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LIST OF ADD ON/ CERTIFICATE/VALUE ADDED PROGRAMS OFFERED DURING THE LAST FIVE YEARS

ADD ON COURSE UNDER DIBRUGARH UNIVERSITY
❖ LED bulb repairing technician
❖ Vermi- Compost Production Training Course
❖ Soft Skill Course
❖ Life Skill Course
❖ Tea Processing with special emphasis on Green & Specialty Tea
❖ Computer basis with special knowledge on MS office and Internet Susceptibility
❖ Sustainable Development of Solid Waste Management Course
❖ Certificate Course in Bioinformatics
UNDER NATIONAL SKILL DEVELOPMENT CORPORATION (NSDC)
❖ Vermicompost Producer (PMKVY 3.0 SCHEME)
❖ LED Light repairing technician (PMKVY 3.0 SCHEME)
UNDER COMMUNITY COLLEGE, JKM(NSDC sponsored)
❖ Horticulture in Nursery Management(
❖ Diploma in Tea Plantation and Management
❖ Bachelor of Vocation in Small Tea Garden Management and Plantation
INTIATIVE OF THE INSTITUTE
❖ Cutting and Embroidery
❖ Spoken English
PGDCA Programme recognized by Dibrugarh University

ADD ON COURSE UNDER DIBRUGARH UNIVERSITY

APPROVAL LETTER

OFFICE OF THE REGISTRAR :: DIBRUGARH UNIVERSITY :: DIBRUGARH

Ref. No. DU/DR-A/6-1/22/417 Date: 20/4/2022

NOTIFICATION

Under Report to the Under Graduate Board and Academic Council, Dibrugarh University, the Hon'ble Vice Chancellor i/c, Dibrugarh University is pleased to approve the following subjects as Add-on-Courses to be offered by Jorhat Kendriya Mahavidyalaya, Jorhat w.e.f. the Academic Session 2021-2022.

Sl No	Title of the Add-on-course	Duration	Department
1	LED bulb repairing technician	3 months	Physics Department in collaboration with Community College.
2	Vermi-compost Production Training Course	3 months	Zoology Department in collaboration with Community College.
3	Soft Skill Course	3 months	English & Assamese.
4	Life Skill Course	3 months	Education & Sociology
5	Tea Processing with special emphasis on Green & Specialty Tea	3 months	Botany Department in collaboration with Community College.
6	Computer basics with special knowledge on MS office and Internet Susceptibility.	3 months	Computer Science
7	Sustainable Development of Solid Waste Management Course.	3 months	Chemistry
8	Certificate course in Bioinformatics.	6 months	Botany

Issued with due approval.

20/4/2022

(Dr. B.C. Borah)
Joint Registrar (Academic)
Dibrugarh University

Copy to:

1. The Hon'ble Vice Chancellor i/c, Dibrugarh University for favour of information.
2. The Deans, Dibrugarh University, for favour of information.
3. The Registrar, Dibrugarh University, for information.
4. The Controller of Examinations, Dibrugarh University, for favour of information.
5. The Inspector of Colleges i/c, Dibrugarh University, for information.
6. The Principal, Jorhat Kendriya Mahavidyalaya, Jorhat Assam for information.
7. The Joint Controller of Examinations "C", Dibrugarh University, for information.
8. The Deputy Controller of Examinations "A" & "B"i/c, Dibrugarh University, for information.
9. The Academic Officer, Dibrugarh University, for information and needful.
10. The Programmer, Dibrugarh University for kind information and with a request to upload the Notification in the University website.
11. File.

20/4/2022

(Dr. B.C. Borah)
Joint Registrar (Academic)
Dibrugarh University

SYLLABUS

Three months add on certificate course on **"LED bulb repairing technician"** introduced by Physics Department, JKM in collaboration with **Community College Jorhat Kendriya Mahavidyalaya.**

Course Syllabus of Three month Add on certificate course on "LED bulb repairing technician" Total Credit: 9

Unit	Element	Topic	Credit
1.	Basics of Electronics and LED	1. Differentiate between various electronic and electrical components, materials and their specific properties, types and usages. 2. Differentiate between alternating current (AC) and direct current (DC). 3. Identify the types of solder and flux List the function of the different. 4. Components of a soldering iron. Identify the selection criteria of a suitable tip. 5. Demonstrate the LED working principle List the parameters which affect the overall life of LED. 6. Categorise LED into its various types such as indicator, illuminator and Chip on Board (COB). 7. List the advantages of LED light products. 8. List the basic parameters of LEDs and their importance in an LED products. 9. Distinguish between the different types of power sources used in LED lighting and their characteristics.	3
2.	LED Luminary Repair and Assembly	1. List the major components of an LED luminary such as LED light engine, LED Driver, LED heat sink and thermal pads. 2. Identify the tools required for LED product assembly. 3. List the materials used in LED product assembly. 4. Demonstrate basic knowledge of assembly of products such as spot light, LED bulb and LED tube light.	2
3.	Safety Standards and Procedures	1. Identify electrostatic discharge (ESD) causes and safety gear. 2. Identify and implement safety rules and company policy on personal protective equipment (PPE). 3. Use eye, respiratory and hearing protection as per company policy.	1
4.	Practical Classes	The Course contents given below	3

11/03/2022
Principal
Jorhat Kendriya Mahavidyalaya
Kendriyapur, Jorhat-10

SYLLABUS

Practical Classes on Led bulb repairing

1. Electric circuit components such as diode, transistor, IC, LED, transformer, resistor, capacitor, thermistor, inductor, timer, motor, starter, connector, switch, PCB, relay.
2. Multimeter, power source.
3. Ammeter, voltmeter Soldering Iron, soldering ware, desoldering pump.
4. LED light, multimeter, tester, LCR meter and power analyser.
5. Stripper, cutter, screw driver set, plier, soldering pump, soldering iron.

(*Rajib Bordoloi*)
HOD
Dept. of Physics, JKM

(*Arup Saikia*)
Faculty
Dept. of Physics, JKM

(*Amrit Dutta*)
Faculty
Dept. of Physics, JKM

(*Priyanus Kalita*)
Guest Faculty
Sibsagar College, JKM

11/03/2022

SYLLABUS

SYLLABUS

Three month certificate course on Vermicomposting Technology by Zoology Department in collaboration with community college, Jorhat Kendriya Mahavidyalaya.

Course syllabus of three months certificate course on Vermicomposting technology

Total credit -9

UNIT	ELEMENT	TOPIC	CREDIT
I	General: Vermiculture/ Vermicompost	1. Introduction, definition, meaning, history, economic importance 2. Role in bio transformation, role as four r's of recycling: reduce, reuse, recycle, restore. 3. The matter and humus cycle, transformation process in organic matter. 4. Choosing the right worm. Useful species of earthworms. Local species of earthworms. Exotic species of earthworms.	2
II	Earthworm Biology and Rearing	1. Key to identify the species of earthworms 2. Biology of *Eisenia fetida.// Eudrilus eugeniae* a) Taxonomy ,Anatomy, physiology and reproduction. b) Vital cycle: alimentation, fecundity, annual reproducer potential and limit factors (gases, diet, humidity, temperature, PH, light, and climatic factors).	2
III	Vermicompost Technology (Methods and Products)	1. Small Scale Earthworm farming for home gardens - Earthworm compost for home gardens 2. Conventional commercial composting - Earthworm Composting larger scale 3. Earthworm Farming (Vermiculture), Extraction (harvest), vermicompost harvesting , packaging and storage 4. Nutritional Composition of Vermicompost for plants, comparison with other Fertilizers 5. Vermiwash collection, composition &use 6. Sickness and worm's enemies. Frequent problems. How to prevent and fix them. Complementary activities of auto evaluation.	2

SYLLABUS

PRACTICAL

Sl No.	Topics	Credit
1.	Key to identify different types of earthworms	3
2.	Study of Systematic position, habit, habitat & External characters of ***Eisenia fetida/ Eudrilus eugeniae***	
3.	Comparison of morphology & life stages of ***Eisenia fetida & Eudrilus eugeniae***	
4.	Study of Vermiculture, Vermiwash & Vermicompost equipments, devices	
5.	Preparation of vermibeds, maintenance of vermicompost & climatic conditions.	
6.	Harvesting, packaging, transport and storage of Vermicompost and separation	

15/03/2022

Mrs. Ely Phukan
Academic Vice Principal,
Jorhat Kendriya Mahavidyalaya

14/03/2022

Mr. Someswar Borah
HOD, Department of Zoology
Jorhat Kendriya Mahavidyalaya

Nilakshi Borah
15. 3. 2022

Dr. Nilakshi Borah
Assistant Professor,
Department of Zoology
Jorhat Kendriya Mahavidyalaya

SYLLABUS

Certificate course in Soft Skills
An initiative of dept. of English and Assamese

Course layout

Objective : This course aims at enhancing the skill of communication, and other soft skills like leadership, positive attitude, emotional intelligence, self motivation etc. for the development of personality as well as carrier development of the learner.

Duration – 3 months Total credit – 09

Unit	Topic	Credit
1.	Introduction to Soft Skills; Aspects of soft skills; Effective communication skills; classification of communication, personality development;	1
2.	Haptics : The language of touch; listening skills; types of listening; effective listening.	1
3.	Letters; types of formal letters; Business letters: types; format and style; Effective resume.	1
4.	Report writing : types and strategies; proceeding writing	1
5.	Synopsis; Research paper; Project;	1
6.	Corporate writing: email, face book, whatsapp, twitter	1
7.	Preparation for personal interviews; speeches for various occasions; effective presentation.	1
8.	Practical: details of practicals are listed below	2

Details of Practical:

1. Group discussion.
2. Power point presentation on specific topics.
3. Demonstration of Listening Skill
4. Report writing & Conduction of meeting

Reference :

1. Butterfield, Jeff. Soft Skills for Everyone. New Delhi: Cengage Learning. 2010.
2. Kumar, Sanajy and Pūshp Lata. Communication Skills. New Delhi: OUP. 2011.
3. Lucas, Stephen E. The Art of Public Speaking. McGraw-Hill Book Co. International Edition, 11th Ed. 2014.
4. Sharma, R.C. and Krishna Mohan. Business Correspondence and Report Writing. New Delhi: TMH. 2016.
5. Turk, Christopher. Effective Speaking. South Asia Division: Taylor & Francis. 1985.
6. বেজবৰা, ডঃ নীৰাজনা মহন্ত, ব্যক্তিত্ব ,সুকুমাৰ কৌশল আৰু যোগাযোগ,অসম বুক ষ্টাৰ্ট
7. গোস্বামী, গোলোক চন্দ্র, অসমীয়া ব্যাকৰণ প্রবেশ, বীণা লাইব্রেৰী, গুৱাহাটী

Ratnamoni Dutta 10/3/22
Ratnamoni Dutta
Co ordinator
Soft Skill

11.3.2022
Bhagyashree Shyam
Co ordinator
Soft Skill

১০/৩/22
Bishnuram Nath
HoD, Assamese Dept.

10/3/2022
Dr. Arunima Borah
HoD, English Dept

10/03/2022
(Dr. Dulen Saikia)
Principal
Jorhat Kendriya Mahavidyalaya

Principal
Jorhat Kendriya Mahavidyalaya
Kanduguri, Jorhat-10

SYLLABUS

Certificate course in Life skills

An initiative of Dept. of Education and Sociology

Course syllabus of three months Add on certificate course on Life skills

Total credit : 14

Unit	Topic	Credit
1.	1 . Introduction to Life Skills and Life Skills Education 2. Conceptual Basis of Life Skills: Definition, Need and Significance 3. Evolution and Development of the concept of Life Skill Education	1
2.	1. Leadership skills, understanding leadership and its importance. 2.Traits and models of Leadership 3. Basic leadership skills.	1
3.	1. Effective use of social media, introduction to social media websites 2. Advantages of social media, Ethics and Etiquettes of social media 3. How to use google search better, effective use of social media.	1
4.	1.Social Influence Theory: Herbert Kelman 2. Core Life Skills: Social & Negotiation Skills 3.Self-esteem – Defination, Importance, how to build positive self-esteem	1
5.	1.Methods and Strategies for nurturing Self- awareness 2. Exploration: Johari Window, SWOT Analysis 3.Empathy: Sympathy, Empathy & Altruism	1
6.	1. Effective Communication: Assertiveness, Effective Listening, Negotiation Techniques & Process, Barriers of Communication, Presentation Skills . 2. Interpersonal Relationship: Defination, Factors Affecting Relationships 3. Thinking Skills: Critical Thinking: Analytical Thinking, Strategies to enhance Critical Thinking	1
7.	1. Creative Thinking: Out of the box thinking, stages of Creative Thinking, Factors hindering creative thinking, Characteristics of Creative thinkers 2. Problem Solving: Definition, Steps in Problem Solving 3. Decision Making: Definition, Informed Decision Making, Consequences of Decision making and Models of Decision	1
8.	1. Coping with Emotions: Basic Emotions, Models of Emotion 2. Coping with Stress: Definition, Types, Sources of Stress,	1

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SYLLABUS

	Strategies to Manage Stress Day 3. Emotional Intelligence : definition. Types. Ways to manage emotional intelligence.	
9.	1. Life Skills for Personal Effectiveness 2. Values: Punctuality, Honesty, Loyalty, Dependability, Reliability 3. Skill of building Self Confidence and Self Motivation	1
10.	1. Skill of Goal Setting; Types, Steps, Personal Vision and goal 2. Skill of time management 3. Study Skills and Memory Techniques	1
11.	1.Resume skill : preparation and presentation 2. Interview skill : preparation and presentation 3.Group discussion skills and exploring career opportunity	1
12.	1. Skill to Overcome Eating Disorders and Obesity, Skills to prevent Abuse- physical, sexual and emotional 2. Application of Life Skills in day-to-day life 3. Life skill for Adolescents and youth.	1
13.	Practical : details of practical are listed below	2

Details of practical :-

1. Group discussion
2. Power point presentation on specific topics.
3. Problem solving techniques.
4. Resume writing
5. Practise on use of different social media.

Dr. Pallabi Mali
Co ordinator
Life skill

Prof. Moonmoni Borkoch
Co ordinator
Life skill

Prof. Ranjumoni Saikia
HoD
Dept. of Education

Dr. Rajen Borah
HoD
Dept. of Sociology

11/03/2022
(Dr. Dulen Saikia)
Principal
Jorhat Kendriya Mahavidyalaya

Principal
Jorhat Kendriya Mahavidyalaya
Kenduguri, Jorhat-10

SYLLABUS

Three months Add on certificate course on "Tea Processing with special emphasis on Green and Specialty Tea" by Botany Department in collaboration with Community College.Jorhat KendriyaMahavidyalaya

Course Syllabus of Three months Add on certificate course on "Tea Processing with special emphasis on Green and Specialty Tea" Total Credit: 9

Unit	Element	Topic	Credit
1.	History and Scope of Tea	1. Tea Historical Background 2. Discovery of Assam tea plant and geographical distribution 3. Classification of tea 4. Cultivars of tea 5. Factors responsible for tea cultivation	1
2.	Tea soil and Integrated nutrient management	1. Composition and important physical and chemical properties 2. Mineral Nutrition in tea 2.1. Symptoms of nutrient deficiency and its correction 2.2. Organic matter management (FYM, Compost) 2.3. Important characteristics of NPK fertilizers, micronutrients, their nutrient content and calculation.	1
3.	Young tea management	1. Land preparation 2. Layout of the field 3. Bringing up of Young tea 4. Post care in the young tea plantation area.	1
4.	Integrated pest and disease management	1. Major diseases in tea and its impact on tea plants 2. Major pestin tea and its impact on tea plants. 3. Control measures of pest and diseases. 4. MRL problem in tea	1
5.	Physiology and Biochemistry of tea.	1. Growth behavior of tea 2. Physiological and biochemical attributes of tea plant 3. Source and sink relationship	1
6.	Manufacturing of tea	1. Tea chemistry 2. Tea manufacturing techniques 2.1. Different types of tea 2.2. Processing techniques of black tea (CTC and Orthodox) 2.3. Tea machineries 2.4. Blending 2.5. Care and handle of plucked tea leaves 2.6. Factory Hygiene 2.7. Tea quality and tea tasting	1

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SYLLABUS

Unit	Element	Topic	Credit
7.	Green Tea manufacturing	1. What is green tea? 2. Difference between green tea and other types of tea 3. Manufacturing technique of green tea 4. Packaging and Marketing 5. Risk involved in green tea manufacturing in Assam condition	1
8.	Practical Classes		2

Practical Classes on **Tea Processing.** Credit: 2

1. Soil sample collection and soil testing
2. Fine leaf count
3. Identification of different machineries used in tea processing.
4. Processing technique of green tea
5. Visit to Tocklai Tea Research Institute
6. Asssignments

(*Pinaki Hazarika*)
HOD
Dept. of Botany, JKM

(*Binod Hazarika*)
Faculty
Dept. of Chemistry, JKM

(*Rashmi Rekha Bora*)
Faculty
Dept. of Botany, JKM

(*Nabajit Tanti*)
Guest Faculty
Community College, JKM

11/03/2022

SYLLABUS

Three Months Add on Certificate course on **"Computer Basics with Special Knowledge on MS Office and Internet Susceptability"** in collaboration with Computer **Science Department of Jorhat Kendriya Mahavidyalaya.**

Course Syllabus of Three Months Add on Certificate course on "Computer Basics with Special Knowledge on Microsoft Office and Internet

Unit	Element	Topic	Credit
1	History of Computer	1.Introduction to Computer 2.Generation of Computers 3.Hardware and Software 4.Performance Measurements of Computer 5.Classification of Computer	1
2	Operating System and its Types	1.OS Directory Structure 2.Importance of Operating System 3.MS-DOS,WINDOWS,LINUX,UNIX Operating System	1
3	Microsoft Word	1.Working With Tables 2.Using Mail Merge 3.Modifying Page Layout 4.Previewing and Printing a document	1
4	Microsoft Excel	1.Formulas and Functions 2.Types of Cell Referencing 3.Cell Reference to another Worksheet 4.Rules to enter a function 5.Common Functions and Formula Errors 6.Charts,Components of Charts and its Types 7.Printing a Worksheet 8. Report generation for EMIS	1
5	Microsoft Powerpoint	1. Watermark in Powerpoint 2.Animating Text, Inserting Sounds	1

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Kenduguri, Jorhat-10

SYLLABUS

		3. Grouping and rotating Objects 4.Slide Transition and animation Effects	
6	Introduction to Internet	1.What is network 2.Types of Internet 3.Cyber Crime,Software Piracy 4.Recent Development in IT	1
7	Electronic Mail	1.Components of E-mail 2.Chart and Video Conferencing 3.Basic of Mobile cloud Computing	1
8		1.Practical Classes	2

Practical Classes **Credit :2**

1.Preparing your Bio-data in MS-WORD

2.Generating a Excel Sheet of calculating BILL ENTRY.

3.Creating a Powerpoint Presentation using Animation.

4.Creating a Brochure for your institute using MS-WORD

5.Creating G-mail Account,Google Classrooms

6.Preparing Data Entry report using MS-EXCEL

For 11/03/2022.

(Sewali Hazarika)
HOD
Dept.of Statistics,JKM

11/03/22

(Bonjit Bondon Buragohain)
Faculty
Dept.of Mathematics,JKM

Armina Rahman 11/03/2022

(Armina Rahman)
Faculty
Dept.of Computer Science,JKM

11/03/2022
Principal
Jorhat Kendriya Mahavidyalaya
Kendrigun, Jorhat-10

SYLLABUS

CERTIFICATE COURSE IN

SUSTAINABLE DEVELOPMENT OF SOLID WASTE MANAGEMENT

"LET'S GO GREEN TOGETHER"

AN INITIATIVE OF DEPARTMENT OF CHEMISTRY

(JORHAT KENDRIYA MAHAVIDYALAYA)

DURATION: 3 MONTHS

TOTAL CREDIT : 9

Unit	Topic	Credit
Unit I : Municipal Solid Waste; Its Sources and Composition	Introduction, Sources of solid waste, Types of solid waste, Composition of solid waste and its determination, Effects of Undisposed or Unattended Garbage Physical, Chemical and Biological properties of Municipal Solid Waste, Transformation of Municipal Solid Waste	1
Unit II: Solid Waste Generation and Collection of Waste	Quantities of solid Waste, Measurements and methods for waste quantities, Solid waste generation and collection of waste, Factors affecting solid waste generation rate	1
Unit III : Waste Management and Segregation	Processing of solid waste at residence (Storage, conveying, compacting, Shredding, pulping, granulating etc.,) Processing of solid waste at Commercial and industrial fields Combustion and energy recovery of municipal solid waste, landfill processes, Differentiate sanitary land fill and incineration as final disposal system for solid waste	1

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Kendugaon, Jorhat-10

SYLLABUS

Unit IV : Hazardous Solid Waste and Laboratory Waste Management	Definition, identification and classification of hazardous solid waste, Characteristics Hazardous waste toxicity, reactivity, infectiousness, flammability, corrosiveness, management and disposal. Laboratory waste, its sources, generation, storage management and disposal	1
Dissertation, Project Work and Hands on Training		5

Parinita Baruah
Mrs Parinita Baruah
HOD
Department of Chemistry

Mr Binod Kumar Hazarika
Coordinator
Solid Waste Management

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Mrs Jyoti Sikha Bora
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Sinki Kolita 15/03/22
Dr Sinki Kolita
Coordinator
Solid Waste Management

15/03/2022
Dr Dulen Saikia
Principal
Jorhat Kendriya Mahavidyalaya

SYLLABUS

Six months Add on certificate course on "Bioinformatics" introduced by Botany Department, Jorhat Kendriya Mahavidyalaya

Course Syllabus **Total Credit: 18**

Unit	Element	Topic	Credit
1.	Fundamentals of bioinformatics	1. Introduction 2. History and scope of bioinformatics. 3. Branches of Bioinformatics 4. Sources of information 5. Internet world wide web and web browsers 6. Genomics 7. Transcriptomics.	2
2.	Biological Databases	1. Introduction to Biological Databases 2. Classification of biological databases 3. Basic concepts of primary and secondary databases 4. Biological Database Retrieval System 5. Data mining and data mining tools (ENTREZ).	2
3.	Biological sequence database	1. National Center for Biotechnology Information (NCBI): Tools and Databases of NCBI, Database Retrieval Tool, Sequence Submission to NCBI. 2. EMBL Nucleotide Sequence Database (ENA): Introduction, Sequence Retrieval, Sequence Submission to EMBL, Sequence analysis tools. 3. DNA Data Bank of Japan (DDBJ): Introduction, Resources at DDBJ, Data Submission at DDBJ. 4. Swiss-Prot: Introduction and Salient Features. 5. Small molecule databases (Chemspider, Drug Bank, ZINC)	2
4.	Basic concept of Sequence Alignments	1. Introduction, Concept of Alignment 2. Pairwise sequence alignment (PSA) 3. Multiple Sequence Alignment (MSA), MSA by CLUSTALW 4. Methods of Sequence Alignment. 5. Tools of sequence alignment – FASTA and BLAST	2
5.	Phylogenetic analysis	1. Basic concept 2. Phylogenetic tree	2

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Jorhat Kendriya Mahavidyalaya
Kenduguri, Jorhat-10

SYLLABUS

Unit	Element	Topic	Credit
		3. Steps in evaluation of phylogeny and constructing phylogenetic trees. 4. Mehods of phylogenetic tree Construction.	
	Applications of Bioinformatics	1. Application of bioinformatics 2. Drug design and development 3. Molecular Docking, Application in plant science 4. Pharmacology (ADME and Toxicity prediction)	2
7.	Practical Classes		6

Practical Classes on Tea Processing. **Credit: 6**

1. Retrieval of nucleotide and protein sequences from the databases
2. Pair-wise alignment of sequences (BLAST)
3. Multiple sequence Alignment (CLUSTALW)
4. Phylogenic tree Construction
5. Predict of 3-D structure of protein
6. Molecular docking
7. ADMET Prediction

Mrs Pinaki Hazarika
HOD
Department of Botany

Mr Bhaskor Kolita
Coordinator
Bioinformatics

Mrs Rashmi Rekha Borah
Assistant Professor
Department of Botany

Ms Dimplly Borah
Coordinator
Bioinformatics

Dr Dulen Saikia 15/03/2022
Principal
Jorhat Kendriya Mahavidyalaya

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Jorhat Kendriya Mahavidyalaya
Kanduguri, Jorhat-10

UNDER NATIONAL SKILL DEVELOPMENT CORPORATION (NSDC)

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ıank you for the information.

ı Tue, 4 Jan 2022, 15:57 Mriganka Sekhar Sarma, <[redacted]@gmail.com> wrote:
Dear Madam/Sir,

This is with reference to the Onboarding of the institutions in SIP under the Skill Hub Initiative program.

NSDC vide an email communication has requested UGC to collect certain information from the Skill Hub institutions.
Accordingly, we are requesting you to provide the relevant information in a google form.
The link to the google form is:

ıttps://forms.gle/P7iJmquYOr19AZbMA

Kindly note the following:

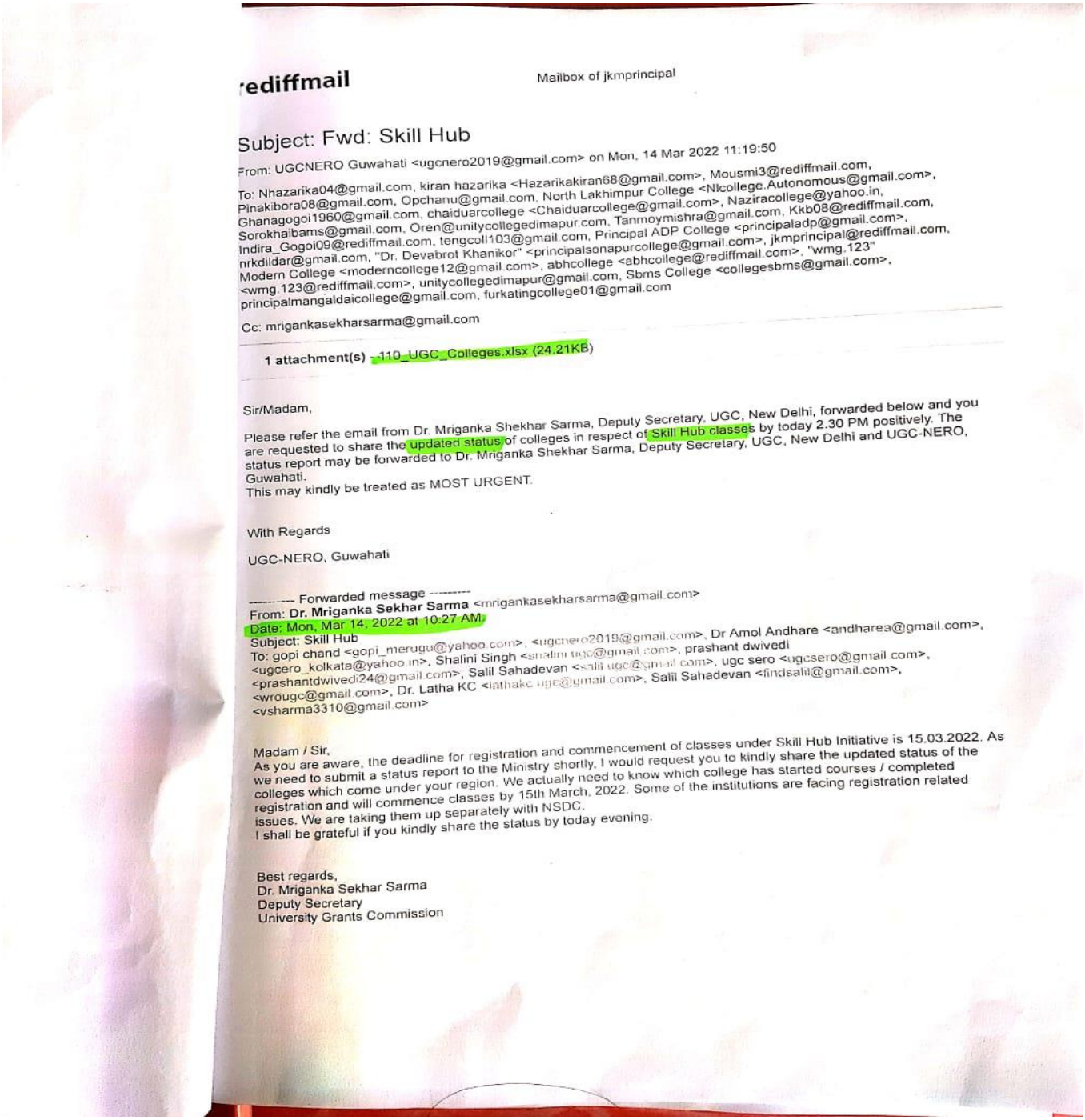
In case an entity is selecting for more than one job roles then data to be filled in two row items as there is no option of selecting two job roles in one cell.
All the institutions to select NOT MORE than TWO job roles
District name to be filled correctly- choose from the drop down only
Only ONE email Id to be provided for TP and another ONE mail for TC. Please avoid giving multiple mail id against TP and or TC.
Mobile number to be of 10 digits, entities should avoid providing details with prefixes like +91, 0, 09.
No field to be left BLANK
QP list is also attached. You need to mention the QP codes and job roles from the QP list only.
In case of any queries, please write to [redacted]

(Institutions which have already provided the information are again requested to share the same via the google form)

You are requested to share the information by **6th January, 2022.**

With regards,
Mriganka Sekhar Sarma
Education Officer
University Grants Commission

APPROVAL MAIL



rediffmail

Mailbox of jkmprincipal

Subject: Fwd: Skill Hub

From: UGCNERO Guwahati <ugcnero2019@gmail.com> on Mon, 14 Mar 2022 11:19:50

To: Nhazarika04@gmail.com, kiran hazarika <Hazarikakiran68@gmail.com>, Mousmi3@rediffmail.com, Pinakibora08@gmail.com, Opchanu@gmail.com, North Lakhimpur College <NIcollege.Autonomous@gmail.com>, Ghanagogoi1960@gmail.com, chaiduarcollege <Chaiduarcollege@gmail.com>, Naziracollege@yahoo.in, Sorokhaibams@gmail.com, Oren@unitycollegedimapur.com, Tanmoymishra@gmail.com, Kkb08@rediffmail.com, Indira_Gogoi09@rediffmail.com, tengcoll103@gmail.com, Principal ADP College <principaladp@gmail.com>, nrkdildar@gmail.com, "Dr. Devabrot Khanikor" <principalsonapurcollege@gmail.com>, jkmprincipal@rediffmail.com, Modern College <moderncollege12@gmail.com>, abhcollege <abhcollege@rediffmail.com>, "wmg.123" <wmg.123@rediffmail.com>, unitycollegedimapur@gmail.com, Sbms College <collegesbms@gmail.com>, principalmangaldaicollege@gmail.com, furkatingcollege01@gmail.com

Cc: mrigankasekharsarma@gmail.com

1 attachment(s) -110_UGC_Colleges.xlsx (24.21KB)

Sir/Madam,

Please refer the email from Dr. Mriganka Shekhar Sarma, Deputy Secretary, UGC, New Delhi, forwarded below and you are requested to share the updated status of colleges in respect of Skill Hub classes by today 2.30 PM positively. The status report may be forwarded to Dr. Mriganka Shekhar Sarma, Deputy Secretary, UGC, New Delhi and UGC-NERO, Guwahati.
This may kindly be treated as MOST URGENT.

With Regards

UGC-NERO, Guwahati

---------- Forwarded message ---------
From: **Dr. Mriganka Sekhar Sarma** <mrigankasekharsarma@gmail.com>
Date: Mon, Mar 14, 2022 at 10:27 AM
Subject: Skill Hub
To: gopi chand <gopi_merugu@yahoo.com>, <ugcnero2019@gmail.com>, Dr Amol Andhare <andharea@gmail.com>, <ugcero_kolkata@yahoo.in>, Shalini Singh <shalini.ugc@gmail.com>, prashant dwivedi <prashantdwivedi24@gmail.com>, Salil Sahadevan <salil.ugc@gmail.com>, ugc sero <ugcsero@gmail.com>, <wrougc@gmail.com>, Dr. Latha KC <lathakc.ugc@gmail.com>, Salil Sahadevan <findsalil@gmail.com>, <vsharma3310@gmail.com>

Madam / Sir,
As you are aware, the deadline for registration and commencement of classes under Skill Hub Initiative is 15.03.2022. As we need to submit a status report to the Ministry shortly, I would request you to kindly share the updated status of the colleges which come under your region. We actually need to know which college has started courses / completed registration and will commence classes by 15th March, 2022. Some of the institutions are facing registration related issues. We are taking them up separately with NSDC.
I shall be grateful if you kindly share the status by today evening.

Best regards,
Dr. Mriganka Sekhar Sarma
Deputy Secretary
University Grants Commission

APPROVAL MAIL

TP ID	TP Name	TP Type
TP104787	Sonapur College	Government Institute
TP104874	Tengakhat College	Government Institute
TP104781	Vidya Pratishthan'S Arts, Science An	Government Institute
TP104812	Shri Vyankatesh Arts Commerce & S	Government Institute
TP104777	St. Francis College For Women.	Government Institute
TP104808	Anandaram Dhekial Phookan Colleg	Government Institute
TP104685	Madras Christian College	Government Institute
TP104805	Late B.S. Arts Prof, N. G. Science & A	Government Institute
TP104776	St.Thomas College	Government Institute
TP105241	St Josephs College (Autonomous)	Government Institute
TP104730	Andhra Loyola College (Autonomou	Government Institute
TP105105	Lady Doak College	Government Institute
TP104775	Kre Society'S Karnatak Arts, Science	Government Institute
TP104767	Vimala College (Autonomous)	Government Institute
TP104762	Nabagram Hiralal Paul College	Government Institute
TP104720	St. Dominic'S College, Kanjirapally	Government Institute
TP104717	Jorhat Kendriya Mahavidyalaya	Government Institute
TP105003	Tuljaram Chaturchand College Of Ar	Government Institute
TP104707	Hindi Mahavidyalaya	Government Institute
TP104891	Kongunadu Arts And Science College	Government Institute
TP104723	Lyallpur Khalsa College For Women J	Government Institute
TP104719	Sri Krishna Arts And Science College,	Government Institute
TP104744	Kamala Nehru College (University Of	Government Institute
TP104661	Modern College Imphal	Government Institute
TP104695	North Lakhimpur College(Autonomo	Government Institute
TP104663	Sahakar Maharshi Late Bhaskarrao S	Government Institute
TP104823	Jmj College For Women (Autonomu	Government Institute
TP104684	Abhayapuri College	Government Institute
TP104679	Chaiduar College	Government Institute
TP104934	Bhiwapur Mahavidyalaya	Government Institute
TP104921	Pavanatma College	Government Institute
TP105018	Psg College Of Arts & Science	Government Institute

TC ID	TC Name	TC Category	TC Type
TC162611	Sonapur College	Skill Hub under PMKVY 3.0	UGC Colleges
TC162610	Vocational Training Centre, Tengal	Skill Hub under PMKVY 3.0	UGC Colleges
TC162606	Vidya Pratishthan'S Arts, Science A	Skill Hub under PMKVY 3.0	UGC Colleges
TC162603	Shri Vyankatesh Arts Commerce &	Skill Hub under PMKVY 3.0	UGC Colleges
TC162602	St. Francis College For Women.	Skill Hub under PMKVY 3.0	UGC Colleges
TC162598	Anandaram Dhekial Phookan Colle	Skill Hub under PMKVY 3.0	UGC Colleges
TC162596	Mcc-Community College	Skill Hub under PMKVY 3.0	UGC Colleges
TC162595	Late B.S. Arts Prof, N. G. Science &	Skill Hub under PMKVY 3.0	UGC Colleges
TC162590	St.Thomas Community College	Skill Hub under PMKVY 3.0	UGC Colleges
TC162583	St Josephs College Autonomous, D	Skill Hub under PMKVY 3.0	UGC Colleges
TC162571	Apssdc	Skill Hub under PMKVY 3.0	UGC Colleges
TC162569	Lady Doak College, Madurai	Skill Hub under PMKVY 3.0	UGC Colleges
TC162566	Kre Society'S Karnatak Arts, Scienc	Skill Hub under PMKVY 3.0	UGC Colleges
TC162558	Vimala College (Autonomous)	Skill Hub under PMKVY 3.0	UGC Colleges
TC162555	Nabagram Hiralal Paul College	Skill Hub under PMKVY 3.0	UGC Colleges
TC162541	Sdc Skill Hub	Skill Hub under PMKVY 3.0	UGC Colleges
TC162540	Jorhat Kendriya Mahavidyalaya	Skill Hub under PMKVY 3.0	UGC Colleges
TC162537	Tuljaram Chaturchand College, Bar	Skill Hub under PMKVY 3.0	UGC Colleges
TC162529	Hindi Mahavidyalaya	Skill Hub under PMKVY 3.0	UGC Colleges
TC162512	Kongunadu Skill Development Cen	Skill Hub under PMKVY 3.0	UGC Colleges
TC162510	Lyallpur Khalsa College For Wome	Skill Hub under PMKVY 3.0	UGC Colleges
TC162506	Sri Krishna Arts And Science Colleg	Skill Hub under PMKVY 3.0	UGC Colleges
TC162501	Kamala Nehru College	Skill Hub under PMKVY 3.0	UGC Colleges
TC162485	Modern College Imphal	Skill Hub under PMKVY 3.0	UGC Colleges
TC162484	North Lakhimpur College(Autonon	Skill Hub under PMKVY 3.0	UGC Colleges
TC162476	Sahakar Maharshi Late Bhaskarrao	Skill Hub under PMKVY 3.0	UGC Colleges
TC162474	Jmj Skill Training Center	Skill Hub under PMKVY 3.0	UGC Colleges
TC162468	Abhayapuri College	Skill Hub under PMKVY 3.0	UGC Colleges
TC162464	Chaiduar College	Skill Hub under PMKVY 3.0	UGC Colleges
TC162454	Bhiwapur Mahavidyalaya	Skill Hub under PMKVY 3.0	UGC Colleges
TC162443	Pavanatma College	Skill Hub under PMKVY 3.0	UGC Colleges
TC162437	Psgcapsg College Of Arts & Science	Skill Hub under PMKVY 3.0	UGC Colleges

SYLLABUS

ASCI

This course encompasses 5 out of 5 National Occupational Standards (NOS) of "Vermicompost Producer" Qualification Pack issued by "Agriculture Skill Council of India".

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	Introduction Theory Duration (hh:mm) 05:00 Practical Duration (hh:mm) 00:00 Corresponding NOS Code Bridge Module	• Understand General Discipline in the class room (Do's & Don'ts) • Study the Scope & importance of Organic farming in India • Understand the usage & market demand for vermicompost • Understand the Role of a 'Vermicompost Producer'	Laptop, white board, marker, projector
2	Identify appropriate site & prepare bed for vermicomposting Theory Duration (hh:mm) 15:00 Practical Duration (hh:mm) 20:00 Corresponding NOS Code AGR / N1212	• Identify appropriate site for vermicompost unit • Construct vermicompost structure • Prepare vermibed as per the specifications • Identify & source appropriate type of organic wastes • Ensure proper coverage & appropriate moisture level • Comply with the occupational health & safety requirements relevant to work	Laptop, white board, marker, projector, Audio-visual aids, White Marker, gunny bag, plastic sheet, Shovels, spades, crowbars, iron baskets, dung fork, buckets, bamboo baskets, trowel, Plumbing and fitting tools, Power operated shredder, Sieving machine with wire mesh sieves, Culture trays (plastic), Wheel barrows, Water pumps with pipe/ dripper
3	Inoculate earthworms in prepared unit & manage vermicomposting process Theory Duration (hh:mm) 15:00 Practical Duration (hh:mm) 30:00 Corresponding NOS Code AGR/N1213	• Identify & procure correct species of earthworm from authentic source • Ensure favourable thriving condition prior to releasing earthworms into bed • Inoculate earthworms into vermicomposting units • Ensure proper moisture and aeration in the vermibed • Prepare feed and manage vermicomposting unit • Control predator attacks- birds, animals & insects, diseases such as sour crop etc • Harvest vermiwash	Laptop, white board, marker, projector, Audio-visual aids, earthworms, plastic sheet, Shovels, spades, crowbars, iron baskets, dung fork, buckets, bamboo baskets, trowel, Power operated shredder, Sieving machine with wire mesh sieves, Culture trays (plastic), Water pumps with pipe/ dripper
4	Identify maturity of	• Identify maturity of prepared	Laptop, white board,

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	vermicompost and harvest using approved procedures Theory Duration (hh:mm) 15:00 Practical Duration (hh:mm) 30:00 Corresponding NOS Code AGR/N1214	vermicompost • Harvest mature vermicompost at appropriate stage using tub method, container etc • Collect & store the vermicompost in shady place • Harvest earthworms using appropriate technique- trapping method, sieving method, manual method, self-harvesting method etc • Segregate the vermiculture collected into cocoons, juveniles, adults etc as per the work requirements • Collect worms in containers, weigh, sort, grade, transfer in ready bed or prepare for sale • Recycle the process by refilling the bed with required materials	marker, projector, Audio-visual aids, Shovels, spades, crowbars, iron baskets, dung fork, buckets, bamboo baskets, trowel, Weighing scale, Weighing machine (platform type), Gunny bags, Bag sealing machine, Culture trays (plastic), Wheel barrows
5	Undertake basic entrepreneurial activities for small enterprise Theory Duration (hh:mm) 30:00 Practical Duration (hh:mm) 20:00 Corresponding NOS Code AGR/N9908	• Assess demand & supply of vermicompost in the market • Seek information regarding subsidies/loan available through govt institutions • Avail loan from the financial institutions • Identify & develop appropriate marketing channels • Track prices prevailing in the market and formulate competitive pricing mechanism • Maintain book of accounts • Calculate B:C ratio • Comply with relevant regulations in marketing & sale of the produce	Laptop, white board, marker, projector, Audio-visual aids, pen, paper
6	Maintain Health & Safety at the work place Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 10:00 Corresponding NOS Code AGR/N9903	• Maintain a clean & efficient workplace • Render appropriate emergency procedures • On Time Reporting to appropriate person. • Practice General safety and first aid	Laptop, white board, marker, projector, , Personal protective equipment Like: Helmet / head gear, Cotton / woolen safety gloves, Safety boots, Safety Harness; First Aid Kit: Bandages, Adhesive bandages, Betadine Solution / ointment, Pain relief spray / ointment, Antiseptic liquid; Phone directory, Search lights, fire extinguisher
	Total Duration:	Unique Equipment Required: Laptop, white board, marker, projector, Audio-visual aids, Shovels,	

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Theory Duration (hh:mm) 90:00 Practical Duration (hh:mm) 110:00	spades, crowbars, iron baskets, dung fork, buckets, bamboo baskets, trowel, Plumbing and fitting tools, Power operated shredder, Sieving machine with wire mesh sieves, power operated with motor , Weighing scale, Weighing machine (platform type), Bag sealing machine, Culture trays (plastic), Wheel barrows, Water pumps with pipe/ dripper	

Grand Total Course Duration: 200 Hours, 0 Minutes

(This syllabus/ curriculum has been approved by Agriculture Skill Council of India)

SYLLABUS

This course encompasses 03 out of 03 National Occupational Standards (NOS) of "LED Light Repair Technician" Qualification Pack issued by "Electronics Sector Skills Council of India".

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1.	**Basics of Electronics and LED** Theory Duration (hh:mm) 60:00 Practical Duration (hh:mm) 40:00 Corresponding NOS Code ELE/N9302	• Differentiate between various electronic and electrical components, materials and their specific properties, types and usages • Calculate resistance by identifying the colour codes • Define capacitance of a capacitor • List and define the parameters of an electric circuit such as voltage, current and resistance • Define Ohm's law and implement it for calculations • Differentiate between alternating current (AC) and direct current (DC) • Measure power and energy using relevant formula • Identify the basics of power electronics and its usages in lighting controls or LED power supplies and LED drivers • Identify the types of solder and flux • List the function of the different components of a soldering iron • Identify the selection criteria of a suitable tip • Demonstrate the LED working principle • List the parameters which affect the overall life of LED. • Categorise LED into its various types such as indicator, illuminator and Chip on Board (COB) • List the advantages of LED light products • List the basic parameters of LEDs and their importance in an LED products • Distinguish between the different types of power sources used in LED lighting and their characteristics	Electric circuit components such as diode, transistor, IC, LED, transformer, resistor, capacitor, thermistor, inductor, timer, motor, starter, connector, switch, PCB, relay and circuit breaker Multimeter, power source Ammeter, voltmeter Soldering Iron, soldering ware, desoldering pump

		• Illustrate the different ways LEDs can be connected in a circuit and list the advantages and disadvantages of each • Identify the steps of heat transfer procedure in an LED • List the components of passive thermal designs to maintain low junction temperature such as adhesive and heat sinks • Identify the use of constant current LED Driver	
2.	**LED Luminary Repair and Assembly** Theory Duration (hh:mm) 60:00 Practical Duration (hh:mm) 70:00 Corresponding NOS Code ELE/N9302	• List the major components of an LED luminary such as LED light engine, LED Driver, LED heat sink and thermal pads • Identify the tools required for LED product assembly • List the materials used in LED product assembly • Demonstrate basic knowledge of assembly of products such as spot light, LED bulb and LED tube light • Analyse the Importance of IP rating in Led products and its requirement for different products based on the product area of use • Categorise LED drivers into different types as per the type of LED • Demonstrate driver selection according to the LED • Follow the steps of driver selection according to the LED • Identify the function and characteristics and application of a constant current LED driver and a constant voltage driver • Assess the reason for LED failure including hot environment, incorrect LED driver and incorrect polarity • Identify and analyse the LED luminaire failure types such as LED failure modes, secondary optics failure modes, thermal management system failure and LED driver failure	LED light, multimeter, tester, LCR meter and power analyser Stripper, cutter, screw driver set, plier, soldering pump, soldering iron

		• Follow the steps to diagnose and repair fault in an LED light both at the component level and the strip level • Demonstrate the process of soldering if loose, de-soldered wires and connections are found • Check the LED light engine with DC supply as per the voltage / current requirements of the product • Check the supply unit with AC supply / multimeter to find out the voltage /current output in case LED light engine is not found defective • Check voltage / current output at different sections of the supply unit in case of no voltage / current • Check the components with multimeter individually of the section where voltage output is found to be less than desired / no output • Perform repair / replacement of the damaged components / SMPs • Check and replace the burnt out / damaged LED strips • Identify 5S work standards • Perform repair as per productivity and quality standards • Report faults found in the LED lights document the fault diagnosis and repair process as per SOP	
3.	**Safety Standards and Procedures** Theory Duration (hh:mm) 30:00 Practical Duration (hh:mm) 30:00 Corresponding NOS Code	• Identify electrostatic discharge (ESD) causes and safety gear • Identify and implement safety rules and company policy on personal protective equipment (PPE) • Categorise hazards into different types • Identify and report potential hazards on time • Use eye, respiratory and hearing protection as per company policy	Apron, safety shoe, wrist band, wire strap, rubber gloves and safety clothes Respirator, mask, skull caps, googles, jacket

	ELE/N9921	• List the reasons for a health and safety policy • Comply with standard health and safety procedures followed in the company while handling an equipment and hazardous materials and tools or situations • Apply electrical safety measures such as adequate wiring, proper insulation, grounding and no standing water • Identify and follow standard safety procedures including daily safety instructions, before starting work, when working and after completion of work • Follow emergency procedures during dangerous situations such as a fire • List the key points of a fire drill • Apply first aid as per the injury • Follow the incident reporting procedure • Implement disposal of hazardous chemicals, tools and materials by following prescribed environmental norms or as per company policy	
4.	**Soft Skills** Theory Duration (hh:mm) 30:00 Practical Duration (hh:mm) 40:00 Corresponding NOS Code ELE/N9919	• Identify work requirement and targets as per drawings, job sheets or work orders from supervisor • Use the tools and equipment to as per the work instructions and deposit the faulty ones • Work as per the standard operating procedure (SOP) • Assess work related issues and queries for solutions or escalate them to the supervisor • Report work completed and receive feedback on work done • Rectify errors as per feedback and minimise mistakes to zero in future • Report about process flow improvements, quality of output and repairs and maintenance of tools and machinery as required	Projector, PPT

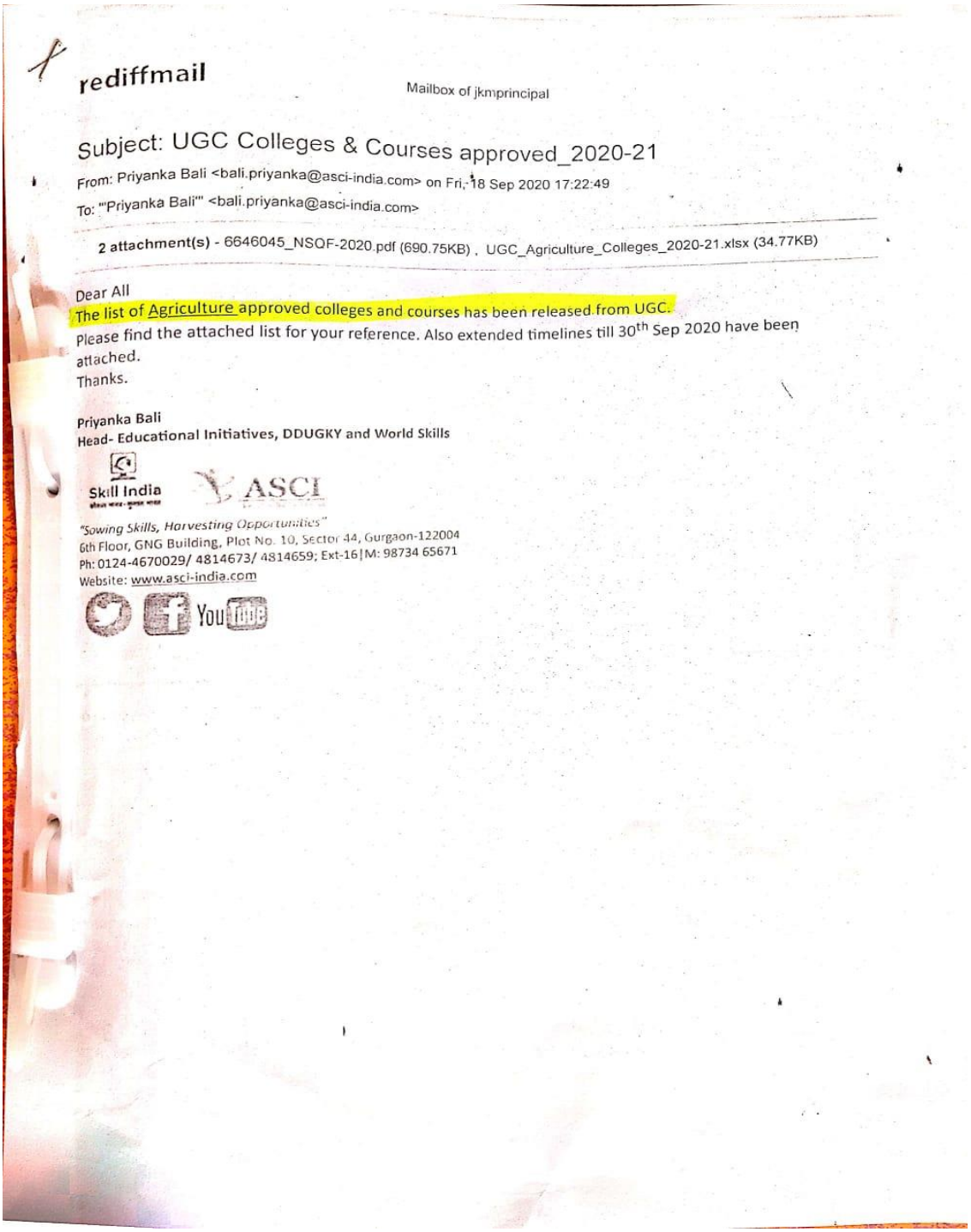
		• Follow the reporting structure to resolve issues • Implement the skills required for working with peers such as proper verbal and non-verbal communication, active listening and appropriate problem solving abilities • Demonstrate reading skills to understand values on components, job sheets, work orders, manuals, warnings and so on • Perform documentation of reports, customer complaints, solution provided and so on • Demonstrate healthy interpersonal relationship by carrying resolving conflict • Demonstrate team building skills to work effectively in a team • Implement the principles of work ethics by resolving personnel issues, delivering quality work and reporting hazards to superior • Identify and explain different policies and rules of the company to achieve quality, productivity and safety standards • Implement critical thinking skills to improve work processes and spot disruptions • Identify the points to be considered to facilitate decision making as per the standard operating procedure	
	Total Duration 360:00 Theory Duration 180:00 Practical Duration 180:00	Unique Equipment Required: Ac Power Source, Allen Key Set, Connecting Wires, Digital Multimeter, ESD Gloves, ESD Mat, ESD Wrist Band, 7 Watt LED Lights, 9 Watt LED Lights, 12 Watt LED Lights, 3 Watt LED Lights, 5 Watt LED Lights, LED Tubelight, Lux Meter, Plier, Precision Screw Driver, Regulated Dc Power Supply, Safety Helmet, Safety Shoes, Screw Driver Set, Soldering Flux, Soldering Station, LED Street Light, Wire Stripper	

Grand Total Course Duration: **360 Hours 0 Minutes**
(This syllabus/ curriculum has been approved by ***Electronics Sector Skills Council of India)***

UNDER COMMUNITY COLLEGE, JKM(NSDC sponsored)

HORTICULTURE IN NURSERY MANAGEMENT

APPROVAL MAIL



rediffmail

Mailbox of jkmprincipal

Subject: UGC Colleges & Courses approved_2020-21

From: Priyanka Bali <bali.priyanka@asci-india.com> on Fri, 18 Sep 2020 17:22:49

To: "'Priyanka Bali'" <bali.priyanka@asci-india.com>

2 attachment(s) - 6646045_NSQF-2020.pdf (690.75KB) , UGC_Agriculture_Colleges_2020-21.xlsx (34.77KB)

Dear All

The list of Agriculture approved colleges and courses has been released from UGC.

Please find the attached list for your reference. Also extended timelines till 30th Sep 2020 have been attached.

Thanks.

Priyanka Bali

Head- Educational Initiatives, DDUGKY and World Skills

Skill India

ASCI

"Sowing Skills, Harvesting Opportunities"

6th Floor, GNG Building, Plot No. 10, Sector 44, Gurgaon-122004

Ph: 0124-4670029/ 4814673/ 4814659; Ext-16|M: 98734 65671

Website: www.asci-india.com

79	Andhra Pradesh	J.M.J. College for Women	Tenali, District Guntur, - 522 202	Diploma	Food Processing/Food and Agricultural Commodities
80	Maharashtra	Jalna Education Society's R.G. Bagdia Arts, S.B. Lakhotia Commerce & R.Bezonji Science College	Jalna, District Jalna - 431 203	Diploma	Agriculture
81	Tamil Nadu	Jamal Mohammed College	No.7, Race Course Road,	Diploma	Agriculture/Aquaculture
				Diploma	Agriculture/Horticulture
82	Andhra Pradesh	Jawahar Bharati Degree College, Kavali	Peddapavani Rd, Vaddi Palem, Kavali, Andhra	Advanced Diploma	Agriculture/Dairy Technology
				Advanced Diploma	Agriculture/Fish Hatchery Management
				M.VOC. Degree	Agriculture/Commercial aqua culture and Fisheries
				Advanced Diploma	Agriculture/Sportmanagent
83	Uttar Pradesh	Jhunjhunwala P.G. College	Dwarika Puri, Hansapur, District Faizabad - 224 133	Diploma	Agriculture/Nursery and Horticulture of Management
				Diploma	Management and Entrepreneurship/Agri-Business
84	Assam	Jorhat Kendriya Mahavidyalaya	Jorhat, District Jorhat	Diploma	Agriculture/Horticultural Nursery Management
85	Karnataka	K.L.E. Society's Arts and Commerce College	Hatalageri Naka, KLE Campus, Gadag-Betgeri –	Certificate	Agriculture/Agri-horticulture Science
86	Maharashtra	K.R.T. Arts, B.H. Commerce and A.M. Science College	- 422 002	Certificate	Agriculture/Sericulture Technology
87	Bihar	K.S.T. College	Salempur, Sohsarai, Biharsharif (Nalanda)	Diploma	Agriculture/HORTICULTURE
88	Manipur	Kakching Khunou College	Kakching Khunou, District Thoubal	B.VOC. Degree	Agriculture/Fishery
89	Manipur	Kamakhya Pemton College	Hiyanghemg, Manipur	B.VOC. Degree	Agriculture/Floriculture
90	Uttar Pradesh	Kamla Nehru Institute of Physical and Social Sciences	Village-Ratanpur, Post-KNI, District-Sultanpur	B.VOC. Degree	Agriculture/Herbal Science
91	Karnataka	Karnataka Arts, Science and Commerce College	Bidar, Dist. Bidar - 585 401	B.VOC. Degree	Agriculture/Horticulture
92	Manipur	Kha - Manipur College	Kakching, District Thoubal	B.VOC. Degree	Agriculture/Fishery
93	Punjab	Khalsa College	Khalsa College . Garhdiwala, District:	B.VOC. Degree	Agriculture/Agri-Business and Agri-Entrepreneurship
94	Maharashtra	Krantisinh Nana Patil College	Walwe (Dist.) Sangli -	Diploma	Agriculture/Plant Nursery Management

SYLLABUS

Syllabus for Diploma in Horticultural Nursery Management

Semester 1

FUNDAMENTALS OF HORTICULTURE

Course outlines

Theory

Horticulture-Its definition and branches. Importance and scope of horticulture. Horticultural and botanical classification. Climate and soil for horticultural crops. Plant propagation-methods (sexual & asexual), propagating structures; separation, division, grafting, budding, layering). High density planting; Use of rootstocks; Orchard establishment; (Principles & Layout) Principles and methods of training and pruning. Juvenility and flower bud differentiation; Unfruitfulness; pollination, pollinizers and pollinators; fertilization and parthenocarpy; Vegetable gardens & ornamental garden types and parts; Lawn making. Use of plant bio-regulators in horticulture. Irrigation methods in horticulture crops. Fertilizers application-methods.

Practical

Identification of garden tools. Identification of horticultural crops. Preparation of seed bed/nursery bed. Practice of sexual and asexual methods of propagation. Layout and planting of orchard plants. Training and pruning of fruit trees. Transplanting and care of vegetable seedlings. Making of herbaceous and shrubbery borders. Preparation of potting mixture, potting and repotting. Fertilizer application in different crops. Visits to commercial nurseries/orchard.

Lecture outlines

Theory

1. Horticulture – Definition - Divisions of horticulture with suitable examples.
2. Scope and importance of horticulture - Importance of horticulture in terms of income, employment generation, industry, religious, aesthetic, food & nutritive value and export.
3. Horticultural classification based on soil, climate and botanical classification.
4. Climate and soil for horticultural crops - Influence of environmental factors on horticultural crop production – Temperature, humidity, wind, rainfall and solar radiation – Influence of soil factors – Soil type, pH, EC.
5. Propagating structures- Plant propagation- Methods - Sexual and asexual – Propagation by cuttings – Definition of cutting – Stem cuttings – Leaf cuttings – Root cuttings.
6. Propagation by Layering - Types of layering (tip, simple, compound, mound, trench, air layering) - Natural modifications of layering (runners, suckers, stolon, offset)-

SYLLABUS

Propagation by separation - Bulbs, corms; division (rhizome, stem tuber, tuberous roots).

7. Grafting, budding -Rootstock and scion selection – Grafting methods – Attached scion methods of grafting, simple or approach grafting, detached scion methods of grafting (side grafting - Veneer grafting, apical grafting- epicotyl grafting, double, soft wood grafting, cleft grafting, tongue grafting, whip grafting) – Graft incompatibility – Types – Translocated and localized incompatibility; Budding – Methods of budding – T-budding, inverted T-budding, patch budding and ring budding - Top working.
8. Principles of orchard establishment – Points to be kept in mind while selecting site for the establishment of orchards - Principles and steps in orchard establishment - Layout of orchards – Systems of planting - Square, rectangle, quincunx, hexagonal and contour systems of planting-their merits and demerits.
9. Principles and methods of training and pruning - Definition of training, objectives and training, principles and methods of training of fruit crops - Open centre, closed centre and modified leader systems their merits and demerits - Definition of pruning, objectives of pruning, principles and methods of pruning of fruit crops.
10. Juvenility and flower bud differentiation – Methods for shortening juvenility - Application of growth regulators (Gibberellins, Auxins, cytokinins, Abscissic acid, Ethylene), environmental methods (photoperiod, temperature) – Cultivation techniques (grafting, pruning, girdling, irrigation, nutrition) - Bearing habits of fruit trees.
11. Unfruitfulness, factors (physiological, phylogenical, management, parasitical, climatological) pollination - Self and Cross pollination, pollinizers and pollinators - Fertilization and parthenocarpy – Types.
12. Types of vegetables Gardens – Kitchen Garden, market garden, truck garden, vegetable forcing, garden for processing, seed production garden and floating garden. Ornamental garden types – Formal – Informal – Wild Garden – Parts/ features of an ornamental garden.
13. Lawn making – Selection of Grass – Bermuda grass – Korean grass – Poa grass – Fescue grass – Kentucky blue grass - Grasses for shady areas – Site Selection – Soil - Preparation of soil – Drainage – Digging – Manuring and grading – Methods of planting – Sowing of seeds – Dibbling – Turfing – Maintenance of lawn – Mowing – Rolling – Sweeping –Scraping – Raking – Weeding – Irrigation – Top dressing with compost and fertilizers - Diseases and other problems – Fairy ring – Pale Yellow Laws.
14. Use of plant bio-regulators (PBR) in horticulture – Introduction – Applications of PBR in fruit crops.
15. Irrigation methods in horticulture crops - Different methods followed in horticultural crops (check basin, furrow, ring basin, basin, flood, pitcher, funnel, drip and sprinkler).
16. Fertilizer application- Different methods of application to horticultural crops, Broad casting, top dressing, localized placement, contact placement Band placement, row placement, pellet, foliar application, starter solution, fertigation.

Practical

1. Identification of garden tools.
2. Identification of horticultural crops.
3. Layout of different planting systems.
4. Layout of kitchen garden.
5. Preparation of nursery bed (raised and flat beds) and sowing of seeds.
6. Practice of different asexual methods by divisions.
7. Practice of different asexual methods by cuttings.
8. Practice of different asexual methods by grafting.
9. Practice of different asexual methods by budding.
10. Practice of different asexual methods by layering.
11. Training and pruning of fruit trees.
12. Transplanting and care of vegetable seedlings.
13. Making of herbaceous and shrubbery borders.
14. Preparation of potting mixture, potting and repotting.
15. Fertilizer application in different crops.
16. Visits to commercial nurseries/orchard.

Diploma in Tea Plantation and Management

APPROVAL LETTER

के. पी. सिंह
संयुक्त सचिव
K.P. Singh
Joint Secretary

विश्वविद्यालय अनुदान आयोग
University Grants Commission
(मानव संसाधन विकास मंत्रालय, भारत सरकार)
(Ministry of Human Resource Development, Govt. of India)
बहादुरशाह ज़फ़र मार्ग, नई दिल्ली-110002
Bahadur Shah Zafar Marg, New Delhi-110002
दूरभाष Phone : कार्यालय Off. : 011-2323 9597
फैक्स Fax : 011-2323 4347, e-mail : kpsingh.ugc@nic.in

By Speed Post

D.O.No.F.1-14/2015(CC)

8 June, 2015

Dear Sir/Madam,

Kindly refer to the proposal of your institute for starting/adding courses under the scheme of Community Colleges from the academic session 2015-16. In this connection, this is to inform you that the UGC has approved your proposal for starting/adding courses under the scheme of Community College in the specialization and as per the intake given below:

Specialization/Trade	Intake
Diploma in Tea Plantation & Management	50

Further, UGC has also approved a grant of Rs 69.56 (Sixty Nine Lakhs Fifty Six Thousands) to the institute for a period of two years for running the course as per the details given below:

Sl. No.	Budget Head	Amount (Rupees in lakhs) Year I	Year II
	Grant-in-aid General – 35 (Non-recurring)		
i.	Equipments	7.00	3.00
ii.	Maintenance of Labs / workshops / classrooms	0.80	0.80
iii.	**Total (year-wise)**	**7.80**	3.80
	Grant-in-aid General – 31 (Recurring)		
iv.	Honorarium to existing / visiting / adjunct faculty	6.00	6.00
v.	Honorarium to Principal and Nodal Officer	1.08	1.08
vi.	Hiring charges for Lab Attendant(s)	2.40	2.40
vii.	Faculty training	0.50	0.50
viii.	Consumables	1.50	1.50
ix.	Curriculum Development	1.00	—
x.	Travel/Industrial visits	1.50	1.50
xi.	Seminars	1.50	1.50
xii.	Admission/Examination/Assessment including Assessment Fee of Sector Skill Council for Skill Component	2.00	2.00
xiii.	Scholarship to students	6.00	6.00
xiv.	Operating Expenditure including hiring of office staff on contract basis	6.00	5.00
	Total (year-wise)	**29.48**	28.48

Grand total for first year =Rs 7.80 (NR) + Rs 29.48 (R) = Rs. 37.28 (Rupees only)
Grand Total for second year =Rs 3.80 (NR) + Rs. 28.48 (R) = Rs. 32.28 (Rupees only)
Total for Two Years: Rs.69.56 (Sixty Nine Lakhs Fifty Six Thousands)

SYLLABUS

JORHAT KENDRIYA MAHAVIDYALAYA

KENDUGURI, JORHAT-785 010, ASSAM

Phone # 0376-2350009, e-mail: jkmprincipal@rediffmail.com. Fax # 0376-2350009

Re-accredited by NAAC with Grade B++

Website # http/www.jorhatkendriyamahavidyalaya.edu.in

Ref No. _____ *Date.*_____

Course Syllabus (Skill Component) 0f Diploma Course in 'Tea Plantation and Management'.

1st Semester: NSQF (Level 4). Total Credit: 18

Unit	Element	Performance Criteria (PC)	Credit	Classes
1	History & Scope of Tea	PC1. Aims and objectives of tea plantation and management PC2. Origin and history of Tea plant PC3. Classification and distribution of tea PC4. Factors responsible for tea cultivation PC5. Field works under tea plantation and management	1	15
2	Management of Shade tree	PC1. Early history of shade tree introduction in tea plantation of N.E. India PC2. Importance, morphology and classification of shade tree in tea PC3. Selection of shade tree for seed and establishment of shade tree nursery PC4. Treatment of seed, time and method of sowing and other maintenance of shade tree nursery PC5. Method of transplanting, time, spacing, size of pit and pit mixture for planting in the field PC6. Importance of shade mixture and rotation in the tea plantation	1	
3	Details about soil for tea cultivation	PC1. Definition and physio- chemical properties of soils PC2. Soil type, soil pH, soil temperature and soil moisture content for tea cultivation	1	15

SYLLABUS

		PC3. Methods of soil sampling for physical and chemical constituents of soil PC4. Soil amendment and its importance PC5. Adoption of cultural practices to improve soil nutrient contents PC6. Soil conservation, drainage and Irrigation in tea cultivation.		
4	Selection of Area and land preparation	PC1. Measures required to prepare land before plantation PC2. Levelling the area by mechanical and manual means after Plaughing and sub – soiling. PC3. Construct drains and other outlets for easy flowing of water PC4. Layout of the field PC5. Prepare the field for planting		15
5	Establishment of Tea Nursery	PC1.Choice of planting materials for Plantation PC2. Prepare Nucleus plot for VP (vegetative propagation)cuttings PC3. Preparation polythene begs for VP cuttings and seed propagation PC4. Preparation of bed for seed and VP cuttings PC5. Post care for nursery Plants before taking to field for plantation PC6. Importance of grafting in tea	1	15
6	Transplantation of nursery plant to field	PC1.Staking for planting pit for tea and shade tree saplings PC2. Initial measures for plantation in planting pit PC3. Arrangement for shade, irrigation and mulching material as required for field practices PC4. Weed control measures and infilling of vacancy PC5.Other post care in the young Plantation area.	1	15
7	Framing of young tea / Bringing up of young tea	PC1.Importance of framing of young plant under commercial plantation of tea PC2. Application of Decentering /Thumb pruning/ Debudding and its importance PC3. 1st Frame Formation Prune (FFP1) and 2nd Frame Formation Prune (FFP2) PC4. Schedule for young tea management in plains and in the hills of N.E. India PC5. Manuring schedule for young tea.	1	15

SYLLABUS

8	Importance of Pruning and Skiffing in tea	PC1.Principles of pruning and skiffing in tea PC2. Types of pruning, timing and it's implication in tea PC3.Importance of skiffing in yield and quality in tea PC4. Pre and post care of pruning and Skiffing PC5. Importance of pruning/skiffing for growth, yield and quality of tea PC6. Control measures for pests and diseases before and after pruning	1	15
9	Management of weeds in tea	PC1. Definition, classification and distribution of weeds in tea plantation PC2. Morphology, physiology and reproductive strategies of weeds PC.3 Harmful and beneficial effects of Weed PC4. Control measures for wee control in tea PC5.Classification, toxicity symptoms and precautions for the use of herbicides in tea PC6. Use of bio-control measures for weed and its impact	1	30
10	Integrated management strategies of Pests in tea	PC1.Life History and classification of Pests in tea plantation in N.E India. PC2.Life history of major leaf–eating Pests and the nature of damages PC3. Life history of leaf- rollers, bark-Eating pest, stem and root- borer and their nature of damages PC4. Life history of Red spider and other mites and their nature of damaged caused PC5.Life history of leaf and stem sucking bugs, scale insects, mealy bugs and fruit-sucking bugs and their nature of damage PC6. Life history of leaf and flower Thrips and their nature of damage caused PC7.Life history of Grasshoppers, crickets and termites and their nature of damage caused PC8. Integrated management to control different pests in tea	1	15
11	Integrated management strategies of diseases in tea	PC1. Major diseases of tea and their impact on the ecology and the Economy of tea plantation of N.E. India.	1	15

SYLLABUS

		PC2. Primary and secondary diseases of tea root and their mode of infection PC3. Stem diseases of tea and their mode of infection PC4. Leaf and flower diseases of tea and their mode of infection PC5. Diseases in young tea and their mode of infection PC6. Parasitic and non- parasitic diseases in tea and their mode of infection PC7. Control measures of diseases through synthetic chemicals and Bio- pesticides in tea		
Total			12	180
12	Practical classes		6	180

Bachelor of Vocation in Small Tea Garden Management and Plantation

APPROVAL LETTER

OFFICE OF THE REGISTRAR: DIBRUGARH UNIVERSITY: DIBRUGARH

Ref. No. DU/DR-A/6-1/19/24 **Dated: 07.01.2019.**

NOTIFICATION

The Hon'ble Vice-Chancellor, Dibrugarh University is pleased to approve the syllabi of the B.Voc Programme on Small Tea Garden Management (STGM) under the National Skill Qualification Framework (NSQF) Schemes of University Grants Commission (UGC) to be conducted by Jorhat Kendriya Mahavidyalaya, Jorhat, Assam under report to the Under Graduate Board and Academic Council, Dibrugarh University. The syllabus is available in the website-www.dibru.ac.in.

The above shall come into effect from the Academic Session 2018-2019.

Issued with due approval.

7/1/2019

(Dr. B.C. Borah)
Joint Registrar (Academic),
Dibrugarh University

Copy to:

1. The Vice-Chancellor, D.U. for favour of information.
2. The Deans, Dibrugarh University for favour.
3. The Registrar, D.U. for favour of information.
4. The Controller of Examinations, DU, for favour of information and necessary action. The copy of the Syllabus is enclosed herewith.
5. The Principal, Jorhat Kendriya Mahavidyalaya, Jorhat, for favour of information and necessary action.
6. Sri Gunadeep Chetia, Programmer, Dibrugarh University for kind information and with a request to upload the Notification along with the syllabus urgently in the University website.
7. File

7/1/2019

(Dr. B.C. Borah)
Joint Registrar (Academic),
Dibrugarh University.

APPROVAL DOCUMENTS

elcome to Rediffmail: Inbox

Skill India
कौशल भारत-कुशल भारत

ASCI
Agriculture Skill Council of India

N·S·D·C
National
Skill Development
Corporation

To
The Principal
Jorhat Kendriya Mahavidyalaya Keduguri,
Jorhat-785010, Assam.

Sub : Approval of Course Syllabus for B.Voc programme in STGM

Sir,
With reference UGC sanction letter of NSQF and your mail, we herewith approve the designed curriculum as per Qualification Packs of ASCI and UGC guidelines. Moreover, as per your request, we will act as certification authority for assessing skill component credits of B Voc programmes in Small Tea Garden Management under UGC scheme. We will charge Rs. 800/- per appeared candidate as assessment fee under the said programme

Warm regards

Shrinkhala Singh

ASCI

Shrinkhala Singh

Agriculture Skill Council of India

6th Floor, GNG Tower, Plot No.-10, Sector-44, Gurgaon, Haryana -122004
Tel.: +91-124-4814659, Email: info@asci-india.com, Website: www.asci-india.com

SYLLABUS

1st SEMESTER

Paper: S 1.3; Plantation Management (6 credits)

Overview & key learning as per NOS:

The units under this paper help the students to know about how to pluck leaves from young tea as well as matured tea bushes, able to learn how plucking to be done under various situation, able to determine the plucking standard, caring in green leaves handling, help in understanding the tipping as well as determine the height of tipping for different types of prune & skiff tea bushes, further, the students develop the skill of supervising plucking. Again in regards to pruning & skiffing, this paper helpsto skill up the students how pruning operation is carried out, before pruning what are the criteria to be followed, what are the safety measures one should take before pruning /skiffing of a tea bushes, also it helps in identifying recommended height of different types of prune/skiff. This unit also includes drainage system and Young tea management practices in Tea.

Total Marks: 75 **Theory-40+ Practical-20 +Internal Assessments-15**

UNIT- I

Drainage in Tea Plantation — 1 Credit (10 marks)

Importance of water in growth and development of Tea Plant , Importance and Management of Irrigation and Drainage system practices in Tea.

UNIT-II

Young Tea Management — 1 Credit (10 marks)

Methods of bringing up of young tea plant , Objectives of formative prunes. Schedule of operations for bringing - up of youngtea ,nutrient management in young tea.

UNIT- III — 1 credit (10 marks))

Pruning &Skiffing

What is pruning? Why pruning is necessary & when the operations followed. Training on different types of Pruning to develop pruning skills, What is the Pruning cycle followed in Garden & what height is considered in different types of pruning what is the percentage maintained for different types of pruning & Why?

UNIT-IV — 1 credit (10 marks)

Plucking & Tipping

Methods of Plucking & Tipping in Young Tea Plants & Matured tea, Methods of plucking for maintenance of plant canopy, maintenance of Plucking Table of the Tea plants for getting maximum yield as well as Quality, Plucking round management.

Practical — 20 marks

1 .Pruning and Skiffing operation carried out in field .
2. Plucking and Tipping practices in the garden.
3. Preparation of different types of drainage system.

Internal Assessment — 15 marks

Assessment on the basis of theory.

SYLLABUS

2ND SEMESTER

Paper: S 2.2: Plant Protection (6 Credits)

Overview & key learning as per NOS:

After going through this paper, the students will acquire the meaning of IPM (minimum ETL), which ultimately reduced the affect in the ecology. It also helps in developing the skill in identification of major pests, diseases and different species of weeds attacking on tea bushes along with their control measures by means of using inorganic chemical, organic and biological methods of control.The students will also able to know about PPC; as well as the TBI recommended chemicals, which have a very low residual effect on made tea & ultimately does not affect in the health of tea consumed peoples of the world.

Total Marks: 75 **Theory-40+ Practical-20 +Internal Assessments-15**

UNIT- I

Pest Management in Tea 1 Credit (10 marks)

Identification, symptoms and control measures by various synthetic chemical, organic chemicals, biological trap, Integrated Pest control measures.

UNIT-II

Disease Management 1 Credit (10 marks)

Identification, symptoms and control measures by various synthetic chemical, organic chemicals, Integrated disease control measures.

UNIT- III

Weed management 1 Credit (10 marks)

Identification, symptoms and control measures by various synthetic chemical, organic chemicals. Methods of collar weeding.

UNIT-IV

Stress Management in Tea 1 Credit (10 marks)

How the drought management overcome , Management in water logged condition , Rain water Harvest methods and procedure, Climate changeand Climate Resilient in Tea, Use of Mulching with a proper thickness , proper use of Growth regulators, use of lime /pyrite ,if the soil is too acidic or alkaline.

Practical **20 marks**

1. Identification of different pest & diseases &their symptoms.
2. Identification of different stress symptoms .

Internal Assessment **15 marks**

Assignment on the basis of theory. Submission of herbariums on weeds,

Collection of Pests and Diseases.

SYLLABUS

2nd SEMESTER

soil nutrients and shade.

Paper: S2.1: ~~Soil Nutrient~~ Management (6 credits)

Overview and key learning as per NOS:

After studying these units of 2nd Semester, the students will be able to learn maintenance and importance of Shade trees , management of Infills, Nutrition management and their functions ,foliar application and deficiency symptoms of nutrients.

Total Marks: 100 **Theory-40+ Practical 40 +Internal Assessments-20**

UNIT- I — 1 credit (10 marks)

Shade Tree & Maintenance of Shade tree

Advantage of Shade tree, what are the plants used as shade tree, spacing of shade tree, treatment of shade tree to become free from disease & Pest.

UNIT-II — 1 credit (10 marks)

Management of Infills

Causes and Objectives of Infilling. Different situations for infilling, infilling operations, manuring of infills.

UNIT- III — 1 credit(10 marks)

Soil Nutrients Management in Tea Plantation

Soil conservation, role of soil nutrient in the growth and development of tea, study on nutrients deficiency symptoms and it improvement practices for growth and development for tea plantations in terms of maximum production.

UNIT- IV

Mineral Nutrition of Tea — 1 credit (10 marks)

Function of major & micro nutrient in Tea, Soil fertility & crop productivity, Use of Lime and Iron Pyrite why & when needed. Nutrient management in young tea, nutrient management in mature tea, foliar application of nutrients and deficiency symptom of nutrients.

40 marks

Practical

Field visit and Laboratory works

1 .Visit to nearby tea estates to study the shade trees and nutrient deficiency symptoms .

2. Calculation of YTD and manuring policy of mature tea.

20 marks

Internal Assessment

Preparation of report on field visit and submission of herbarium.

INTIATIVE OF THE INSTITUTE
❖ Cutting and Embroidery
❖ Spoken English

SYLLABUS

The syllabus of the course was designed by the faculty for a period of three months.

Syllabus for Cutting

- **Peticoat**
- **Simple Blouse**
- **Pillow case**
- **Chaili Blouse**
- **Line Forck**
- **Design forck**
- **Round cut forck**
- **Ladies kurta**
- **Sallwar**
- **Bel Salawar.**
- **Churidar**
- **Apron**
- **Simple pyjama**
- **Baba suit**
- **Nighty**

Syllabus for Embroidery:

1. **Running stitch**
2. **Line work.**
3. **Bakul phool.**
4. **Curly barly.**

5. Glass work

6. Lachhi stitch

7. Long and short stitch

8 .Open work

9. Round stitch

10. Applique work

11. Eyelet and cut work

12. Needle work

13. Chumki work

14. Bihu dance.

15. Wool work.

16. Kashmiri stitch

17. Buttonhole work

18. Applique and fancy stitch on net

19. Hem stitch

20. Silver or golden thread work

SYLLABUS FOR SPOKEN ENGLISH

MODULE

1.	The IPA: 20 Vowel sounds 24 consonant sounds	-- Symbols and Words	3 hours ✓
2.	Words/Sentences	-- Speaking Practice	2hours ✓
3.	Stress/Accent/Tone/Intonation	-- do	
4.	Some aspects of Grammar	-- The Sentence	6 hours
		--Framing negatives	
		--Framing questions	
		--Question Tags	
		--Exclamatory sentences	
		--Passives	
		--Using Indirect questions	
		--Narrating	
		--Using to forms and ing forms	
		--Verbs	
		--Using do does and did	
		--Use of helping verbs	
		--Modal auxiliaries	
		--Use of Past Participle	
		--Tense	
		--Adverbials	
		--Linking words etc.	
5.	Communicating	--Making requests	5 hours
		-- Greeting/leave taking	
		-- Expressing gratitude.	
		--Apologising/accepting an apology.	
		-- expressing necessity/obligation	
		--Stating preferences	
		--Making suggestions	

	--Asking for information (Questions)	
6. Communicating	-- Complaining	8 hours
	-- Giving opinions	
	-- Expressing probability	
	--Hesitating	
	--Persuading	
	--Expressing a purpose	
	--agreeing or disagreeing	
	--expressing intentions etc.	
	-- Imagining situations	
7. Common Errors		2 hours
8. Vocabulary		5 hours
9. Words/sentences sound/intonation.	--Listen and repeat	5 hours
10. Conversation	--Given topics	6 hours
	--Practice in groups	
11. A demonstration by the students of the course		1hour.

HOD
Dept. of English
Jorhat Kendriya Mahavidyalaya
Jorhat-10

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PGDCA Courses Approved by Dibrugarh University

OFFICE OF THE REGISTRAR :: DIBRUGARH UNIVERSITY :: DIBRUGARH

No. DU/RG/AOC/2022/PGDCA/Permission/JKM/1865 Date: 30/9/2022

ORDER

As authorized by the Affiliation Committee, D.U. held on 02.06.2022, the Hon'ble Vice-Chancellor, D.U. is pleased to accord provisional permission to **Jorhat Kendriya Mahavidyalaya, P.O- Chengali Gaon, Dist: Jorhat, Assam,** to introduce **PGDCA Programme** w.e.f the academic session **(2022-2023)** under **CBCS mode** as per the Dibrugarh University Syllabus ***under report to the Executive Council, D.U.*** Subject to fulfillment of following conditions,

1. The Maximum intake shall be 20 (Twenty)
2. Required software shall be procured commencement of Second Semester.
3. Text books for PGDCA as per the University syllabus shall be procured.
4. One 6 K.V.A online UPS shall be procured and installed.
5. The College shall submit Compliance report.

Registrar i/c 30/9/2022
Dibrugarh University

Registrar i/c
Dibrugarh University
Dibrugarh

Copy to:

1. The Hon'ble Vice-Chancellor , D.U. for favour of information please
2. The Secretary to the Govt. of Assam, Department of Higher Education, Dispur, Guwahati, for information please.
3. The Director of Higher Education, Assam, Kahilipara, Guwahati, for information please
4. The Dean, Faculty of Science & Engineering, D.U for kind information please
5. The Chairperson, Centre for Computer Science & Application, DU for information please
6. The Controller of Examinations, D.U. for information
7. The Joint Controller of Examinations -C, D.U for information
8. The Deputy Controller of Examination – B(i/c) ,D.U for information
9. The Deputy Controller of Examination – A, D.U for information
10. The Joint Registrar (Academic), D.U. for information.
11. **The Principal, Jorhat Kendriya Mahavidyalaya, P.O- Chengali Gaon, Dist: Jorhat, Assam,-785010**
12. The Section Officer, Exam-B, D.U. for information and necessary action.
13. *File.*

Registrar i/c
Dibrugarh University

SYLLABUS OF PGDCA

POST GRADUATE DIPLOMA OF COMPUTER APPLICATION (P.G.D.C.A.) COURSE

FIRST SEMESTER

Course No.	*Subject*	*Marks*	
		Theory	*Practical*
Course 101	Fundamental of Computers	60	40
Course 102	Programming with C	60	40
Course 103	Relational Database Management System	40	60
Course 104	Data Communication and Computer Network	40	60
Course 105	Project I	100	

SECOND SEMESTER

Course No.	*Subject*	*Marks*	
		Theory	*Practical*
Course 201	Introduction to Multimedia	60	40
Course 202	Desktop Publishing	40	60
Course 203	Internet & Web Technology	60	40
Course 204	Mobile Technology	60	40
Course 205	Project II	100	

SYLLABUS OF PGDCA

Course No:	Course Name:	Marks		
101	Fundamental of Computers	Theory: 60	Practical: 40	Total: 100

Objective:

The course is designed with an objective to

- Discuss about computers and their applications,
- Explain the concept of various number systems,
- Explain fundamental concepts of computer hardware and software,
- Discuss the various operating system environments.
- Introduce the various features of Microsoft Office.

Learning Outcome:

On completion of the course, students will be able to

- Identify computer hardware and peripheral devices,
- Differentiate various number systems,
- Distinguish the advantages and disadvantages of various operating systems.
- Use Microsoft Office suite.

PART - A : Theory (TH:101)

Unit I: Introduction **Marks: 12**

Basics of computer, Characteristics of computers, Classification of computers.
Input, output and storage devices.

Unit II: Number System **Marks: 12**

Binary, Decimal, Hexadecimal, and Octal systems, Conversion from one system to the other, representation of characters, integers and fractions, Binary arithmetic, BCD, EBCDIC, ASCII, Unicode, XS-3, Grey Codes.

Unit III: Computer languages & Software **Marks: 12**

Introduction to machine language, assembly language, high level language, 4GL, Compiler, Interpreter, Assembler, System Software, Application Software.

Unit IV: Operating Systems **Marks: 12**

Introduction to Operating Systems (Disk Operating System, Windows, Unix, Linux), System Administration, Shell Programming

Unit V: Office Automation Tools **Marks: 12**

Introduction to MS Office suite, its features and uses- Word processing, Spreadsheet and Presentation.

PART - B : Practical (PR:101)

- Basics of DOS and Unix commands
- Basic Windows and Linux operations
- MS Office package (Word processing, Spreadsheet and Presentation)
- System Administration
- Shell Programming

SYLLABUS OF PGDCA

Course No:	Course Name:	Marks		
102	Programming with C	Theory: 60	Practical: 40	Total: 100

Objective:

The course is designed with an objective to

- Explain the fundamental concepts of C programming language.
- Demonstrate C coding.
- Explain the skills for problem solving using C Program.

Prerequisite:

Basic reasoning ability.

Learning Outcome:

On completion of the course, students will be able to

- Comprehend fundamental concepts of C program.
- Develop C code for different problems.

PART - A : Theory (TH:102)

Unit I: C fundamentals **Marks: 12**

C fundamentals, variables, data types, operator & expression, I/O functions and statements, basic structure of a C program, simple programming examples.

Unit II: Control Statements and Loop Control Structures. **Marks: 12**

if-else, nested if-else, switch, for loop, while loop, do-while loop, goto statement, break statement, continue statement, exit() function, programming examples.

Unit III: Arrays and String Manipulation **Marks: 12**

Defining an array, array initialization, processing an array, multidimensional array, strlen() function, strcat() function, strcmp() function, strcpy() function, programming examples.

Unit IV: Functions and Pointer **Marks: 12**

Overview of a function, defining a function, accessing a function, call by value, recursion, Storage classes, pointer declarations, expressions using pointers, pointers as function argument, call by reference, programming examples.

Unit V: Structures and File Management **Marks: 12**

Structures, Declaration and Initializing Structure, Accessing Structure members, Defining and opening a file, closing a file, input/output operations on files, programming examples.

PART - B : Practical (PR:102)

- Fundamental C Programs.
- Programs using control statements and loop control structures.
- Programs implementing concepts of array and string functions.
- Programs implementing storage classes.
- Programs implementing concepts of functions & pointers.
- Programs using structures and files.

SYLLABUS OF PGDCA

Course No:	Course Name:	Marks		
103	Relational Database Management System	Theory: 40	Practical: 60	Total: 100

Objective:

The course is designed with an objective to

- Discuss the concept of database
- Explain data modeling and database design.
- Discuss the use of SQL

Prerequisite:

Basics of data, information, fact.

Learning Outcome:

On completion of the course, students will be able to

- Define database.
- Explain the advantages of database.
- Construct database model.
- Use RDBMS's back end and front end tools.

PART - A : Theory (TH:103)

Unit I: Database Concept **Marks :10**

Data-Base concept: data, meta data, data item, files, Database, DBMS, Concept of Schema, View

Unit II: Relational DBMS **Marks :10**

RDBMS terminologies, Advantages of RDBMS, Concept of Keys (Primary, Foreign, Composite)

Unit III: Data Modeling **Marks :10**

Data Modeling concept, ER modeling, Functional dependency, Database Normalization, Advantages, Different Normalization forms, (Up-to 3NF)

Unit IV: SQL **Marks :10**

Introduction to Structured Query Language, data types,
DDL, DML and DCL Commands.
Joins, Index, Views

PART - B : Practical (PR:103)

- Introduction to MySQL and any other SQL Tool.
- Database connectivity through Visual Basic

SYLLABUS OF PGDCA

Course No:	Course Name:	Marks		
104	Data Communication and Computer Network	Theory: 40	Practical: 60	Total: 100

Objective:
The course is designed with an objective to
Introduce basics of Data Communications and Computer Networks.

Learning Outcome:
On completion of the course, students will be able to
- Describe fundamental concepts of data communication and computer networks.
- Illustrate the Layers of ISO/OSI and TCP/IP reference model.

PART - A : Theory (TH:104)

Unit I: **Marks :8**
Introduction to computer networks, analog and digital transmission.

Unit II: **Marks :8**
Types of transmission: parallel and serial communication, Asynchronous and synchronous communication, modes of communication: simplex, half duplex & full duplex. Multiplexing concept

Unit III: **Marks :8**
Types of networks, Network topologies, Transmission media: guided and unguided media, Introduction to wireless networks.

Unit IV: **Marks: 8**
Network reference models, ISO/OSI and TCP/IP

Unit V: **Marks: 8**
Internetworking devices, Error control & detection mechanisms.

PART - B : Practical (PR:104)

- Familiar with networking devices and transmission media.
- Basic network commands.
- Hands on practice on basic network design.
- Network setup, Monitoring and Administration

Text Books:

1. Godbole.S.A," *Data Communication and Networking*". Tata McGraw Hill , 2nd Edition, 2011
2. Bhusan T, " *Data Communication and Networks*", Oxford University Press 1st Edition, 2016

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Reference Books:

1. William S, "*Data and computer communications*", Pearson education Asia, 7th Edition, 2011.
2. Forouzan, B. A. "*Data Communication and Networking* "Tata McGraw Hill, 6th edition, 2014.

Discussion

- Application : FTP, Telnet , Internet

Course No:	Course Name:	Project Work	Seminar	Viva	Total
105	**Project I**	60	20	20	100

Objective:

The course is designed with an objective to

- Explain basics of system analysis and design.
- Implement the concepts of 1st semester courses.

Learning Outcome:

On completion of the course, students will be able to

- Comprehend fundamental concepts of system analysis and design
- Use and apply the concepts of courses of the 1st semester PGDCA programme.

Course Work on System Analysis and Design:

Basics of System, System element, System Planning and Analysis, SDLC, DFD, DSS, Data and fact gathering techniques, Feasibility study

Project Guidelines:

Students will have to implement a minor project based on the subjects covered in this semester. They have to submit a project report and appear for seminar and viva.

SYLLABUS OF PGDCA

Course No:	Course Name:	Marks		
201	Introduction to Multimedia	Theory: 60	Practical: 40	Total: 100

Objective:
The course is designed with an objective to
- Introduce the fundamental elements of multimedia.
- Describe how still images, sound, and video can be digitized on the computer.

Learning Outcome:
On completion of the course, students will be able to
- Summarize the key concepts in current multimedia technology.
- Create quality multimedia software titles.

PART - A : Theory (TH:201)

Unit I: Introduction to Multimedia **Marks:10**
Basics of multimedia and its Components, Fonts and hypertext.
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Unit II: Audio fundamentals and representations **Marks:15**
Digitization of sound, frequency and bandwidth, decimal system, data rate, audio file format, sound synthesis, MIDI, wavetable, compression and transmission of audio on internet, adding sound to multimedia project.

Unit III: Image Fundamentals and representations **Marks:10**
Colour science, colour, colour models, colour palettes, Dithering, 2D Graphics, Image compression and File Formats.

Unit IV: Video and Animation **Marks:15**
Video Basics, Broadcast Video Standards, Analog video, Digital video, Video Recording and Tape formats, Shooting and Editing Video, Video Compression and File Formats. Video compression .

Unit V: Animation **Marks:10**
Cell Animation, Computer Animation, Morphing

PART - B : Practical (PR:201)

- Assignments may be handled using Multimedia tools, such as Flash, Dreamweaver, Photoshop etc. or any other open source multimedia tools.

Text Books:

1. Jain S.,Singh S.,Iyer M. G., "Introduction to Multimedia" BPB, Reprint 2015.
2. Parekh Ranjan, "*Principles of Multimedia*", 2nd Edition, Tata McGraw-Hill, 2012.
3. Nahrstedt K., Steinmetz R., "*Multimedia*", 2nd Edition, Pearson, 2014.

SYLLABUS OF PGDCA

Course No:	Course Name:	Marks		
203	Internet & Web Technology	Theory: 60	Practical: 40	Total: 100

Objective:
The course is designed with an objective to
- Discuss different technology aspects of internet.
- Explain about importance of E-commerce, internet security,
- Explain how an internet works.
- Write program in HTML, java Scripts to design web pages

Prerequisite:
Course 104

Learning Outcome:
On completion of the course, students will be able to
- Develop and publish web sites.
- Resolve Code and troubleshoot HTML web pages, incorporating CSS and JavaScripts.

PART - A : Theory (TH:203)

Unit I: Introduction to Internet **Marks: 15**
Basics of internet, Internet protocols, Internet vs Intranet, ISP, URLs, Email, File Transfer Protocol, Internet chatting, Web Servers ,Web Browsers and their functions, Search Engines, Internet issues, security.
Introduction to E-Commerce, Meaning, Objective, challenges and opportunities.

Unit II: Introduction to HTML **Marks: 20**
Basics of HTML, HTML Tag, HTML Documents, Head & Body Sections, Building HTML documents, Inserting texts, Images, Hyperlinks, Backgrounds and Color controls, Different HTML tags, Table layout , Use of font size & Attributes, List types and its tags, forms in web pages, CSS definition and application Web publishing

Unit III: Basics of JavaScript **Marks: 15**
JavaScript Overview, syntax & conventions. Variables, Expressions, Looping statements, Functions, Arrays Objects, Events - onClick, on Mouse Over, on Submit, on Focus, on Change, on Blur. On Load, onUnload, Alerts, Prompts & Confirms.

Unit IV: Basic of PHP **Marks: 10**
Introduction to PHP file, Operators and expressions; Conditional statements and iterations in PHP; Connecting to the Database selecting the Database Table, Executing commands and closing the connection to the Database.

PART - B : Practical (PR:203)

- Designing of Web page using HTML, JavaScripts and PHP
- Web application development

SYLLABUS OF PGDCA

Course No:	Course Name:	Marks		
204	Mobile Technology	Theory: 60	Practical: 40	Total: 100

Objective:
The course is designed with an objective to
- Discuss different mobile operating system.
- Discuss different methods for mobile application development.

Prerequisite:
Basic Idea of mobile OS, html.

Learning Outcome:
On completion of the course, students will be able to
- Explain different mobile operating system.
- Discuss various mobile technologies.
- Develop mobile applications.

PART - A : Theory (TH:204)

Unit I: Mobile Terminology **Marks :10**
Mobile terminology: GSM, CDMA, WAP, GPRS, WCDMA, 3g, 4g, LTE, sensors.

Unit II: Mobile Operating Systems **Marks :10**
Operating systems concepts, Mobile operating system, Google Android, Apple IOS.

Unit III: Technologies for Mobile Application Development **Marks :20**
Java, XML, HTML5, J-query, C#.

Unit IV: Application Development Platforms **Marks :20**
Android studio, Eclipse, App-Builder.

PART - B : Practical (PR:204)

- Android application development
- Hybrid Application Development

Text Books:

1. Horton. J, "*Android Programming for Beginners*", Packt Publishing Ltd, Paperback Edition, 2015
2. Shildit. H , "*Java: A beginers Guide*", McGraw Hill Education, Sixth edition 2014
3. Talukder A., Yavagal A., "*Mobile Computing*" , Tata McGraw Hill, 2nd edition 2012

Reference Books:

3. Horton. J, "*Learning Java by Building Android Games*", Packt Publishing Ltd, Paperback Edition, 2015
4. Schiller J., "*Mobile Communication*" Pearson education, 2nd edition 2014

SYLLABUS OF PGDCA

Discussion:

Brief mentioning of the following:

- BlackBerry OS, Symbian, BADA, Firefox OS, Microsoft's Windows Phone OS, PALM OS, Tizen OS.

Course No:	Course Name:	Project Work	Seminar	Viva	Total
205	**Project II**	60	20	20	100

Objective:

The course is designed with an objective to

- Implement the concepts in real life applications

Learning Outcome:

On completion of the course, students will be able to

- Use and apply the concepts of courses of the PGDCA programme.

Project Guidelines:

Students will have to implement a minor project based on the subjects covered in the programme. They have to submit a project report and appear for seminar and viva.