

# SHRI GURU RAM RAI UNIVERSITY

[Estd. by Govt. of Uttarakhand, vide Shri Guru Ram Rai University Act no. 03 of 2017 & recognized by UGC u/s (2f) of UGC Act 1956]



## COURSE SYLLABI

For Value Added Course Programme

ON

“Agripreneurship Development in Beekeeping”

## School of Agricultural Sciences

**Effective from Academic Session**

**Pathri Bagh, Dehradun-248001, Uttarakhand**

## VALUE ADDED COURSE (VAC)

### Agripreneurship Development in Beekeeping

**Course code: VCSAS004****Duration: 30 Hrs**

<b>Name of course Coordinator</b>	<b>Office Address</b>	<b>Office Number</b>	<b>Email ID</b>
Dr.Hitendra Kumar	Department of Entomology, School of Agricultural Sciences, SGRR University Pathribagh Dehradun-248001	7017286650	hitendrakumar@sgru.ac.in

**Course Objectives:**

1. To impart the basic knowledge about honey bee species and bee flora
2. To develop understanding about handling of honey bee keeping equipments & management of diseases & pests of honey bee
3. To develop the skills in scientific methods of bee keeping and extraction of honey
4. To impart the knowledge regarding apiary management by month wise calendar

**Eligibility for registration in the course:**

Any student of SGRR University can be registered in value added course in “Agri-prneurship Development in Beekeeping”.

**Examination and Evaluation**

As per university norms.

## SYLLABUS

**Module I :** Introduction to Bee Keeping, History, Present scenario & scope, Selection of bee species & races, Identification of bee flora and location of site

**Module II :** Honey bee keeping equipments, Building & division of comb and colony, Management of insects and diseases and nuisance in bee hives

**Module III :**Scientific methods of bee keeping, Bee Boxes Maintenance, Collection and preservation of honey,

**Module IV :** Month wise calendar of operations in bee keeping, Seasonal Management of honey bees.

**Course outcomes (CO) :**

**On successful completion of course the student will be able to:**

**CO 1:** Understand importance of beekeeping , Selection of bee species & Identification of bee flora and location of site

**CO 2:** Handling of bee keeping equipments,Management of insects and diseases & natural enemies

**CO 3:** Scientific methods of bee keeping & honey processing

**CO 4:** Seasonal apiary management by month wise calendar

**Suggested Readings:**

- Atwal AS.2006. The World of the Honey Bee. Kalyani Publisher., New Delhi.
- Singh S. 1975. Beekeeping in India. ICAR, New Delhi.
- Abrol DP.2010. Bee and Beekeeping in India. Kalyani Publisher., New Delhi.
- Mandal,SK. Kumari,A.2016.Madhumakhi Palan:Mahatva, Utpadan Evam Upyog .Astral International Pvt. Ltd