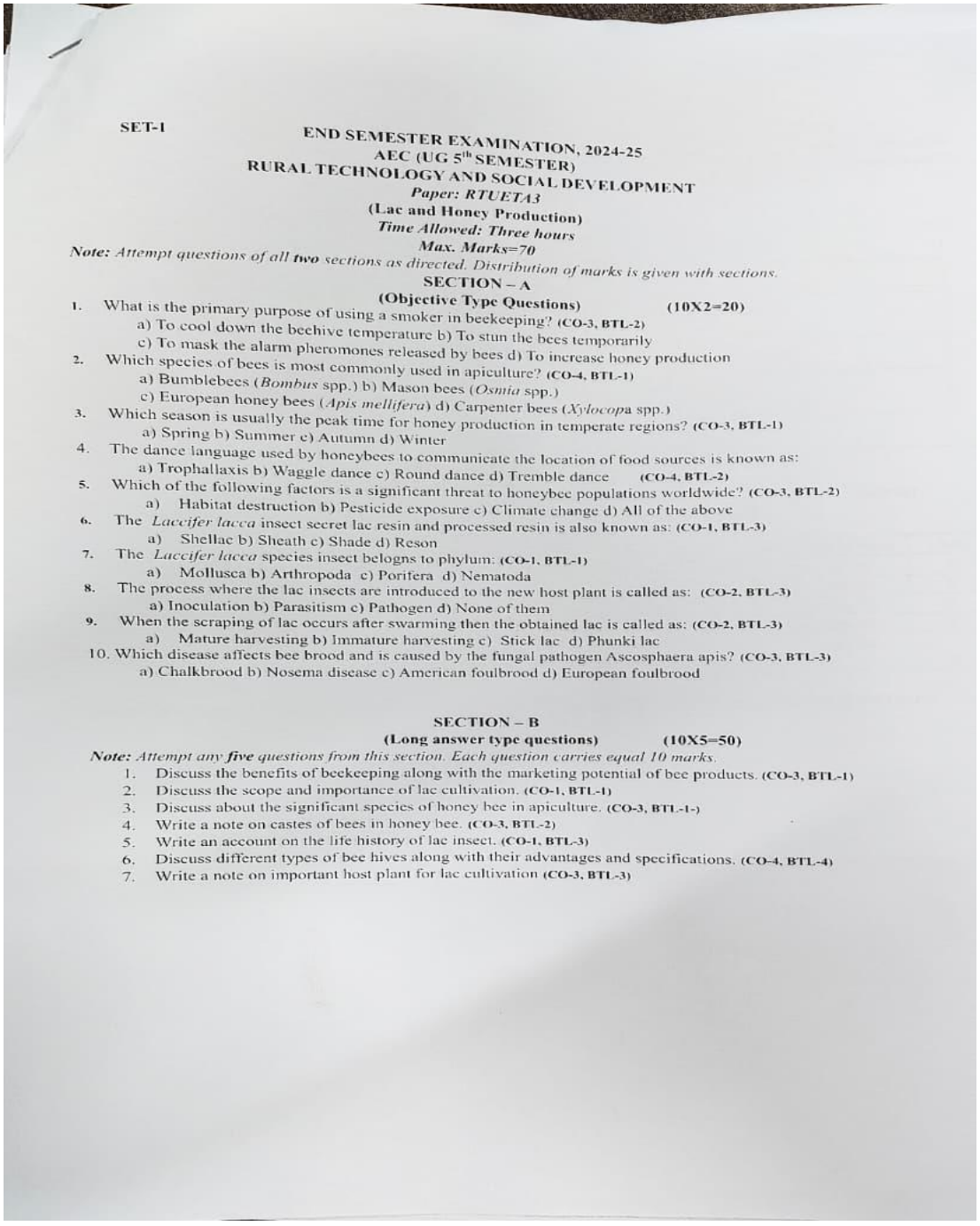
2.6.1 Provide question papers mapped with COs and BTL during the year 2024-25



SET-1

END SEMESTER EXAMINATION, 2024-25
AEC (UG 5th SEMESTER)
RURAL TECHNOLOGY AND SOCIAL DEVELOPMENT
Paper: RTUETA3
(Lac and Honey Production)
Time Allowed: Three hours
Max. Marks=70

Note: *Attempt questions of all* ***two*** *sections as directed. Distribution of marks is given with sections.*

SECTION – A
(Objective Type Questions) **(10X2=20)**

1. What is the primary purpose of using a smoker in beekeeping? **(CO-3, BTL-2)**
   a) To cool down the beehive temperature b) To stun the bees temporarily
   c) To mask the alarm pheromones released by bees d) To increase honey production
2. Which species of bees is most commonly used in apiculture? **(CO-4, BTL-1)**
   a) Bumblebees (*Bombus* spp.) b) Mason bees (*Osmia* spp.)
   c) European honey bees (*Apis mellifera*) d) Carpenter bees (*Xylocopa* spp.)
3. Which season is usually the peak time for honey production in temperate regions? **(CO-3, BTL-1)**
   a) Spring b) Summer c) Autumn d) Winter
4. The dance language used by honeybees to communicate the location of food sources is known as:
   a) Trophallaxis b) Waggle dance c) Round dance d) Tremble dance **(CO-4, BTL-2)**
5. Which of the following factors is a significant threat to honeybee populations worldwide? **(CO-3, BTL-2)**
   a) Habitat destruction b) Pesticide exposure c) Climate change d) All of the above
6. The *Laccifer lacca* insect secret lac resin and processed resin is also known as: **(CO-1, BTL-3)**
   a) Shellac b) Sheath c) Shade d) Reson
7. The *Laccifer lacca* species insect belogns to phylum: **(CO-1, BTL-1)**
   a) Mollusca b) Arthropoda c) Porifera d) Nematoda
8. The process where the lac insects are introduced to the new host plant is called as: **(CO-2, BTL-3)**
   a) Inoculation b) Parasitism c) Pathogen d) None of them
9. When the scraping of lac occurs after swarming then the obtained lac is called as: **(CO-2, BTL-3)**
   a) Mature harvesting b) Immature harvesting c) Stick lac d) Phunki lac
10. Which disease affects bee brood and is caused by the fungal pathogen Ascosphaera apis? **(CO-3, BTL-3)**
    a) Chalkbrood b) Nosema disease c) American foulbrood d) European foulbrood

SECTION – B
(Long answer type questions) **(10X5=50)**

Note: *Attempt any* ***five*** *questions from this section. Each question carries equal 10 marks.*

1. Discuss the benefits of beekeeping along with the marketing potential of bee products. **(CO-3, BTL-1)**
2. Discuss the scope and importance of lac cultivation. **(CO-1, BTL-1)**
3. Discuss about the significant species of honey bee in apiculture. **(CO-3, BTL-1-)**
4. Write a note on castes of bees in honey bee. **(CO-3, BTL-2)**
5. Write an account on the life history of lac insect. **(CO-1, BTL-3)**
6. Discuss different types of bee hives along with their advantages and specifications. **(CO-4, BTL-4)**
7. Write a note on important host plant for lac cultivation **(CO-3, BTL-3)**

SET-1

End Semester Examination, 2024-2025
B. Sc. (Third Semester)
RURAL TECHNOLOGY & SOCIAL DEVELOPMENT
Paper: RTUCMJT1
(Sericulture)
Time Allowed: Three hours
Max. Marks= 70

Note: *Attempt questions of all* ***two*** *sections as directed. Distribution of marks is given with sections.*

Section -A

(Objective Type Questions) **10X 2=20**

Note: *Section A is compulsory. Each question carries 2 marks.*

1. Multiple choice questions (attempt all)

1. In an age laying of *Bombyx mori*, the number of eggs are___ **(CO-2, BTL-1)**
(a) 200-300 (b) 400-500 (c) 400-600 (d) 500-700
2. Tasar silk worm is feed on____ **(CO-1, BTL-1)**
(a) Mulberry leaf (b) Neem leaf (c) Sal leaf (d) Castor leaf
3. The silkworm spin cocoon after ? **(CO-2, BTL-2)**
(a) 4th moult (b) 3rd moult (c) Either a or b (d) 2nd moult
4. Which is the young age silkworm? **(CO-1, BTL-1)**
(a) Pupa (b) Adult (c) Spinning worms (d) Chawki
5. Which of the following silk is mainly produced in Assam? **(CO-1, BTL-1)**
(a) Arundi silk (b) Natural silk (c) Muga silk (d) Tassar silk
6. Cocoon is formed by how many pairs of glands? **(CO-2, BTL-2)**
(a) Two (b) Three (c) Four (d) One
7. The central silk board was established in ? **(CO-1, BTL-2)**
(a) 1946 (b) 1947 (c) 1948 (d) 1959
8. In the word voltine stands for ? **(CO-3, BTL-3)**
(a) Brood frequency (b) Cocoon frequency (c) Worm frequency (d) Silk frequency
9. What is stifling? **(CO-4, BTL-3)**
(a)Spinning process of cocoon (b) Killing process of pupa inside the cocoon (c) Feeding process of caterpillar (d) None of the above.
10. What is the process of degumming? **(CO-5, BTL-3)**
(a) Boiling of silk cocoon (b) Use of chemical agents (c).Sun drying of cocoon (d) All of the above

Section- B

Long answer type questions **(10 X 5 = 50)**

Note: *Attempt any* ***five*** *questions from this section. Each question carries equal 10 marks.*

1. Describe the life cycle of silk insect including moulting and metamorphosis. **(CO-2, BTL-2)**
2. What do you mean by ideal rearing house? Write the features and advantages of an ideal rearing house in sericulture. **(CO-4, BTL-3)**
3. What is mountage? Classify the different types of mountages. **(CO-5, BTL-3)**
4. Describe the major diseases of silkworm. **(CO-3, BTL-4)**
5. Explain the young and late stage rearing. **(CO-3, BTL-3)**
6. Give an account on government schemes and programme related to sericulture. **(CO-1, BTL-3)**
7. Write a note on stifling of cocoon. **(CO-5, BTL-3)**

Set -A

B.Sc (Hon's) (Fifth Semester) Examination ,2024

Land surveying Levelling and Drawing techniques

Rural Technology (GURU GHASIDAS VISHVIDYALAYA)

Time = 3hrs **Total : Marks=70**

Multiple choice questions (2X 10=20)

Q.1. The fixed point whose elevation is known is called- **BTL-1, CO -3**
(a) Benchmark (b) Forsight (c) Back sight (d) none

Q.2. In surveying well conditioned triangle will be ----angle **BTL-1, CO -1**
(a) acute (b) right (c) both(d) None

Q.3. The line joining the two main stations is known as **BTL-1, CO -1**

(a) Main (b) Check (c) Tie (d) None

Q.4. The purpose of tie line is to ------ **BTL-1, CO -1**

(a) check accuracy (b) show interior (c)both (d) none

Q.5 For less than 250 km following survey ---- is taken in account **BTL-1, CO -3**

(a) plane (b) geodatic (c) both (d) none

Q.6 chain Survey is suitable for------ area **BTL-1, CO -2**

(a) Big (b) Small (c) Both (d) None

Q.7 Five arrow means -------- chain **BTL-1, CO -2**

(a) Five (b) One (c) Both (d) none

Q.8 For settlement of land revenue type of map is used are **BTL-1, CO -3**

(a) Topographic (b) cadastral (c) both (d) none

Q. 9 1 hectare = ----- acre **BTL-1, CO -2**

(a) 2.471 (b) 3.971 (c) both (d) none

Q.10 Length of Guntur chain is **BTL-1, CO -3**

(a) 66ft (b) 33ft (c) both (d) none

Long answer type questions (Any-5) **(5x10=50)**

Q.1. Define Levelling .Explain the process of Levelling in detail with its implication in rural development.		**BTL-1, CO -3**
Q.2 Classify the types of Ranging . .Why there is need of ranging explain its importance in rural development		**BTL-2 , CO3**
Q.3 Mention the radiation method of Plane table and limitations of plane table survey.		**BTL-1 , CO2**
Q.4 Briefly describe about instrument used in Chain survey		**BTL-1 , CO2**
Q.5 Write a note on instrument needed for Plane Table Survey		**BTL-3 , CO2**
Q.6 Write short note on Drawing sheet and its layout		**BTL-3 , CO3**
Q.7 Discuss different type of surveying in detail.. Explain its importance in Rural Development.		**BTL-2 , CO 3**

Department of Rural Technology & Social Development
Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)
End Semester Examination, 2024
M.Sc. (Rural Technology) – III Semester
Course name: Beekeeping Techniques
Paper Code: - RTPCTG1
Maximum Marks: 70

Duration: 3 Hours

A. (Objective type Questions) **10x2=20**

Note – Attempt all question, all question carry 2 marks

1. How do bees contribute to crop farming? [CO-1, BTL1-, Marks-2]
   a) Producing wax b) Building hives
   c) Pollination d) Producing honey
2. Which of the following is a natural predator of honeybees? [CO-2, BTL2-, Marks-2]
   a) Birds b) Ants
   c) Miters d) All of the above
3. What is the primary food of bee larvae? [CO-2, BTL1-, Marks-2]
   a) Pollen b) Nectar
   c) Honey d) Royal Jelly
4. Which of the following is a hive product other than honey? [CO-1, BTL2-, Marks-2]
   a) Milk b) Cotton
   c) Silk d) Wax
5. What substances do bees collect to make honey? [CO-1, BTL1-, Marks-2]
   a) Nectar b) Pollen
   c) Resin d) Propolis
6. How many wings does a honeybee have? [CO-2, BTL2-, Marks-2]
   a) 6 b) 8
   c) 2 d) 4
7. Which bee is responsible for the mating with the queen? [CO-1, BTL1-, Marks-2]
   a) Drone b) Worker bee
   c) Forager d) Guard bee
8. Which of the following is a bee species commonly used in commercial beekeeping? [CO-2, BTL1-, Marks-2]
   a) *Apis mellifera* b) *Apis dorsata*
   c) *Apis cerana* d) All of the above
9. What is the primary product obtained from the beekeeping? [CO-1, BTL2-, Marks-2]
   a) Wax b) Milk
   c) Honey d) Silk
10. What is the primary function of the queen bee in a hive? [CO-2, BTL2-, Marks-2]
    a) Lay eggs b) Collect nectar
    c) Guard the hive d) Build the comb

B. Long type questions (Attempt any five questions) **5x10=50**

Q1. Describe the bee breeding and rearing of queen bees in brief. [CO-2, BTL2-, Marks-10]

OR

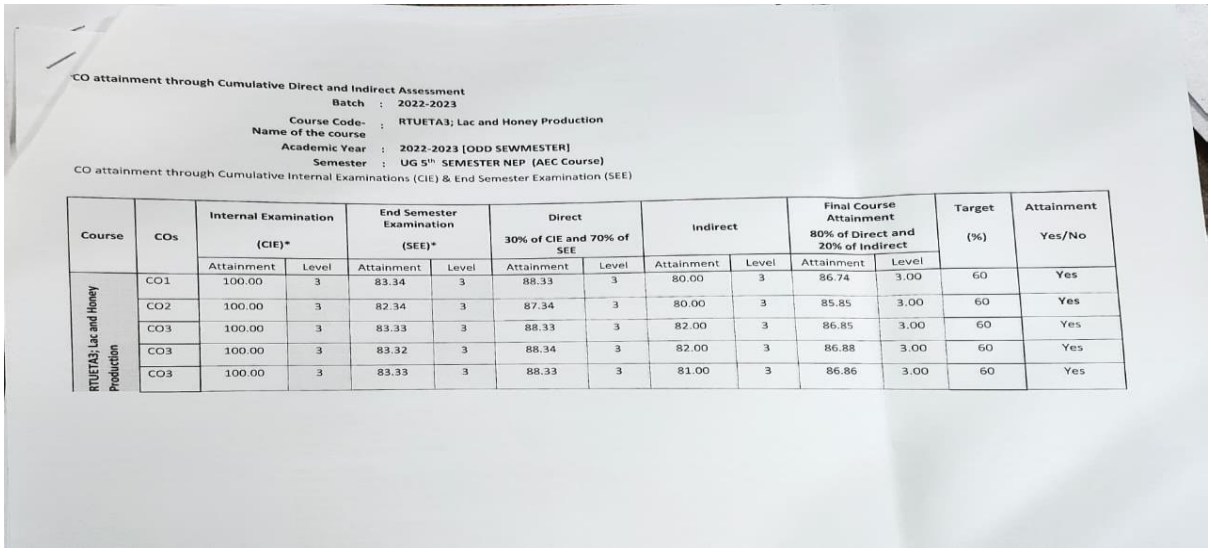
Discuss on grading, packaging and marketing of bee products. [CO-2, BTL2-, Marks-10]

Q2. Explain the harvesting of honey and physical and chemical properties of honey in brief. [CO-1, BTL2-, Marks-

OR

Explain the importance of flora in apiculture. [CO-1, BTL2-, Marks-10]

2.6.2 Provide documents related to attainment of Programme outcomes, Programme specific outcomes and course outcomes during the year 2024-25



CO attainment through Cumulative Direct and Indirect Assessment

Batch : 2022-2023

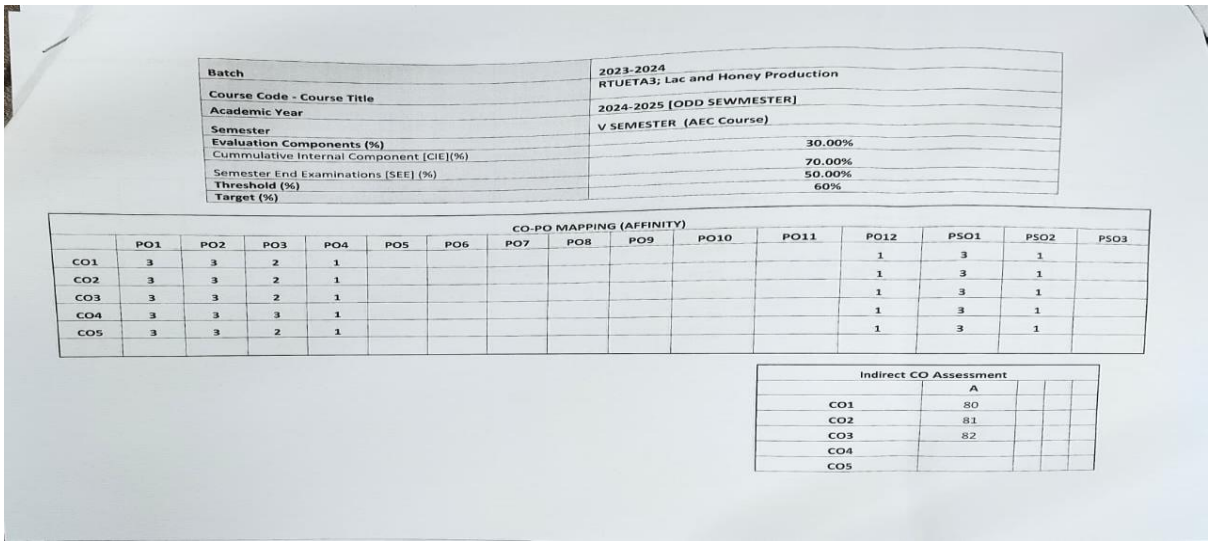
Course Code-Name of the course : RTUETA3; Lac and Honey Production

Academic Year : 2022-2023 [ODD SEWMESTER]

Semester : UG 5th SEMESTER NEP (AEC Course)

CO attainment through Cumulative Internal Examinations (CIE) & End Semester Examination (SEE)

Course	COs	Internal Examination (CIE)*		End Semester Examination (SEE)*		Direct 30% of CIE and 70% of SEE		Indirect		Final Course Attainment 80% of Direct and 20% of Indirect		Target (%)	Attainment Yes/No
		Attainment	Level	Attainment	Level	Attainment	Level	Attainment	Level	Attainment	Level		
RTUETA3; Lac and Honey Production	CO1	100.00	3	83.34	3	88.33	3	80.00	3	86.74	3.00	60	Yes
	CO2	100.00	3	82.34	3	87.34	3	80.00	3	85.85	3.00	60	Yes
	CO3	100.00	3	83.33	3	88.33	3	82.00	3	86.85	3.00	60	Yes
	CO3	100.00	3	83.32	3	88.34	3	82.00	3	86.88	3.00	60	Yes
	CO3	100.00	3	83.33	3	88.33	3	81.00	3	86.86	3.00	60	Yes

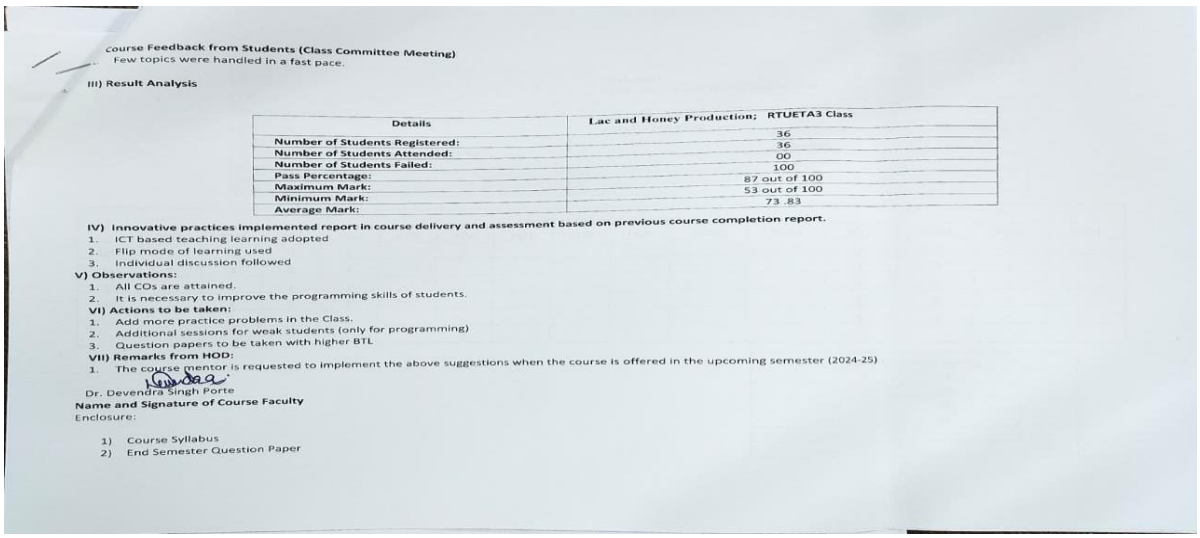


Batch	2023-2024
Course Code - Course Title	RTUETA3; Lac and Honey Production
Academic Year	2024-2025 [ODD SEWMESTER]
Semester	V SEMESTER (AEC Course)
Evaluation Components (%)	30.00%
Cummulative Internal Component [CIE](%)	70.00%
Semester End Examinations [SEE] (%)	50.00%
Threshold (%)	60%
Target (%)	

CO-PO MAPPING (AFFINITY)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	2	1								1	3	1	
CO2	3	3	2	1								1	3	1	
CO3	3	3	2	1								1	3	1	
CO4	3	3	3	1								1	3	1	
CO5	3	3	2	1								1	3	1	

Indirect CO Assessment	
	A
CO1	80
CO2	81
CO3	82
CO4	
CO5	



Course Feedback from Students (Class Committee Meeting)

Few topics were handled in a fast pace.

III) Result Analysis

Details	Lac and Honey Production; RTUETA3 Class
Number of Students Registered:	36
Number of Students Attended:	36
Number of Students Failed:	00
Pass Percentage:	100
Maximum Mark:	87 out of 100
Minimum Mark:	53 out of 100
Average Mark:	73 .83

IV) Innovative practices implemented report in course delivery and assessment based on previous course completion report.

1. ICT based teaching learning adopted
2. Flip mode of learning used
3. Individual discussion followed

V) Observations:

1. All COs are attained.
2. It is necessary to improve the programming skills of students.

VI) Actions to be taken:

1. Add more practice problems in the Class.
2. Additional sessions for weak students (only for programming)
3. Question papers to be taken with higher BTL

VII) Remarks from HOD:

1. The course mentor is requested to implement the above suggestions when the course is offered in the upcoming semester (2024-25)

Dr. Devendra Singh Porte

Name and Signature of Course Faculty

Enclosure:

1) Course Syllabus
2) End Semester Question Paper

attainment through Cumulative Direct and Indirect Assessment

Batch : 2022-2023

Course Code- Name of the course : RTUCMJT1; Sericulture

Academic Year : 2022-2023 [ODD SEWMESTER]

Semester : UG 5th SEMESTER NEP (Major Course

CO attainment through Cumulative Internal Examinations (CIE) & End Semester Examination (SEE)

Course	COs	Internal Examination (CIE)*		End Semester Examination (SEE)*		Direct 30% of CIE and 70% of SEE		Indirect		Final Course Attainment 80% of Direct and 20% of Indirect		Target (%)	Attainment Yes/No
		Attainment	Level	Attainment	Level	Attainment	Level	Attainment	Level	Attainment	Level		
RTUCMJT1 Sericulture	CO1	100.00	3	83.33	3	88.33	3	80.00	3	86.67	3.00	60	Yes
	CO2	100.00	3	82.31	3	87.33	3	80.00	3	85.89	3.00	60	Yes
	CO3	100.00	3	83.33	3	88.33	3	81.00	3	86.88	3.00	60	Yes
	CO3	100.00	3	83.33	3	88.33	3	81.00	3	86.88	3.00	60	Yes
	CO3	100.00	3	83.33	3	88.33	3	81.00	3	86.87	3.00	60	Yes

Batch	2023-2024
Course Code - Course Title	RTUCMJT1; Sericulture
Academic Year	2024-2025 [ODD SEWMESTER]
Semester	III SEMESTER (Major Course)
Evaluation Components (%)	
Cummulative Internal Component [CIE](%)	30.00%
Semester End Examinations [SEE] (%)	70.00%
Threshold (%)	50.00%
Target (%)	60%

CO-PO MAPPING (AFFINITY)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	2	1								1	3	1	
CO2	3	3	2	1								1	3	1	
CO3	3	3	2	1								1	3	1	
CO4	3	3	3	1								1	3	1	
CO5	3	3	2	1								1	3	1	

Indirect CO Assessment	
	A
CO1	80
CO2	81
CO3	82
CO4	
CO5	

se Feedback from Students (Class Committee Meeting)

ew topics were handled in a fast pace.

III) Result Analysis

Details	Sericulture; RTUCMJT1 Class
Number of Students Registered:	65
Number of Students Attended:	65
Number of Students Failed:	00
Pass Percentage:	100
Maximum Mark:	87 out of 100
Minimum Mark:	53 out of 100
Average Mark:	73 .83

IV) Innovative practices implemented report in course delivery and assessment based on previous course completion report.

1. ICT based teaching learning adopted
2. Flip mode of learning used
3. Individual discussion followed

V) Observations:

1. All COs are attained.
2. It is necessary to improve the programming skills of students.

VI) Actions to be taken:

1. Add more practice problems in the Class.
2. Additional sessions for weak students (only for programming)
3. Question papers to be taken with higher BTL

VII) Remarks from HOD:

1. The course mentor is requested to implement the above suggestions when the course is offered in the upcoming semester (2024-25)

Dr. Devendra Singh Porte

Name and Signature of Course Faculty

Enclosure:

1) Course Syllabus
2) End Semester Question Paper

CO attainment through Cumulative Direct and Indirect Assessment

Batch : 2022-2023

Course Code-Name of the course : RTUETC1; Land Surveying and Drawing Techniques

Academic Year : 2022-2023 [ODD SEWMESTER]

Semester : B.Sc. V Semester

CO attainment through Cumulative Internal Examinations (CIE) & End Semester Examination (SEE)

Course	COs	Internal Examination (CIE)*		End Semester Examination (SEE)*		Direct 30% of CIE and 70% of SEE		Indirect		Final Course Attainment 80% of Direct and 20% of Indirect		Target (%)	Attainment Yes/No
		Attainment	Level	Attainment	Level	Attainment	Level	Attainment	Level	Attainment	Level		
RTUETC1,Land Surveying Leveling and Drawing Techniques	CO1	100.00	3	83.33	3	88.33	3	80.00	3	86.78	3.00	60	Yes
	CO2	100.00	3	82.33	3	87.34	3	80.00	3	85.82	3.00	60	Yes
	CO3	100.00	3	83.31	3	88.33	3	82.00	3	86.82	3.00	60	Yes
	CO3	100.00	3	83.32	3	88.32	3	82.00	3	86.84	3.00	60	Yes
	CO3	100.00	3	83.31	3	88.32	3	81.00	3	86.84	3.00	60	Yes

Batch	2022-2023
Course Code - Course Title	RTUETC1, Land Surveying Leveling and Drawing Techniques
Academic Year	2024-2025 [ODD SEWMESTER]
Semester	B.Sc. V Semester
Evaluation Components (%)	
Cummulative Internal Component [CIE](%)	30.00%
Semester End Examinations [SEE] (%)	70.00%
Threshold (%)	50.00%
Target (%)	60%

CO-PO MAPPING (AFFINITY)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	2	1								1	3	1	
CO2	3	3	2	1								1	3	1	
CO3	3	3	2	1								1	3	1	
CO4	3	3	3	1								1	3	1	
CO5	3	3	2	1								1	3	1	

Indirect CO Assessment	
	A
CO1	80
CO2	81
CO3	82
CO4	
CO5	

II) Course Feedback from Students (Class Committee Meeting)

1. Few topics were handled in a fast pace.

III) Result Analysis

Details	RTUETC1, Land Surveying Leveling and Drawing Techniques
Number of Students Registered:	43
Number of Students Attended:	43
Number of Students Failed:	00
Pass Percentage:	100
Maximum Mark:	87 out of 100
Minimum Mark:	53 out of 100
Average Mark:	73 .83

IV) Innovative practices implemented report in course delivery and assessment based on previous course completion report.

1. ICT based teaching learning adopted
2. Flip mode of learning used
3. Individual discussion followed

V) Observations:

1. All COs are attained.
2. It is necessary to improve the programming skills of students.

VI) Actions to be taken:

1. Add more practice problems in the Class.
2. Additional sessions for weak students (only for programming)
3. Question papers to be taken with higher BTL

VII) Remarks from HOD:

1. The course mentor is requested to implement the above suggestions when the course is offered in the upcoming semester (2024-25)

Dr. Alka Mishra

Name and Signature of Course Faculty

Enclosure:

1) Course Syllabus
2) End Semester Question Paper

Program	Year of Admission	Course Code
M.Sc. Rural Technology	2024-25	RTPCTG2 (Beekeeping Techniques)

Name of the Program/Branch : M.Sc. Rural Technology

Curriculum Year : 2024-2025

Course Code with Name : RTPCTG2 (Beekeeping Techniques)

Semester : Third Semester

Faculty handling the course: Section A: Dr. Lokesh Kumar Tinde

Course	COs	Internal Examination (CIE)*		End Semester Examination (SEE)*		Direct 30% of CIE and 70% of SEE		Indirect		Final Course Attainment 80% of Direct and 20% of Indirect		Target (%)	Attainment Yes/No
		Attainment	Level	Attainment	Level	Attainment	Level	Attainment	Level	Attainment	Level		
RTPCTG2 BEEKEEPING TECHNIQUES	CO1	100.00	3	100.00	3	100.00	3	82.00	3	96.40	3.00	60	Yes
	CO2	75.00	3	100.00	3	92.50	3	83.50	3	90.70	3.00	60	Yes

*. - *Suitable Weightages for CIE and SEE shall be assigned for Theory; Assignment and Internal assessment of the Course*

II) Course Feedback from Students (Class Committee Meeting)

1. Few topics were handled in a fast pace.

III) Result Analysis

Details	M.Sc. (RT) I SEM.
Number of Students Registered:	02
Number of Students Attended:	02
Number of Students Failed:	0
Pass Percentage:	100
Maximum Mark:	53 out of 70
Minimum Mark:	50 out of 70
Average Mark:	51

IV) Innovative practices implemented report in course delivery and assessment based on previous course completion report.

1. ICT based teaching learning adopted
2. Flip mode of learning used
3. Individual discussion followed

V) Observations:

1. All COs are attained.
2. It is necessary to improve the programming skills of students.

VI) Actions to be taken:

1. Add more practice problems in the Class.
2. Additional sessions for weak students (only for programming)
3. Question papers to be taken with higher BTL

VII) Remarks from HOD:

1. The course mentor is requested to implement the above suggestions when the course is offered in the upcoming semester (2024-25)

Name and Signature of Course Faculty

Dr. Lokesh Kumar Tinde

Enclosure:

1) Course Syllabus
2) End Semester Question Paper