



शहीद दुर्गामल्ल राजकीय स्नातकोत्तर महाविद्यालय
डोईवाला, देहरादून (उत्तराखण्ड) पिन-248144

Ph.No.-0135-2973836

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पत्रांक : 211 / 2022-23

दिनांक-22.06.2022

सेवा में

निदेशक (उ०शि०)
उत्तराखण्ड
हल्द्वानी नैनीताल

विषय:- कौशल विकास के अन्तर्गत त्रैमासिक पाठ्यक्रम संचालन विषयक।

महोदय,

कौशल विकास कार्यक्रम के अन्तर्गत Plantica Foundation Dehradun, [Indian Academy Of Rural Development (IARD)] के मध्य MOU किया गया। जिसमें निम्नलिखित त्रैमासिक सर्टिफिकेट पाठ्यक्रम संचालित किये जायेंगे।

क्र०सं०	पाठ्यक्रम	पंजीकरण शुल्क	पाठ्यक्रम शुल्क	कुल योग
1.	Bee Keeping	500	1500	2000
2.	Mushroom Cultivation	500	1500	2000
3.	Organic Natural Farming	500	1500	2000

शुल्क छात्र/छात्राओं द्वारा वहन किया जायेगा। महाविद्यालय के समस्त छात्र/छात्राएँ इस पाठ्यक्रम का लाभ उठा सकते हैं।

अतः महोदय से अनुरोध है कि कौशल विकास के अन्तर्गत त्रैमासिक सर्टिफिकेट पाठ्यक्रम को इस सत्र से प्रारम्भ करने की संस्तुति प्रदान करने का कष्ट कीजिएगा। जिससे कि छात्र-छात्राएँ लाभान्वित हो सकें।

प्राचार्य

श०दु०म० राजकीय स्नातकोत्तर महाविद्यालय
डोईवाला, देहरादून।

पत्रांक : - 211 - 1/2022 - 23

प्रतिलिपि:-कुलसचिव श्रीदेव सुमन उत्तराखण्ड विश्वविद्यालय बादशाही थौल (टि०ग०)को
सूचनार्थ प्रेषित

प्राचार्य

o/c



25/3/22



MEMORANDUM OF UNDERSTANDING

BETWEEN

S. D. M. GOVT. P. G. COLLEGE, DOIWALA, DEHRADUN (UTTARAKHAND)

AND

**PLANTICA FOUNDATION, DEHRADUN (UTTRAKHAND)
(2nd party)**

1. S. D. M. Govt. P. G. College, Doiwala, Dehradun is constituted in the year 2001, Shaheed Durga Mall Government Post-Graduate College, Doiwala, Dehradun is a government institution of higher education that caters to the need of the students residing in the foothills of Garhwal region. Situated near the state capital of Uttarakhand, Dehradun that is habited by a wide and varied populace, the institution is an important center of learning offering accessible education to the students belonging especially to the economically weaker section of society. The college plays a major role in educating, enabling and empowering 75% of women population of the area pursuing higher studies. In the beginning, the College was run in Primary School, Lachchhiwala, Doiwala. At present, this college is situated near Saung River Bridge in Bhaniyawala, approx. 20 kms away from Dehradun. Initially, the college started with eight subjects who included Hindi, English, Economics, Sociology, Political Science, History, Psychology, and Geography. Later on, in 2010, subjects like Home Science, Sanskrit, and Drawing were also included at graduation level. The college has a lush green campus, well-furnished labs and a rich library. The college has highly qualified and dedicated faculty and disciplined students. Commerce and Science classes began at graduation level in 2010-2011. And since 2011-12, post-graduate classes commenced in Hindi, English, Political Science, Economics, and Geography in Arts Stream. From session 2015-16, post-graduate classes in the subjects, like, Sociology and History have also begun. The college has started providing classes in Defence Studies at graduation level from 2015-16. Vide government order number 2268(1)XXIV(7)23(dec.)/2011 dated 22nd December, 2011, the name of the college was changed from Government Degree College to Shaheed Durga Mall Government PG College, Doiwala on the name of famous freedom fighter, martyr Shri Durga Mall.

2. Profile of 2nd party (with special reference to the area of MoU)

Plantica Foundation, Registered under The Indian Trust Act, 1882 and Ministry of MSME Govt. of India, located at Dehradun, Uttarakhand. Plantica Foundation is an ISO 9001:2015 certified organization for quality standards and Recognized as authorized skill development training and research centre by Sri Dev Suman Uttarakhand University and Uttarakhand Open University (State Govt. University of Uttarakhand). Since its establishment in 2017, Plantica is a key player for training and capacity building in Agriculture and its applications through training, education and research in India. The

training, education and capacity building programmes of the academy are designed to meet the requirements of Professionals at working levels, fresh graduates, researchers, academia, and decision makers. Plantica starts the work with the formation of an all India based academic and scientific group of researchers (Plantica Group of Researchers- PGR, India- www.pgrindias.in) named Association of Plant Science Researchers (APSR) in 2017. The objective of the association is to organize National and International conferences/ seminar / workshop etc. with scientific publications. Plantica initiate to publish a research book series entitled PLANTA (Publish Biannually in the month of April and October) since 2017. Association of Plant Science Researchers has been conducted Plant Science Researchers Meet (PSRM) every year since 2018 as a series of National Conferences on different themes. Plantica has constituted Indian Academy of Rural Development (IARD)- www.plantica.in in 2019 with the objective to provide hands on skill development training to the students and farmers. IARD also provide platform to the researchers to fulfill their research objective and to conduct partial thesis research work at Plantica. Plantica- IARD has been recognized as authorized skill development training and research centre by Sri Dev Suman Uttarakhand University (State Govt. University of Uttarakhand) in 2022 to conduct various skill development training program for youth and farmers. IARD is the only training and research centre in Uttarakhand who has received this type of recognition by State Govt. University. Plantica- IARD is also affiliated by VIPNET, Vigyan Prasar, Department of Science and Technology, Govt. of India as recognized Science Club in Uttarakhand. In 2022 Plantica constituted the Indian Academy of Women in Agriculture (IAWA) with the objective to provide a suitable and strong platform to the women academicians and researchers and also to provide skill development training and self employment opportunities to the women farmers and rural women. PLANTICA Vision is to be counted among the most pioneering, innovative, use-friendly and self – supported educational society, publisher, training and research centre/ institute in the world. PLANTICA Mission is to facilitate the acquisition of technical skill by students and professionals in all sectors of agricultural/ plant science economy to enable them to provide most effective support and services to farmers and other agricultural and researchers' community for practicing sustainable agriculture and ensuring better income for their produce.

This MEMORANDUM OF UNDERSTANDING (MoU) is entered into on this _____ day of _____ 2022.

BETWEEN

S. D. M. GOVERNMENT P. G. COLLEGE, DOIWALA, DEHRADUN UTTARAKHAND, represented by its Principal, having its office at Doiwala, Dehradun, Uttarakhand in India, hereinafter referred to as the PARTY OF THE FIRST PART.

AND

PLANTICA FOUNDATION, represented by its Founder Director, having its office at Dehradun, Uttarakhand in India hereinafter referred to as the PARTY OF THE SECOND PART.

WITNESSETH that



WHEREAS, THE Party of the First Part is an educational institution of state importance committed to producing quality human resource through effective curricula delivery in various fields of education including agriculture and allied sciences.

WHEREAS, THE Party of Second Part is a training and research centre with the major objective to provide agricultural/ plant science related need based training to the students, young professional / researchers who want to be an entrepreneur in agriculture sector; also publish journals, books and educational materials for farmers, students and researchers.

WHEREAS, both party of the First Part and the party of the Second Part have come to an understanding to promote collaboration in education

NOW, THEREFORE, IT IS HEREBY MUTUALLY AGREED BY AND BETWEEN THE PARTIES AS FOLLOWS:

1. STATEMENT OF PURPOSE INCLUDING OBJECTIVES

- i) To share facilities in the area of skill development in various aspects of Botany, Agricultural and Allied Sciences as part of the curricula delivery
- ii) To share expertise in Botany, Agricultural and Allied Sciences for guidance of graduate and postgraduate students
- iii) To organize skill development training, conferences, workshops, seminars etc. in mutual areas of academic interest

2. TERMS AND CONDITIONS (These are general guidelines and may need to be modified on case to case basis)

1. This MoU is valid for a period of Three year at the first instance, but can be extended with the consent of both the parties.
2. This MoU shall be deemed to have been automatically rescinded after the expiry of the MoU period, unless renewed for any further period as per mutually agreed upon terms at a later stage.
3. Either of the parties hereto shall be entitled to terminate the MoU at any time with valid reasons acceptable in writing to both parties and in such case, the MoU will terminate six months after the date of written notification or date of expiry of the MoU, whichever is earlier. In case of such premature termination of the MoU, all rights and obligations of both parties shall automatically cease except for those covered by written contract including ongoing collaborative activity that can no longer be cancelled.
4. In case of any dispute that may crop-up during executing of MoU, the matter would be settled through arbitration by referring to Arbitration

Committee comprising of a member nominated each by two parties and one member will be jointly nominated by two parties.

5. All credits and benefits for collaborative work including the intellectual property generated during the tenancy of project would be equally shared between both parties i.e. both parties shall be the joint owners of this IP.
6. The collaborative programme between two parties shall be coordinated by a Coordination Committee consisting of four members from the organization appointed by the Principal, S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand, and appointed authorities of the second part.
7. S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand, agrees to provide space and required facilities to conduct certificate courses/ diploma courses/ on-campus trainings/ workshops/ seminars/ conferences etc. for their UG / PG students in their respective areas of specialization, to Plantica Foundation, on terms as mutually agreed.
8. Services of the expertise in various specialization, available with the S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand, can be utilized by the Plantica Foundation for guidance of graduate and postgraduate students on mutually agreed terms and conditions and vice versa.
9. The Plantica Foundation will provide Training to the students of S. D. M. Govt. P. G. College Doiwala, Dehradun Uttarakhand, on mutual understanding. Also experts of the Foundation, will visit S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand for providing training and guest lectures on mutual understanding and vice versa.
10. The S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand, and Plantica Foundation, Dehradun, Uttarakhand may apply for collaborative projects jointly to organize scientific workshop/symposia /training courses/ conferences in areas of mutual interest.
11. The S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand and Plantica Foundation, as the case may be, will provide assistance in developing training facilities and required infrastructure facilities for carrying out collaborative training / research projects.
12. UG, PG and Ph.D. students studying at S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand would be allowed to carry out a training/project work part of their course at Plantica Foundation, Dehradun, Uttarakhand for a period recommended by their respective heads and vice versa.
13. This MOU would be reviewed by S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand, and Plantica Foundation, Dehradun, Uttarakhand as and when required.

INDIAN ACADEMY OF RURAL DEVELOPMENT (IARD)

Official Organization of Plantica Foundation, Dehradun, Uttarakhand
Recognized by Sri Dev Suman Uttarakhand University
(State Govt. University of Uttarakhand), Rishikesh
Affiliated by VIPNET, Vigyan Prasar, Department of
Science and Technology, Govt. of India



Ref. No.: IARD/GPGC-Doiwala/CC-3/2022-002

Date: 28/02/2022

To,
The Principal
Govt. P. G. College, Doiwala, Dehradun

Subject: Scheme and Syllabus of Add on Certificate Courses to be run at S.D.M. Govt. P. G. College, Doiwala campus

Honorable Sir,

With reference to your letter no. 682-1/IARD/2021-22, Dated 25-02-2022 regarding Add on Certificate Courses, I am submitting the detail scheme and syllabus of the following courses:

1. Certificate in Bee Keeping (CBK)
2. Certificate in Mushroom Cultivation (CMC)
3. Certificate in Organic – Natural Farming (CONF)

The detail scheme and syllabus of all above mentioned 03 month's duration add on certificate courses are attached here with this letter.

Sir, you are requested to accord your kind consent/ approval for the above said scheme and syllabus of the courses.

Thanking You.

With Regards'




Dr. Anoop Badoni
Scientist Director – IARD

- Enclosure:**
1. Detail about the Plantica Foundation, Dehradun
 2. Detail scheme and syllabus of all proposed certificate courses

Plantica Foundation
Madhur Vihar Phase-2
Banjarawala, Dehradun

Contact: 9548055290
7060709609

planticaddn@gmail.com
www.plantica.in
www.pgrindias.in

INDIAN ACADEMY OF RURAL DEVELOPMENT (IARD) (भारतीय ग्रामीण विकास अकादमी)



Official Organization of Plantica Foundation, Dehradun, Uttarakhand
Recognized by Sri Dev Suman Uttarakhand University
(State Govt. University of Uttarakhand), Rishikesh
Affiliated by VIPNET, Vigyan Prasar, Department of
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About PLANTICA:

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Plantica- IARD is also affiliated by VIPNET, Vigyan Prasar, Department of Science and Technology, Govt. of India as recognized Science Club in Uttarakhand.

In 2022 Plantica constituted the Indian Academy of Women in Agriculture (IAWA) with the objective to provide a suitable and strong platform to the women academician and researchers and also to provide skill development training and self employment opportunities to the women farmers and rural women.

PLANTICA Vision: To be counted among the most pioneering, innovative, use-friendly and self – supported educational society, publisher, training and research centre/ institute in the world.

PLANTICA Mission: To facilitate the acquisition of technical skill by students and professionals in all sectors of agricultural/ plant science economy to enable them to provide most effective support and services to farmers and other agricultural and researchers' community for practicing sustainable agriculture and ensuring better income for their produce.

PROJECTS SANCTIONED:

1. **ATMA Project, Department of Agriculture, District- Rudraprayag Govt. of Uttarakhand, Sate Level**
Farmer Training – 26 to 30 March, 2022. Total Sanctioned Amount – Rs. 85,000/-
2. **ATMA Project, Department of Agriculture, District- Pauri Garhwal, Govt. of Uttarakhand, Sate Level**
Farmer Training – 21 to 25 March, 2022. Total Sanctioned Amount – Rs. 2, 55,000/-
3. **Mukhyamantri Navachaar Yojna, Govt. of Uttarakhand. 07 Days Training on Mushroom Cultivation, Support by Govt. P. G. College, Maldevta, Raipur, Dehradun.** Training on Mushroom Cultivation – 22 to 28 February, 2022. Total Sanctioned Amount – Rs. 3,00, 000/-
4. **Uttarakhand Science Education & Research Centre (USERC), Department of Information & Science Technology, Govt. of Uttarakhand (Office Order Letter No.- USERC/2021-22/30/-)** Workshop on Agri Entrepreneurship – 18 & 19 February, 2022. Total Sanctioned Amount – Rs. 50, 000/-
5. **ATMA Project, Department of Agriculture, District- Chamoli, Govt. of Uttarakhand, Sate Level**
Farmer Training on Mushroom Cultivation – 08 to 10 February, 2021, Total Sanctioned Amount t – Rs. 1,05,000/-
6. **ATMA Project, Department of Agriculture, District- Rudraprayag, Govt. of Uttarakhand Sate Level**
Farmer Training on Mushroom Cultivation – 27 to 29 February, 2020. Total Sanctioned Amount – Rs. 36,000/-

Plantica Foundation
Madhur Vihar Phase-2
Banjarawala, Dehradun

Contact: 9548055290
7060709609

planticaddn@gmail.com
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DETAIL ABOUT THE PLANTICA- IARD AND CERTIFICATE COURSES**INTRODUCTION:**

Skills and knowledge are the driving forces of economic growth and social development of any country. They have become even more important given the increasing pace of globalization and technological changes provide both challenges that is taking place in the world. Countries with higher and better levels of skills adjust more effectively to the challenges and opportunities of globalization.

In today's competitive world with increasing unemployment, neither education nor skill can be neglected. Education is a core necessity for any job. Education qualification is an absolute must, especially for technical jobs. However, education is not enough. Skills are extremely important and even the educated do not get jobs if they lack skills. Skills give an edge over those with just a degree.

OBJECTIVES:

1. To increase the employability of the youth and empower them to take part in the economic growth of Uttarakhand and India and thereby reduce unemployment, under-employment, poverty and socio-economic inequality.
2. To encourage and facilitate skill training for youth and farmers of Uttarakhand.
3. To facilitate launching of training programs for both uneducated and educated unemployed persons / farmers for up-gradation of their skills.
4. To formulate area and trade specific strategies for maximizing employment opportunities on a sustainable basis in the State supported by private sector.
5. To facilitate a coordinated approach in achieving the above objectives for maximizing the benefits over time and space and in reaching out the neediest sections of the population.

PROPOSED SKILL DEVELOPMENT / EXPERIMENTAL LEARNING CERTIFICATE PROGRAM:

S.N.	Program / Courses	Duration (Months)
1	Certificate in Bee Keeping	03
2	Certificate in Mushroom Cultivation	03
3	Certificate in Organic – Natural Farming	03

EXISTING FACILITIES AVAILABLE WITH PLANTICA- IARD, DEHRADUN:

S.N.	Particular	Detail
1.	Seminar / Class Room	With the Sitting Capacity of 50 participants
✓ 2.	Bee Keeping Unit	With 10 Bee Hive in a Apiary
✓ 3.	Mushroom Cultivation Unit	With 100 bags capacity of 10 Kg each
4.	Food Processing Unit	With all essential appliances
5.	Soil, Water, Plant and Seed Testing Laboratory	With all essential Equipments, Chemicals and Glassware
6.	Hydroponic Unit	With the capacity of more than 200 plants in vertical farming system
✓ 7.	Organic – Natural Farming (Vermicomposting and NADEP Composting) Unit	With the capacity of 100 Kg compost preparation
8.	Agriculture Land	03 Bigha (0.5 Acre)

INDIAN ACADEMY OF RURAL DEVELOPMENT, PLANTICA FOUNDATION, DEHRADUN HAVING RESEARCH LABORATORIES WITH FOLLOWING EQUIPMENTS:

S.N.	Name of the Equipment	Quantity
1	Laminar Air Flow Cabinet	01
2	Autoclave	01
3	Spectrophotometer	01
4	Flame photometer	01
5	Hot Air Oven	01
6	Incubator	01
7	pH Meter	01
8	EC Meter	01
9	Water bath	01
10	Electronic balance	01
11	Kjheldall digestion and distillation unit	01
12	Water distillation unit	01
13	Centrifuge	01
14	Seed Germinator	01
15	Hot Plate with Magnetic stirrer	01
16	Hydroponic Unit	03
17	Desiccator	02
18	Mechanical Seed Divider	01
19	Illustrated Purity Board	05

FACULTY PROFILE OF PLANTICA- IARD, DEHRADUN:

S. N.	Name	Designation	Highest Qualification	Specialization	Experience
1.	Dr. Anoop Badoni	Scientist and Director	Ph.D.	Agriculture – Seed Science and Technology	12 Years
2.	Mr. Adarsh Dangwal	Scientific Officer	M. Sc. (Ag)	Agronomy	03 Years
3.	Mr. Ashish Negi	Scientific Officer	M. Sc. (Ag)	Agronomy	03 Years
4.	Mr. Chandan Kumar	Technical Associate	B. Sc. (Ag)	Agriculture	01 Year
5.	Dr. Pooja Kaintura	Visiting Faculty	Ph.D., NET	Horticulture- Floriculture and Landscaping	10 Years
6.	Mr. Naveen Chandra	Visiting Faculty	M.Sc. (Ag)	Horticulture – Vegetable Science	06 Years

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DETAIL OF OFFERED CERTIFICATE COURSES:

1. Certificate in Bee Keeping (CBK)

Duration: 03 Months

Eligibility: Any student enrolled in the degree program of the college/ university.

Credits: 3 (2+1)

Contact Hrs.: 80

Objective: To train the students in basic aspects of Bee Keeping. To train the students in Honey processing, Marketing and Generation of Employment opportunities.

Course Offered:

Course Code	Course Title	Hrs.
CBK 001	Bee Keeping – Present Scenario & Prospects, Commercial Bee Keeping	16
CBK 002	Identification of Flora and location of sites, Use of Bee Boxes and other Too	16
CBK 003	Building of Comb and Month wise Calendar wise operations	16
CBK 004	Production of Honey and Managing Insects and Diseases	16
CBK 005	Harvesting, Processing and Preservation of Honey and Costing, Pricing, Packaging & Marketing of Honey	16
	Total	80

2. Certificate in Mushroom Cultivation (CMC)

Duration: 03 Months

Eligibility: Any student enrolled in the degree program of the college/ university.

Credits: 3 (2+1)

Contact Hrs.: 80

Objective: To increase the production and consumption of mushrooms. To help create new employment opportunities for rural youth through mushroom cultivation. To empower rural communities with entrepreneurial skills through the production and sale of mushrooms.

Course Offered:

Course Code	Course Title	Hrs.
CMC 001	Introduction and Health benefits of Mushrooms	16
CMC 002	Life Cycle, Compost & Composting	16
CMC 003	Cultivation Technology, Spawn Production and Spawning	16
CMC 004	Cultivation of other economically important and medicinal mushroom	16
CMC 005	Insect - Pests and Disease management in cultivated mushroom, Mushroom growing unit/ house and Value addition of mushroom	16
	Total	80

3. Certificate in Organic Natural Farming (CONF)

Duration: 03 Months

Eligibility: Any student enrolled in the degree program of the college/ university.

Credits: 3 (2+1)

Contact Hrs.: 80

Objective: To produce food of high nutritional quality in sufficient quantity. To work with natural system rather than seeking to dominate them. To encourage and enhance biological cycles within farming system-involving microorganisms, soil flora and fauna, plants and animals. To maintain and increase long term fertility of soil. to impart knowledge and proficiency in Organic production practices, Certification process and Marketing of organically raised agricultural products, and to promote self employment and income generation.

Course Offered:

Course Code	Course Title	Hrs.
CONF 001	Introduction and Organic Agriculture	16
CONF 002	Organic Fertilizers/ Manure	16
CONF 003	Composting	16
CONF 004	Natural Farming	16
CONF 005	Certification and Inspection Systems in Organic Farming in India	16
	Total	80



Submitted by
Dr. Anoop Badoni
Scientist and Director
PLANTICA – IARD, Dehradun

Detail Syllabus are Attached herewith.

Certificate in Bee Keeping (CBK)

CURRICULUM (2022-23) Scheme and Syllabus

Duration: 03 Months

Eligibility: Any student enrolled in the degree program of the college/ university.

Credits: 3 (2+1)

Contact Hrs.: 80

Objective: To train the students in basic aspects of Bee Keeping. To train the students in Honey processing, Marketing and Generation of Employment opportunities.

Course Offered:

Course Code	Course Title	Hrs.
CBK 001	Bee Keeping – Present Scenario & Prospects, Commercial Bee Keeping	16
CBK 002	Identification of Flora and location of sites, Use of Bee Boxes and other Too	16
CBK 003	Building of Comb and Month wise Calendar wise operations	16
CBK 004	Production of Honey and Managing Insects and Diseases	16
CBK 005	Harvesting, Processing and Preservation of Honey and Costing, Pricing, Packaging & Marketing of Honey	16
	Total	80

Examination Scheme:

Components	CT	HA	C	V	A	ETE
Weightage (%)	10	5	5	5	5	70

(C - Case Discussion/ Presentation; HA - Home Assignment; V - Viva; CT- Class Test; A - Attendance; EE - End Trimester Examination)

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Syllabus

Certificate in Bee Keeping (CBK)

Course Content

CBK: Bee Keeping

Theory

CBK 001: Bee Keeping – Present Scenario & Prospects, Commercial Bee Keeping

Present scenario and prospects for bee keeping, Requirements of Commercial Bee Keeping. Pit falls in Bee Keeping. Honey Bees and Honey –Types and classification Different species and races of honey bees. Specific Characteristics and suitability for geographic condition.

CBK 002: Identification of Flora and location of sites, Use of Bee Boxes and other Tools

Climatic requirement of different bee species. Preparation of flowering calendar. Description and demonstration of use of different boxes. Cleaning of boxes. Other tools in Bee Keeping.

CBK 003: Building of Comb and Month wise Calendar wise operations

Building of comb and colony. Division of colony, Raw produce generated by different life stages of bees, Drawing details of activities month wise

CBK 004: Production of Honey and Managing Insects and Diseases

Effect of nectar and pollen properties on honey production. Colony management during honey flow and dearth period. Common pests that attack honey bees and hives. Management of nuisance in Bee hives

CBK 005: Harvesting, Processing and Preservation of Honey and Costing, Pricing, Packaging & Marketing of Honey

Methods of harvesting honey, Processing of honey, Preservation of honey, Methodologies adopted for costing, pricing, Packaging and labeling & branding Marketing Management

Practical:

Capturing of colony and starting up of Apiary. Introduction of different stages in life cycle of Honey bees. Bee keeping unit - Handling of frames with colonies. Introduction of parts of Bee box & Tools used in Bee keeping. Colony inspection, maintenance. Identification of Queen cells, Drone cells & Brood. Sugar feeding of colonies in scarcity period. Identification of swarming tendency in a colony. Bee flora. Extraction of Honey using Honey extractor, moisture reduction, packing and storing of Honey. Disease management. Preventive and control measures of the diseases.

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Certificate in Mushroom Cultivation (CMC)

CURRICULUM (2022-23) Scheme and Syllabus

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Eligibility: Any student enrolled in the degree program of the college/ university.

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CMC 002	Life Cycle, Compost & Composting	16
CMC 003	Cultivation Technology, Spawn Production and Spawning	16
CMC 004	Cultivation of other economically important and medicinal mushroom	16
CMC 005	Insect - Pests and Disease management in cultivated mushroom, Mushroom growing unit/ house and Value addition of mushroom	16
	Total	80

Examination Scheme:

Components	CT	HA	C	V	A	EE
Weightage (%)	10	5	5	5	5	70

(C - Case Discussion/ Presentation; HA - Home Assignment; V - Viva; CT- Class Test; A - Attendance; EE - End Examination)

Syllabus

Certificate in Mushroom Cultivation (CMC)

Course Content

CMC: Mushroom Cultivation

Theory

CMC 001: Introduction and Health benefits of Mushrooms

History and Scope of mushroom cultivation - Edible and Poisonous Mushrooms-Vegetative characters, Different parts of a typical mushroom & variations in mushroom morphology. Key to differentiate Edible from Poisonous mushrooms. Button, Straw & Oyster- General morphology, distinguishing characteristics, spore germination and life cycle. Common edible mushrooms - Button mushroom (*Agaricus bisporus*), Milky mushroom (*Calocybe indica*), Oyster mushroom (*Pleurotus sajorcaju*) and paddy straw mushroom (*Volvvariella volvcea*). Nutritional and medicinal values of mushrooms

CMC 002: Life Cycle, Compost & Composting

Life Cycle of Mushroom- Vegetative Phase, Reproductive Phase and Spore Production. Principles of composting, machinery required for compost making, materials for compost preparation. Methods of Composting- Long method of composting (LMC) & Short method of composting (SMC).

CMC 003: Cultivation Technology, Spawn Production and Spawning

Sterilization of substrates. Spawn production - culture media preparation- production of pure culture, mother spawn, and multiplication of spawn. Composting technology, mushroom bed preparation. Spawning, spawn running, harvesting. Cultivation of button, milky, oyster and paddy straw mushroom.

CMC 004: Cultivation of other economically important and medicinal mushroom

Prepare substrate and manage crop Pick, grade and pack the harvested economically important and medicinal mushroom. Kabul Dhingri (King Shiitake Mushroom oyster) Mushroom Reishi (*Ganoderma*) Mushroom Kira ghas (*Cordycep*) Mushroom

CMC 005: Insect - Pests and Disease management in cultivated mushroom, Mushroom growing unit/ house and Value addition of mushroom

Major insect pests - Mushroom flies/ nematodes/mites. Dry Bubble and wet bubble - major diseases of cultivated mushroom Competitor/weed moulds encountered: Green, yellow and plaster moulds/ *Coprinus*. Design and develop mushroom production growing structure / unit. Prepare different value added products of mushroom

Practical: Sterilization and sanitation of mushroom house, instruments and substrates Preparation of mother culture, media preparation, inoculation, incubation and spawn production Cultivation of oyster mushroom using paddy straw/agricultural wastes.



Certificate in Organic Natural Farming (CONF)

CURRICULUM (2022-23) Scheme and Syllabus

Duration: 03 Months

Eligibility: Any student enrolled in the degree program of the college/ university.

Credits: 3 (2+1)

Contact Hrs.: 80

Objective: To produce food of high nutritional quality in sufficient quantity. To work with natural system rather than seeking to dominate them. To encourage and enhance biological cycles within farming system-involving microorganisms, soil flora and fauna, plants and animals. To maintain and increase long term fertility of soil. to impart knowledge and proficiency in Organic production practices, Certification process and Marketing of organically raised agricultural products, and to promote self employment and income generation.

Course Offered:

Course Code	Course Title	Hrs.
CONF 001	Introduction and Organic Agriculture	16
CONF 002	Organic Fertilizers/ Manure	16
CONF 003	Composting	16
CONF 004	Natural Farming	16
CONF 005	Certification and Inspection Systems in Organic Farming in India	16
	Total	80

Examination Scheme:

Components	CT	HA	C	V	A	ETE
Weightage (%)	10	5	5	5	5	70

(C - Case Discussion/ Presentation; HA - Home Assignment; V - Viva; CT- Class Test; A - Attendance; EE - End Trimester Examination)



Syllabus

Certificate in Organic Natural Farming (CONF)

Course Content

CONF: Organic and Natural Farming

Theory

CONF 001: Introduction and Organic Agriculture

Introduction, Organic Agriculture Vs. Conventional Agriculture, History of Organic Farming, Definitions, Principles, Concept, Need of Organic Farming, Mulching in Organic Agriculture, Water Management in Organic Agriculture, Nutrient Management in Organic Agriculture, Weed Management in Organic Agriculture, Soil Cultivation and Tillage in Organic Agriculture

CONF 002: Organic Fertilizers/ Manure

Why use organic fertilizers? Keeping soil fertile in natural way: Soil, Composting, Vermicomposting, Bio-fertilizers, other homemade fertilizers, Effect of Inorganic fertilizers and other agro-chemicals on soil and plants, Chemical fertilizers Vs. Organic fertilizers: Chemical fertilizers and their impact and Advantages of Organic fertilizers, Advantages of Organic Manure, Major organic sources and transformation, Residual effect of Organic manure, Green Manures: Nutrient potential of green manure, Nutrient content of important green manure, Advantage of green manure

CONF 003: Composting

Purpose of composting, What happens during composting, Factors affecting the composting process, Decomposing organisms, Limitations of composting. Vermicomposting and NADEP composting

CONF 004: Natural Farming

Introduction, Need and Concept, Objective, Principle of Natural farming, natural insecticide, herbicide, fertilizers, fungicide etc.

CONF 005: Certification and Inspection Systems in Organic Farming in India

Organic certification, Purpose of certification, Certificate Process, Operational Structure, Standards for Organic production, Inspection and Certification process

Practical: Preparation of various type of compost including vermicompost and NADEP compost. Preparation of natural fertilizer, growth promoter, insecticide, fungicide, herbicide etc.

PLANTICA – Indian Academy of Rural Development (IARD)

(Official organization of Plantica Foundation)

Recognized by Sri Dev Suman Uttarakhand University, Rishikesh Campus
and Uttarakhand Open University, Haldwani

Affiliated by Vigyan Prasar, Department of Science and Technology, Govt. of India
ISO 9001:2015 Certified Organization

Fee Structure – 2022-23

S. N.	Course /Program	Duration	Registration Fee (Rs.)	Course Fee (Rs.)	Total Fee (Rs.)
1.	Certificate in Mushroom Cultivation (CMC)	03 Months	500/-	1500/-	2000/-
2.	Certificate in Bee Keeping (CBK)	03 Months	500/-	1500/-	2000/-
3.	Certificate in Organic, Natural Farming (CONF)	03 Months	500/-	1500/-	2000/-

Director





शहीद दुर्गामल्ल
राजकीय स्नातकोत्तर महाविद्यालय डोईवाला, (देहरादून)
पो0ऑ0 भानियावाला, पिन-248144

Email: principaldoiwala@gmail.com

Email: degreecollegedoiwala@gmail.com

Website: sdmgovtpgcollege.in

Ph.No.-0135-2973836

पत्रांक : 682 -1 /IARD / 2021-22

दिनांक-25.02.2022

सेवा मे

निदेशक

Plantica foundation (Indian Academy of Rural Development (IARD))

Dehradun

महोदय,

कौशल विकास / Skill India कार्यक्रम के तहत आंतरिक गुणवत्ता सुनिश्चयन प्रकोष्ठ (IQAC) की संस्तुति पर छात्र / छात्राओं को महाविद्यालय व्यक्तिगत प्रशिक्षण Hands on Training कार्यक्रम संचालित करना चाहता है। इस हेतु आपके द्वारा कतिपय संस्थानों में तीन माह के प्रशिक्षण कार्यक्रम चलाये जा रहे हैं।

अतः अनुरोध है कि तीन(3) माह के निम्न **Add on certificate Course** हेतु पाठ्यक्रम / शुल्क ढांचा / विषय विशेषज्ञों का विवरण आदि प्रेषित करने का कष्ट करें।

1. Certificate in Bee Keeping (CBK)
2. Certificate in Mushroom Cultivation (CMC)
3. Certificate in Organic & Natural Farming (CONF)

प्राचार्य

श0दु0ग0 राजकीय स्नातकोत्तर महाविद्यालय
डोईवाला, देहरादून।

दिनांक : 25 Feb 2022

IBAC एवं कैरियर कौंसिलिंग एवं परामर्शदात्री समिति की बैठक दिनांक 25.02.2022 को आयोजित की गयी, जिसके निम्न बिन्दुओं पर चर्चा की गयी -

1. Plantix Foundation देहरादून द्वारा कृषि, उद्यमिता और विकास के अन्तर्गत सर्टिफिकेट कोर्स हेतु -

A. Certificate in Bee Keeping (CBK)

B. Certificate in Mushroom Cultivation (CMC)

C. Certificate in Organic-Natural Farming (CONAF)

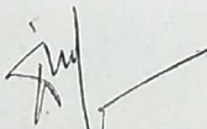
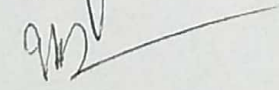
प्रस्ताव दिया गया है, इसे स्वीकार करते हुए महाविद्यालय में इसे प्रारम्भ किया जा सकता है। इस हेतु उपरोक्त संस्था से पाठ्यक्रम एवं शुल्क ढांचा प्राप्त किया जाए। पाठ्यक्रम एवं शुल्क ढांचे का अकलोकन करने के उपरांत उक्त संस्था से MOU हस्ताक्षरित कर लिया जाए। उक्त के सम्बन्ध में अन्य संस्थाओं से भी सम्पर्क करके उचित निर्णय लिया जाए।

हस्ताक्षर

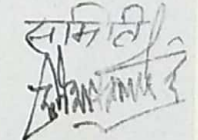
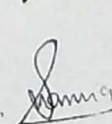
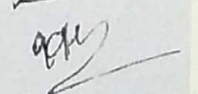
IBAC समिति

कैरियर कौंसिलिंग
समिति

महाविद्यालय,
परामर्शदात्री
समिति

1. 
2. 
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1. 
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INDIAN ACADEMY OF RURAL DEVELOPMENT (IARD)

Official Organization of Plantica Foundation, Dehradun, Uttarakhand
Recognized by Sri Dev Suman Uttarakhand University
(State Govt. University of Uttarakhand), Rishikesh
Affiliated by VIPNET, Vigyan Prasar, Department of
Science and Technology, Govt. of India



Ref. No.: IARD/GPGC-Doiwala/MOU/2022-001

Date: 21/3/22

To,
The Principal
Govt. P. G. College, Doiwala, Dehradun

Subject: Proposal of MOU between S.D.M. Govt. P. G. College, Doiwala, Dehradun and PLANTICA- IARD, Plantica Foundation, Dehradun, Uttarakhand

Honorable Sir,

Plantica Foundation (IARD) is a "**Recognized as authorized training and research centre by Sri Dev Suman Uttarakhand University, Rishikesh and Uttarakhand Open University, Haldwani**" registered organization under the Indian Trust Act, 1882 and Ministry of MSME, Govt. of India having ISO 9001:2015 certification for Quality Standards. We have signed MOU for collaboration with SDSUU, Rishikesh and UOU, Haldwani signed by honorable VCs and registrar of both the Universities.

We also have signed MOU for collaboration with many other reputed organizations like, Govt. P. G. College, Maldevta, Raipur, Dehradun, B.L.J. Govt. P. G. College, Purola, Uttarkashi Uttaranchal University, Dehradun, ITM University, Gwalior (M.P.), Geeta University, Patiyala and RIMT University (Punjab).

We are working on the agri entrepreneurship theme and would like to aware and train to the youth and farmers, In this regard we are providing hands-on-training related to agriculture which are based on entrepreneurship and skill development to promote self employment like Mushroom Cultivation, Bee Keeping, Organic and Natural Farming, Food Processing, Plant Protection, Soil, Water, Plant and Seed Testing and many more.

As you are one of the best academic institutions of Uttarakhand, we would like to propose an MOU to you to join hands for academic and research development activities for the growth and development of students, scholars as well as society.

We would be highly grateful and thankful to you if you may accept our proposal of Collaboration (MOU).

Thanking You.

With Regards'




Dr. Anoop Badoni
Scientist & Director – IARD

Enclosure:

1. About the Plantica Foundation, Dehradun
2. Two Copies of MOU

Plantica Foundation
Madhur Vihar Phase-2
Baniarawala, Dehradun

Contact: 9548055290
7060709609

planticaddn@gmail.com
www.plantica.in
www.pgrindias.in

दिनांक → 04.01.2022

दिनांक 04.01.2022 को आई० व्प ०ए०सी० द्वारा एक बैंक आपोजित की गयी जिसमें निम्न किन्दुओ पर चर्चा की गयी

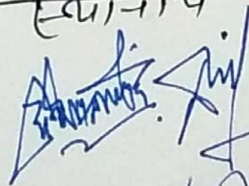
1. डाक/डाकाओ को महाविद्यालय से महाविद्यालय वेष्टा रूखा (उपय) में एवं पोल्डप-पव पर ही प्रवेश दिया जाय जिसके लिये महाविद्यालय के प्रमुख गैर पर कोविड - 19 के अन्तर्गत व्यवस्था की जाय ,

2. महाविद्यालय फिलर हो-डपिकण के अन्तर्गत उपयुक्त स्थानो पर फूल पोखे लगाने हेतु माली बुलाया जाय .

3. डाक/डाकाओ के शिक्षा एवं शिक्षणालय कार्यकर्मो के लिये फाइ बैंक लिखा जाय .

4. डाक/डाकाओ को व्यावसायिक रूप से कोशल्य विकास हेतु डीडी वाला कृषि प्रधान क्षेत्र होने के अन्तर्गत कृषि उद्योगो एवं कोशल्य विकास के अन्तर्गत विभिन्न सुस्थाको से सम्पर्क कर सभी सम्बन्धित एग्रीकल्चर को महाविद्यालय स्तर पर प्रारम्भ करे जाय .

5. विषयगत सौमिक मजरा डाक/डाकाओ को कराया जाय . ताकि स्थानीय जातकरी पाले हो सके ,



04/01/22

Pallavi



शहीद दुर्गामल्ल
राजकीय स्नातकोत्तर महाविद्यालय डोईवाला, (देहरादून)
पो0ऑ0 भानियावाला, पिन-248144

Ph.No.-0135-2973836

Email- principaldoiwala@gmail.com

Email-degrecollegedoiwala@gmail.com

Website-sdmgovtpgcollege.in

पत्रांक : 682 -1 / IARD / 2021-22

दिनांक-25.02.2022

सेवा मे

निदेशक

Plantica foundation(Indian Academy of Rural Development (IARD))

Dehradun

महोदय,

कौशल विकास / Skill India कार्यक्रम के तहत आंतरिक गुणवत्ता सुनिश्चयन प्रकोष्ठ(IQAC) की संस्तुति पर छात्र / छात्राओं को महाविद्यालय व्यापारगत प्रशिक्षण Hands on Training कार्यक्रम संचालित करना चाहता है। इस हेतु आपके द्वारा कतिपय संस्थानों में तीन माह के प्रशिक्षण कार्यक्रम चलाये जा रहे है।

अतः अनुरोध है कि तीन(3) माह के निम्न Add on certificate Course हेतु पाठ्यक्रम / शुल्क ढांचा / विषय विशेषज्ञों का विवरण आदि प्रेषित करने का कष्ट करें।

1. Certificate in Bee Keeping(CBK)
2. Certificate in Mushroom Cultivation (CMC)
3. Certificate in Organic & Natural Farming(CONF)

प्राचार्य

श0दु0ग0 राजकीय स्नातकोत्तर महाविद्यालय
डोईवाला, देहरादून।



MEMORANDUM OF UNDERSTANDING



BETWEEN

S. D. M. GOVT. P. G. COLLEGE, DOIWALA, DEHRADUN (UTTARAKHAND)

AND

PLANTICA FOUNDATION, DEHRADUN (UTTARAKHAND)
(2nd party)

1. S. D. M. Govt. P. G. College, Doiwala, Dehradun is constituted in the year 2001, Shaheed Durga Mall Government Post-Graduate College, Doiwala, Dehradun is a government institution of higher education that caters to the need of the students residing in the foothills of Garhwal region. Situated near the state capital of Uttarakhand, Dehradun that is habited by a wide and varied populace, the institution is an important center of learning offering accessible education to the students belonging especially to the economically weaker section of society. The college plays a major role in educating, enabling and empowering 75% of women population of the area pursuing higher studies. In the beginning, the College was run in Primary School, Lachchiwala, Doiwala. At present, this college is situated near Saung River Bridge in Bhaniyawala, approx. 20 kms away from Dehradun. Initially, the college started with eight subjects who included Hindi, English, Economics, Sociology, Political Science, History, Psychology, and Geography. Later on, in 2010, subjects like Home Science, Sanskrit, and Drawing were also included at graduation level. The college has a lush green campus, well-furnished labs and a rich library. The college has highly qualified and dedicated faculty and disciplined students. Commerce and Science classes began at graduation level in 2010-2011. And since 2011-12, post-graduate classes commenced in Hindi, English, Political Science, Economics, and Geography in Arts Stream. From session 2015-16, post-graduate classes in the subjects, like, Sociology and History have also begun. The college has started providing classes in Defence Studies at graduation level from 2015-16. Vide government order number 2268(1)XXIV(7)23(dec.)/2011 dated 22nd December, 2011, the name of the college was changed from Government Degree College to Shaheed Durga Mall Government PG College, Doiwala on the name of famous freedom fighter, martyr Shri Durga Mall.

2. Profile of 2nd party (with special reference to the area of MoU)

Plantica Foundation, Registered under The Indian Trust Act, 1882 and Ministry of MSME Govt. of India, located at Dehradun, Uttarakhand. Plantica Foundation is an ISO 9001:2015 certified organization for quality standards and Recognized as authorized skill development training and research centre by Sri Dev Suman Uttarakhand University and Uttarakhand Open University (State Govt. University of Uttarakhand). Since its establishment in 2017, Plantica is a key player for training and capacity building in Agriculture and its applications through training, education and research in India. The

training, education and capacity building programmes of the academy are designed to meet the requirements of Professionals at working levels, fresh graduates, researchers, academia, and decision makers. Plantica starts the work with the formation of an all India based academic and scientific group of researchers (Plantica Group of Researchers- PGR, India- www.pgrindias.in) named Association of Plant Science Researchers (APSR) in 2017. The objective of the association is to organize National and International conferences/ seminar / workshop etc. with scientific publications. Plantica initiate to publish a research book series entitled PLANTA (Publish Biannually in the month of April and October) since 2017. Association of Plant Science Researchers has been conducted Plant Science Researchers Meet (PSRM) every year since 2018 as a series of National Conferences on different themes. Plantica has constituted Indian Academy of Rural Development (IARD)- www.plantica.in in 2019 with the objective to provide hands on skill development training to the students and farmers. IARD also provide platform to the researchers to fulfill their research objective and to conduct partial thesis research work at Plantica. Plantica- IARD has been recognized as authorized skill development training and research centre by Sri Dev Suman Uttarakhand University (State Govt. University of Uttarakhand) in 2022 to conduct various skill development training program for youth and farmers. IARD is the only training and research centre in Uttarakhand who has received this type of recognition by State Govt. University. Plantica- IARD is also affiliated by VIPNET, Vigyan Prasar, Department of Science and Technology, Govt. of India as recognized Science Club in Uttarakhand. In 2022 Plantica constituted the Indian Academy of Women in Agriculture (IAWA) with the objective to provide a suitable and strong platform to the women academicians and researchers and also to provide skill development training and self employment opportunities to the women farmers and rural women. PLANTICA Vision is to be counted among the most pioneering, innovative, use-friendly and self – supported educational society, publisher, training and research centre/ institute in the world. PLANTICA Mission is to facilitate the acquisition of technical skill by students and professionals in all sectors of agricultural/ plant science economy to enable them to provide most effective support and services to farmers and other agricultural and researchers' community for practicing sustainable agriculture and ensuring better income for their produce.

This MEMORANDUM OF UNDERSTANDING (MoU) is entered into on this _____ day of _____ 2022.

BETWEEN

**S. D. M. GOVERNMENT P. G. COLLEGE, DOIWALA, DEHRADUN
UTTARAKHAND**, represented by its Principal, having its office at Doiwala, Dehradun, Uttarakhand in India, hereinafter referred to as the PARTY OF THE FIRST PART.

AND

PLANTICA FOUNDATION, represented by its Founder Director, having its office at Dehradun, Uttarakhand in India hereinafter referred to as the PARTY OF THE SECOND PART.

WITNESSETH that

WHEREAS, THE Party of the First Part is an educational institution of state importance committed to producing quality human resource through effective curricula delivery in various fields of education including agriculture and allied sciences.

WHEREAS, THE Party of Second Part is a training and research centre with the major objective to provide agricultural/ plant science related need based training to the students, young professional / researchers who want to be an entrepreneur in agriculture sector; also publish journals, books and educational materials for farmers, students and researchers.

WHEREAS, both party of the First Part and the party of the Second Part have come to an understanding to promote collaboration in education

NOW, THEREFORE, IT IS HEREBY MUTUALLY AGREED BY AND BETWEEN THE PARTIES AS FOLLOWS:

1. STATEMENT OF PURPOSE INCLUDING OBJECTIVES

- i) To share facilities in the area of skill development in various aspects of Botany, Agricultural and Allied Sciences as part of the curricula delivery
- ii) To share expertise in Botany, Agricultural and Allied Sciences for guidance of graduate and postgraduate students
- iii) To organize skill development training, conferences, workshops, seminars etc. in mutual areas of academic interest

2. TERMS AND CONDITIONS (These are general guidelines and may need to be modified on case to case basis)

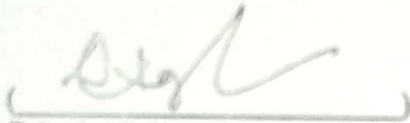
1. This MoU is valid for a period of Three year at the first instance, but can be extended with the consent of both the parties.
2. This MoU shall be deemed to have been automatically rescinded after the expiry of the MoU period, unless renewed for any further period as per mutually agreed upon terms at a later stage.
3. Either of the parties hereto shall be entitled to terminate the MoU at any time with valid reasons acceptable in writing to both parties and in such case, the MoU will terminate six months after the date of written notification or date of expiry of the MoU, whichever is earlier. In case of such premature termination of the MoU, all rights and obligations of both parties shall automatically cease except for those covered by written contract including ongoing collaborative activity that can no longer be cancelled.
4. In case of any dispute that may crop-up during executing of MoU, the matter would be settled through arbitration by referring to Arbitration

Committee comprising of a member nominated each by two parties and one member will be jointly nominated by two parties.

5. All credits and benefits for collaborative work including the intellectual property generated during the tenancy of project would be equally shared between both parties i.e. both parties shall be the joint owners of this IP.
6. The collaborative programme between two parties shall be coordinated by a Coordination Committee consisting of four members from the organization appointed by the Principal, S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand, and appointed authorities of the second part.
7. S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand, agrees to provide space and required facilities to conduct certificate courses/ diploma courses/ on-campus trainings/ workshops/ seminars/ conferences etc. for their UG / PG students in their respective areas of specialization, to Plantica Foundation, on terms as mutually agreed.
8. Services of the expertise in various specialization, available with the S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand, can be utilized by the Plantica Foundation for guidance of graduate and postgraduate students on mutually agreed terms and conditions and vice versa.
9. The Plantica Foundation will provide Training to the students of S. D. M. Govt. P. G. College Doiwala, Dehradun Uttarakhand, on mutual understanding. Also experts of the Foundation, will visit S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand for providing training and guest lectures on mutual understanding and vice versa.
10. The S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand, and Plantica Foundation, Dehradun, Uttarakhand may apply for collaborative projects jointly to organize scientific workshop/symposia /training courses/ conferences in areas of mutual interest.
11. The S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand and Plantica Foundation, as the case may be, will provide assistance in developing training facilities and required infrastructure facilities for carrying out collaborative training / research projects.
12. UG, PG and Ph.D. students studying at S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand would be allowed to carry out a training/project work part of their course at Plantica Foundation, Dehradun, Uttarakhand for a period recommended by their respective heads and vice versa.
13. This MOU would be reviewed by S. D. M. Govt. P. G. College Doiwala, Dehradun, Uttarakhand, and Plantica Foundation, Dehradun, Uttarakhand as and when required.

IN WITNESS WHEREOF, the authorized representatives of both parties have hereunto affixed their signatures on the dates indicated below:

For
S. D. M. Govt. P. G. College,
Doiwala, Dehradun



Principal


Signed in the presence of

1. _____

2. _____

Dated:

For
Plantica Foundation
Dehradun



Director

Signed in the presence of



Secretary
Plantica Foundation
&



Scientific Officer

Plantica – Indian Academy
of Rural Development
Dehradun, Uttarakhand





