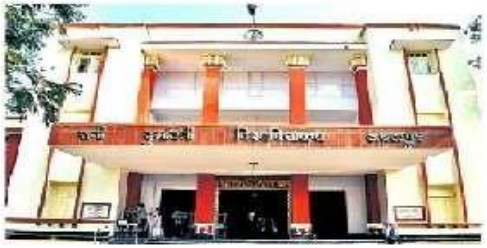
RANI DURGAWATI UNIVERSITY

Saraswati Vihar, Pachpedi, Jabalpur,

Madhya Pradesh (INDIA) -482001



Women Studies & Research Centre

Syllabus of All Programme

INDEX

UGC COMMUNITY COLLEGE,
RANI DURGVATI UNIVERSITY,
JABALPUR. (M.P.)

SYLLABUS

DIPLOMA IN MUSHROOM CULTIVATION AND POST HARVEST TECHNOLOGY (DMCPHT)

Course offered through University Grant Commission
(UGC Community Colleges from 2019 – 2020)

DIPLOMA IN MUSHROOM CULTIVATION AND POST HARVEST TECHNOLOGY

TITLE	:	Diploma in Mushroom Cultivation and Post Harvest Technology (DMCPHT) Syllabus (Semester Pattern) Under Faculty of Life Science
1. YEAR OF IMPLEMENTATION	:	Syllabus will be implemented from 2019
2. DURATION	:	Diploma (One Year) and two semesters.
3. PATTERN OF EXAMINATION	:	CBCS 222 (Semester Pattern)

- Practical Examination - i) In the first semester of Diploma there will be internal assessment of Practical record, related report submission and project reports at the end of semester.

  ii) In the second semester of Diploma, there will be external practical examination at the end of semester.

- Theory Examination - At the end of semester as per R.D. University, Jabalpur Rules

4. MEDIUM OF INSTRUCTION	:	English /Hindi
5. STRUCTURE OF COURSE	:	Diploma Two Semesters per Year Three Vocational Papers per Year / Semester One Industry Visit/ Study Tour and on job training.

6. **ELIGIBILITY FOR ADMISSION**: Pass in 10th std examination conducted by the M.P. Board or CBSC or any other equivalent examination.

7. **STANDARD OF PASSING:**
   As per the guidelines and rules for Diploma under Community College RDVV.

8. **GUIDELINES FOR ASSESSMENT (as per the guideline of NSDC):**

   1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.

   2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.

Syllabus approved in BOS dated 15th September 2020 and also approved by faculty of life Science in Faculty meeting on 14-10-2020

3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination (as per assessment criteria below).
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination based on this criteria.
5. To pass the Qualification Pack, every trainee should score a minimum of 70% in aggregate.
6. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack. {National Skill Development Corporation (NSDC)}

9. STRUCTURE AND SCHEME OF THE COURSE

DIPLOMA IN MUSHROOM CULTIVATION AND POST HARVEST TECHNOLOGY (DMCPHT)
SCHEME OF EXAMINATION

S. No	Subject code.	Title of the paper	Total Marks	Out of	Theory	Practical Skills
SEMESTER - I						
1	UCC/DMCPHT-01	Prepare and pasteurize the compost necessary to cultivate mushrooms	100	100	45	55
2	UCC/DMCPHT-02	Select commercially important species of mushroom and design appropriate site to cultivate mushrooms	100	100	50	50
3	UCC/DMCPHT-03	Undertake disease control and pest management activities, casing and pinning for mushroom cultivation	100	100	50	50
Total			**300**	**300**	**145**	**155**
SEMESTER - II						
1	UCC/DMCPHT-04	Undertake harvest and post-harvest procedures of mushrooms	100	100	45	55
2	UCC/DMCPHT-05	Undertake basic entrepreneurial activities for small enterprise	100	100	50	50
3	UCC/DMCPHT-06	Maintain health & safety at the workplace	100	100	50	50
Total			**300**	**300**	**145**	**155**
Grand Total for Diploma			**600**	**600**	**290**	**310**

1st Semester

DIPLOMA IN MUSHROOM CULTIVATION AND POST HARVEST TECHNOLOGY (DMCPHT)

Paper Name	Unit Title	Total Marks	Out of	Theory	Practical Skills
1. UCC/DMCPHT-01 Prepare and pasteurize the compost necessary to cultivate mushrooms	MP1. identify different types of base materials from various agricultural by-products, e.g. freshly harvested paddy straw, wheat straw, mustard straw, etc.	100	10	5	5
	MP2. select materials which acts as a reservoir of cellulose, hemi-cellulose and lignin, and is utilized by the mushroom species during its growth as a carbon source		10	5	5
	MP3. identify materials that have nitrogen (N) and carbon (C) ratio 1: 10 for the establishment of the bacterial flora in the compost		6	3	3
	MP4. select materials that acts as a nutrient source, impart proper physical structure to the substrate, ensure adequate aeration during composting, and add bulk to the compost		6	3	3
	MP5. select chemicals for rectifying the mineral deficiencies in the compost such as muriate of potash, super phosphate, urea, calcium ammonium nitrate, ammonium sulphate, etc.		6	3	3
	MP6. identify chemicals which has a stabilizing effect on ammonium content, serves as a calcium source for the mushroom and also for the oxalic acid produced by the mushroom mycelium, which gets converted into calcium oxalate, e.g. gypsum and calcium carbonate		6	3	3
	MP7. select the necessary tools required to produce a compost		4	2	2
	MP8. compute different formulations of composting ingredients to achieve the required nitrogen and carbon ratio for mushroom compost		6	3	3
	MP9. identify the types of compost-Natural and synthetic		4	2	2
	MP10. select the method of composting with respect to the availability of steam pasteurization		4	2	2
	MP11. ensure to sprinkle water over the compost regularly after an interval of a day		3	1	2
	MP12. rotate the compost after an interval of 2-3 days regularly to allow gas exchange, adequate moisture, and carbohydrates throughout the process		4	2	2
	MP13. store the agricultural by-products under cover to minimize growth of unwanted and potentially detrimental fungi and bacteria		3	1	2
	MP14. pasteurize the compost to kill insects, nematodes, pest fungi, or other pests		4	2	2
	MPlS. identify the attributes of a good compost- dark brown in colour, non-greasy, inoffensive sweet smell, ammonia free, no insects and nematodes		5	2	3
	MP16. leave the work in a safe condition		3	0	3
	MP17. return used tools and materials in appropriate storage area		3	0	3
	MP18. dispose wastes materials in accordance with environmental health & safety guidelines		5	2	3
	MP19. report any work related problems or issues to responsible authority and seek guidance on how to rectify problems		4	2	2
	MP20. exercise safe handling practices while handling sharp tools and equipment		4	2	2
		Total	100	45	55

Syllabus approved in BOS dated 15th September 2020 and also approved by faculty of life Science in Faculty meeting on 14-10-2020

2. UCC/DMCPHT-02 Select commercially important species of mushroom and design appropriate site to cultivate mushrooms	MP1. select the type of mushroom based on market's demand, climatic conditions of the farm, growing season, investments, etc.	100	10	5	5
	MP2. collect mushroom spawns from reliable sources, e.g. nearest Krishi Vigyan Kendra (KVK), etc.		10	5	5
	MP3. select species which will be cost effective and economically beneficial according to market research		10	5	5
	MP4. identify the type of mushroom with more shelf life as per industry standard		10	5	5
	MP5. select freshly prepared spawns because the mycelium is in the state of active growth		6	3	3
	MP6. undertake site assessment		4	2	2
	MP7. locate site easily accessible by main roads and pathways		4	2	2
	MP8. ensure that the site is deprived of sunlight		6	3	3
	MP9. ensure proper drainage of rain water		6	3	3
	MP10. prepare and check the suitability of design and layout of the farm according to the growing conditions required for different kinds of mushrooms		8	4	4
	MP11. ensure availability of fresh water supply for the mushroom growing facility		6	3	3
	MP12. ensure effective underground drainage system or gutters for carrying out waste water		6	3	3
	MP13. use safe and reliable construction techniques to build required fixtures for mushroom growing		6	3	3
	MP14. use crop rotation method for mushroom cultivation		8	4	4
		Total	100	50	50

3. UCC/DMCPHT-03 Undertake disease control and pest management activities, casing and pinning for mushroom cultivation	MP1. ensure substrates are not exposed to pathogens or pests during spawning	100	4	2	2
	MP2. inspect mushroom bags or beds carefully for early detection of pests and diseases		4	2	2
	MP3. ensure that flies do not enter the mushroom farms, e.g. not dumping any waste near mushroom farms, installing screens on windows and doors, etc.		4	2	2
	MP4. use sterilized casing soil, proper disposal of spent compost to control nematodes, mites, insect pests, etc.		4	2	2
	MPS. spray fungicide after casing to check dry bubble, e.g. dithane Z-78, sporgon, topsin M, chlorothalonil, prochloraz, daconil, etc.		4	2	2
	MP6. control local infections by spraying the affected patch with commercial formalin		4	2	2
	MP7. spray chlorinated water to manage bacterial diseases		4	2	2
	MP8. disinfest mushroom farms by spraying pesticide as a prophylactic measure, e.g. dicofol, etc.		4	2	2
	MP9. control mites by spraying insecticide on the compost, e.g. diazinon emulsion, etc.		4	2	2
	MP10. maintain hygiene by wearing clean clothes and shoes and wash hands before entering mushroom farms		4	2	2
	MP11. pasteurize the mushroom farm to remove nematode in mushroom cultivation		4	2	2
	MP12. treat the mushroom farms with small amount of caustic chemical to keep rodents away, e.g. zinc phosphate, etc.		4	2	2
	MP13. use fungicides to control major fungal pathogens, e.g. bavistin, etc.		4	2	2
	MP14. prepare casing soil to hold moisture for the development of a firm mushroom		4	2	2
	MPl5. use freshly prepared spawn because the mycelium is in the state of active growth		4	2	2
	MP16. protect the compost from drying, and provide support for the developing mushrooms and resisting structural breakdown following repeated watering		4	2	2
	MP17. promote the formation of primordia, or mushroom pins by supplying water with a sprayer pump to the mycelium for growth and development		4	2	2
	MP18. maintain proper hygienic condition by wearing gloves and boots dipped in disinfectant while entering the mushroom farms for casing		4	2	2
	MP19. adjust compost temperature and relative humidity		4	2	2
	MP20. fertilize with nitrogen to increases yield of mushrooms		4	2	2
	MP21. maintain carbon dioxide concentration at a higher level to accelerate the growth of mushrooms		4	2	2
	MP22. apply water to casing in a few instalments so that water does not run into spawn run compost		4	2 2	2 2
	MP23. detect the earliest formation of recognizable mushrooms from mycelium		4	2	2
	MP24. case at a regular interval of three days after harvesting or cover the holes after mushroom picking		4	2	2
	MP25. pick the mushrooms daily		4	2	2
		Total	100	50	50

4. UCC/DMCPHT-04 Undertake harvest and post-harvest procedures of mushrooms	MPl. select mushrooms that are young and healthy	100	8	4	4
	MP2. assess the maturity of a mushroom by how far the veil is stretched respective of their types, and select mushrooms from medium- to large-size,		8	4	4
	MP3. identify harvest periods		8	4	4
	MP4. apply good harvesting practices, e.g. air temperature during cropping should be held between 14°(to 17°C and relative humidity should be high to minimize the drying of casing		4	2	2
	MP5. twist and pluck the mushrooms from its base by undertaking control measures to prevent contamination of the mushroom contamination of the mushroom		4	2	2
	MP6. use approved cutting techniques for harvesting		4	2	2
	MP7. use approved cleaning methods to remove soil particles, compost, and other foreign materials, e.g. washing in water and sodium meta bisulphite solution		4	2	2
	MP8. remove the water content from the mushroom, as it is highly perishable		6	3	3
	MP9. sort and grade the harvests as per required quality specifications		5	2	3
	MPl0. store freshly harvested mushrooms at lower temperature e.g. 2°C to 7°C		4	2	2
	MPll. select packaging material with respect to the shelf life, type of market where it is to be sold, and investment		4	2	2
	MP12. identify packaging materials which is strong in nature, does not get contaminated easily, available abundantly, lucrative and attractive		3	1	2
	MP13. check the selected storage area is clean, well-ventilated and dry		4	2	2
	MP14. protect the storage area from direct sunlight, dust, rain, rodents, insects, and livestock, etc.		4	2	2
	MP15. select the type of storage according to the shelf life of mushrooms-short-term and long-term		4	2	2
	MP16. pack the mushrooms in bags (usually polypropylene) of different capacities or perforated polythene pouches with 0.5 percent venting area or polystyrene/pulp-board punnets for sale		4	2	2
	MP17. transport precooled mushrooms in insulated ice containers internally lined with thermocole and covered with tin sheets on both the sides		3	1	2
	MP18. label the packed item correctly with all the required information		3	1	2
	MP19. record information, e.g. quality, quantity, type, expenditure incurred in operation, etc. in appropriate registers, record book and logs		5	1	4
	MP20. use spent mushroom substrate in organic farming as it is rich in nutrient resources		5	1	4
	MP21. utilize spent mushroom substrate in vermicomposting and bioremediation of contaminated soil		6	3	3
		Total	100	45	55

5. UCC/DMCPHT-05 Undertake basic entrepreneurial activities for small enterprise	MPl. seek information regarding demand and supply of produce in the market	100	10	5	5
	MP2. identify target customers and assess their needs such as amount required, purpose, quality, expectations, etc.		10	5	5
	MP3. perform basic accounting such calculating expenditure incurred, costing and pricing of produce		10	5	5
	MP4. ensure that the cost of production, transportation and marketing are included in costing and pricing		10	5	5
	MP5. collect information related to various subsidies/funds offered by the Government, authorized state units and other financial institutions involved with the promotion of the produce		10	5	5
	MP6. comply with relevant regulations in marketing of the produce		10	5	5
	MP7. track information related to wholesale and retail price of the produce		10	5	5
	MP8. record daily sell and purchase of items in designated log books, register, etc.		10	5	5
	MP9. record quantity, quality, date of manufacture and batch number of every produce accurately		10	5	5
	MP10. identify appropriate marketing channels related to the produce considering requirements and constraints		10	5	5
		Total	100	50	50

6. UCC/DMCPHT-06 Maintain health & safety at the workplace	MPl. undertake basic safety checks before operation of all machinery and vehicles and hazards are reported to the appropriate supervisor		8	4	4
	MP2. work for which protective clothing or equipment is required is identified and the appropriate protective clothing or equipment is used in performing these duties in accordance with workplace policy		8	4	4
	MP3. read and understand the hazards of use and contamination mentioned on the labels of pesticides/fumigants etc	100	8	4	4
	MP4. assess risks prior to performing manual handling jobs, and work according to currently recommended safe practice		8	4	4
	MP5. use equipment and materials safely and correctly and return the same to designated storage when not in use		8	4	4
	MP6. dispose of waste safely and correctly in a designated area		6	3	3
	MP7. recognize risks to bystanders and take action to reduce risk associated with jobs in the workplace		6	3	3
	MP8. perform your work in a manner which minimizes environmental damage all procedures and work instructions for controlling risk are followed closely		6	3	3
	MP9. report any accidents, incidents or problems without delay to an appropriate person and take necessary immediate action to reduce further danger		6	3	3
	MPl0. follow procedures for dealing with accidents, fires and emergencies, including communicating location and directions to emergency		6	3	3
	MPll. follow emergency procedures to company standard/ workplace requirements		6	3	3
	MP12. use emergency equipment in accordance with manufacturers' specifications and workplace requirements		6	3	3
	MP13. provide treatment appropriate to the patient's injuries in accordance with recognized first aid techniques		6	3	3
	MP14. recover (if practical), clean, inspect/test, refurbish, replace and store the first aid equipment as appropriate		6	3	3
	MPl5. report details of first aid administered in accordance with workplace procedures		6	3	3
		Total	100	50	50
GRAND TOTAL FOR DIPLOMA		**600**	**600**	**290**	**310**

WOMEN'S STUDIES AND RESEARCH CENTRE,

RANI DURGVATI UNIVERSITY,

JABALPUR. (M.P.)

REVISED SYLLABUS

(CBCS pattern effective from 2020-21)

PG DIPLOMA IN GENDER STUDIES AND DEVELOPMENT (PGDGSD)

Inter-disciplinary Post Graduation level course

WOMEN'S STUDIES AND RESEARCH CENTRE
RANI DURGAWATI UNIVERSITY,

PG DIPLOMA IN GENDER STUDIES AND DEVELOPMENT (PGDGSD)
ONE YEAR 1 (PG DIPLOMA)

Course Code : PGDGSD

Program Outcomes (POs):

- The course aims to offer a structured program of study in the field of gender and development to students with little or no previous knowledge or academic training in either the principal subject area or in gender studies.
- The course will introduce students to a comprehensive set of topics dealing with the principal issues in the area of gender and development and will be multidisciplinary.
- The program aims to introduce students to the theoretical and empirical analysis of a wide range of issues and will focus on the development of skills relevant.

Program Specific outcomes (PSOs)

Students will be able to:

- Analyse and explain gender differences and disadvantages for women in national and international contexts
- Identify, summarise and evaluate different approaches to understanding gender and development
- Research a range of issues in gender and development
- Improve or develop writing and other communication skills.

Course Outcomes:

Students successfully completing this programme will be able to pursue their careers in the following areas:

- Higher studies and research programmes.
- Public sector, Non-governmental Organisations both at National and International level;
- Specialised areas like Media, Communications, Corporate sector, Writing, Editing, Journalism, Gender Training Programmes.

Course Duration:

Two Semesters (One Year)

WOMEN'S STUDIES AND RESEARCH CENTRE
RANI DURGAWATI UNIVERSITY,

PG DIPLOMA IN GENDER STUDIES AND DEVELOPMENT (PGDGSD)
ONE YEAR 1 (PG DIPLOMA)

Examination Pattern

TITLE : PG Diploma in Gender Studies and Development (PGDGSD)

1. **YEAR OF IMPLEMENTATION** : Syllabus will be implemented from 20-2021
2. **DURATION** : PG Diploma (One Year) and two semesters.
3. **PATTERN OF EXAMINATION** : CBCS 222 (Semester Pattern)

Practical Examination - i) In the first semester of PG Diploma there will be internal assessment of assignment, project record, related report submission and project reports at the end of semester.

ii) In the second semester of PG Diploma, there will be external practical examination at the end of semester.

Theory Examination - At the end of semester as per R.D. University, Jabalpur Rules

4. **MEDIUM OF INSTRUCTION**: English /Hindi
5. **STRUCTURE OF COURSE** : PG Diploma (Two Semesters per Year)

- Three Theory and one elective Paper
- One Project to be prepared related to syllabus with relevant agencies, NGO, Government and non-government organization in the guidance of any professor of university.

6. **ELIGIBILITY FOR ADMISSION**: Graduation in any discipline or any other equivalent examination.
7. **STANDARD OF PASSING:**

As per the rules of Rani Durgavati University Jabalpur (M.P).

WOMEN'S STUDIES AND RESEARCH CENTRE
RANI DURGAWATI UNIVERSITY,

PG DIPLOMA IN GENDER STUDIES AND DEVELOPMENT (PGDGSD)
ONE YEAR 1 (PG DIPLOMA)

8. STRUCTURE AND SCHEME OF THE COURSE

SEMESTER I

Course Code	Unit	Topic	L / Week	Credits	Marks
			T	T	T
PGDGSD-01 (Understanding Gender)	I	Basic Concepts	02	10	100
	II	Equality, Rights and Empowerment	02		
	III	Women's Studies and Gender Studies	02		
	IV	Assignments	02		
PGDGSD-02 (Gender and Qualitative Methods)	I	Methods, Techniques and Tools	02	10	100
	II	Qualitative studies Ethnographic Study	02		
	III	Sampling and Data Collection; Sampling methods	02		
	IV	Assignments	02		
PGDGSD-03 (Sociology of Gender)	I	Changing Status of Women in India	02	10	100
	II	Social Construction of Gender	02		
	III	Social Structures	02		
	IV	Assignments	02		
Total				30	300

SEMESTER II

Course Code	Unit	Topic	L / Week	Credits	Marks
			T	T	T
PGDGSD-04 (Gender-Development and Feminism) Elective	I	Colonial and Capitalistic Perspectives of Gender	02	10	100
	II	Feminist Theories and Practice	02		
	III	Feminist Movements	02		
	IV	Assignments	02		
	Or				
or (Women in Indian History) Elective	I	The Women's Movements in India	02		
	II	Education and Women	02		
	III	Women's Organization	02		
	IV	Assignments	02		
PGDGSD-05 (Dissertation)	I	One Project to be prepared related to syllabus with relevant agencies, NGO, Government and non-government organization in the guidance of any professor of university.	2 months	20	200
Total				30	300

- T = Theory
- The value of One (01) credit is equal to 15 Hours of learners loads
- 25% Marks which will be an internal assessment and 75% marks at semester and examination.

WOMEN'S STUDIES AND RESEARCH CENTRE
RANI DURGAWATI UNIVERSITY,

PG DIPLOMA IN GENDER STUDIES AND DEVELOPMENT (PGDGSD)
ONE YEAR 1 (PG DIPLOMA)

SEMESTER I

Detail Syllabus

Paper –I Understanding Gender (PGDGSD-01)

Program outcomes:

1. To introduce basic concepts relating to gender and to provide logical understanding of gender roles.
2. To present various perspective of body and discourse on power relationship.
3. To trace the evolution of gender studies from women's studies.

Course Outcome: It will help to understand the basic concepts related to gender and to enhance their knowledge to various approaches to gender equity.

Unit 1 - Basic Concepts

Sex and gender, multiple identities, femininity, masculinity, parallel sexualities and multiple identity-Patriarchy and structure of patriarchy familial relationships changing structure of family and kinship-Power, powerlessness, empowerment and subordination, sexual division of labour, personal is political.

Unit 2 - Equality, Rights and Empowerment

Approaches to gender equality (formal, substantive, protectionist, de jure and de facto) Gender equity and equality- Rights vs. Needs.

Unit 3 - Women's Studies and Gender Studies

Evolution and Scope of Women's Studies-From Women's Studies to Gender Studies: A Paradigm ShiftWomen's Studies vs. Gender Studies.

Unit 4 - Assignments

I. Workshop: gender sensitization through gender related concepts.
II. Textual analysis of documentary/short films: cultural construction of gender⟩
III. Video clip presentation: Masculine and Feminine identities, male gaze and objectivity⟩
IV. Debates: Challenging traditional/ideal attributes of male and female psyche⟩

WOMEN'S STUDIES AND RESEARCH CENTRE
RANI DURGAWATI UNIVERSITY,

PG DIPLOMA IN GENDER STUDIES AND DEVELOPMENT (PGDGSD)
ONE YEAR 1 (PG DIPLOMA)

SEMESTER I

Paper-2 - Gender and Qualitative Methods (PGDGSD-02)

Program outcomes:

This paper will introduce the students to basic concerns in research in social sciences. The objective is to develop foundational knowledge of key sociological methods.

Course Outcome: It will equip students with skills required for field based studies, and research projects andorganizations. The students will learn different research tools, methodologies, and their applications.

Unit 1 - Methods, Techniques and Tools:

Historical, Experimental, Case study, Case History, Trend study, Follow-up study and Content Analysis; Techniques - Observation, Interview, Survey; Scaling Techniques; Tools - Questionnaire, Schedules.

Unit 2 - Qualitative studies Ethnographic Study–

Historical study– Grounded Theory– Biographic Analysis

Unit 3 - Sampling and Data Collection; Sampling methods –

Quantitative & Qualitative Data - Collection of Data -Analysis of data; Interpretation; Conclusion and Generalization - Social Sciences Research Methods Vs. Feminist Research Methods: Feminist research concepts – Need for Feminist research methodology.

Unit 4 – Assignment

I. Class room activity: Draft a research proposal in stages using feminist research methods.〉
II. Group Project: Using feminist Ethnography and narratives
III. Feminist writing skills: Developing a story on feminist issue.

WOMEN'S STUDIES AND RESEARCH CENTRE
RANI DURGAWATI UNIVERSITY,

PG DIPLOMA IN GENDER STUDIES AND DEVELOPMENT (PGDGSD)
ONE YEAR 1 (PG DIPLOMA)

SEMESTER I

Paper-3 - Sociology of Gender (PGDGSD-03)

Program outcomes:

This paper will highlight the social construction of gender in Indian society and the role of social institutions in the socialization process. Gendered family relations do not occur in vacuum and the course work help trace the reasons of gender inequality and gender discrimination.

Course Outcome

The students will understand the Social construction of Gender, Gender Roles and Gender stereotyping. The course will enable students to understand Women and Religion and Religious conceptualization of women.

Unit 1 - Changing Status of Women in India:

Women in Ancient and Pre Colonial India - Women in Colonial Period: Women's participation in the freedom movement, and women's organization - Women in Post-Colonial India: Towards Equality Report, Sharamshakti Report

Unit 2 - Social Construction of Gender:

Sex and Gender - Nature versus Culture, Equality versus Difference - Gender Roles, Gender stereotyping.

Unit 3 - Social Structures :

Kinship - Forms of Family and Household - Institutions of Marriage and Divorce, Politics of reproduction, Dowry, Property Rights - Class/Caste: hierarchy, difference and mobility.

Unit 4 - Assignment

I. Classroom activities: Group Discussion: Gendered division of labour in family and gender power relations
II. Group presentation: Gender discrimination in various in different social institutions

WOMEN'S STUDIES AND RESEARCH CENTRE
RANI DURGAWATI UNIVERSITY,

PG DIPLOMA IN GENDER STUDIES AND DEVELOPMENT (PGDGSD)
ONE YEAR 1 (PG DIPLOMA)

SEMESTER II

Paper-4 (Electives) - Gender-Development and Feminism (PGDGSD-04)

Program outcomes:

1. Acquainting students with the theory and concepts of feminism.
2. Preparing students to develop a critique of available historiography on women.
3. Focusing attention on the status of women in Indian tradition.
4. Enabling students to undertake research in the field of women's history.

Course Outcome

Students learn the feminist aspect of Indian society, which is generally ignored in traditionallearning of history. Students will be able to understand the logical sequencing of events in removing social evilsagainst women, their antecedents. This paper will help them to understand the legal disabilities of Indian women, their historical demands and their struggle in the colonial India. It will also analyse the role of women in national freedom movement. This paper will help students to develop critical understanding about women's status in Ancient, Medieval and Modern India.

Unit 1 - Colonial and Capitalistic Perspectives of Gender-

Gender Analysis of Development Theories- Modernization Theory- World System Theory-Dependency Theory-Structural Functionalism-Gender Approaches to Development-Women in Development (WID)-Women and Development (WAD)-Gender and Development (GAD)-Gender Critique of Structural Adjustment Policies (SAPs)-Globalization and Gender.

Unit 2 - Feminist Theories and Practice

What is Feminism-Liberal Feminism-Radical Feminism-Marxist/Socialist Feminism-Psychoanalytical Feminism-Men's Feminism-Postmodern Feminism

Unit 3 - Feminist Movements

Feminist Movements in the West. First Wave, Second Wave and Third Wave Feminism. United Nation Conferences on Women, Feminist Movements in Pakistan.

Unit 4 – Assignment

I. Class room activity: Critical review of classical books by students
II. Film appreciation on the topics related to women studies.

WOMEN'S STUDIES AND RESEARCH CENTRE
RANI DURGAWATI UNIVERSITY,

PG DIPLOMA IN GENDER STUDIES AND DEVELOPMENT (PGDGSD)
ONE YEAR 1 (PG DIPLOMA)

SEMESTER II

OR

Paper-4 (Electives) - Women in Indian History (PGDGSD-04)

Unit 1 - The Women's Movements in India

Phases in the women's movements-Social Reform, Freedom, Contemporary women Rights movement. Women's movements and the law Intersection of women's movement with people movements. Women In Social Reform Movements In the 19th Century : BrahmoSamaj-Arya Samaj-Theosophical Movement-Satya ShodhakSamaj- Aligrah Movement

Unit 2 - Education and Women

Ancient India- Medieval India-Colonial India- Post-independence, **Women's participation in Freedom Movement and Politics :** a. Gandhian Satyagarah- Revolutionary Movements-Peasant and Workers Movements-Panchayats and Muncipal Councils- State Legislatures and Parliament-Feminist Movement

Unit 3 - Women's Organization:
Colonial - local, provincial, national-Post/Pre-independence.

Unit 4 - Assignment
Class room activities: Case Study Analysis -Audio Lectures Film

Paper-5 – Dissertation (PGDGSD-05)

One Project (Research Work) to be prepared minimum 100 pages (thesis) related to syllabus with relevant agencies, NGO, Government and non-government organization in the guidance of any professor of university or College.

SYLLABUS

One Year Programme (Semester I and II)

Diploma in Renewable Energy

Under the Scheme of Community College

(Sponsored by U.G.C. New Delhi)

Women's Studies and Research Centre

Rani Durgavati Vishwavidayalaya, Jabalpur (M.P.)

Website: www.rdunijbpin.org

To be implemented from Academic Year 2016-2017 onwards

CURRICULUM STRUCTURE OF COMMUNITY COLLEGE DIPLOMA IN RENEWABLE ENERGY

Preamble of the course

Energy is a vital input for the development and economic growth of a country. The growth for energy sector is critical for socioeconomic development particularly for rural areas. In the Indian context, it is a great challenge to provide affordable energy services to the population. Renewable energy contributes to energy supply reserves and the environment. India is fortunate in having a lot of resources of solar, hydro, wind, wave, and tidal hydro-electric energy. Development must, however, occur with proper attention to the technical, economic and operational constraints associated with increase in penetration of such technology. The development of energy systems is also constrained by the depletion of fossil fuel, local environmental impacts and the problem of global warming and associated climate change. The energy sector is in transition and there is significant need to understand the various energy conversion and efficient utilization process. In view of the problem of climate change and scar city of fossil fuels, the field of energy engineering offers significant challenges and opportunities.

The Diploma in Renewable Energy prepare the students in theoretical as well as practical aspects of renewable energy technologies, energy conservation, and management. This multi-disciplinary integrated programme train the students not only in renewable energy technologies and its implementation but also in equally important areas of energy infrastructure, rational use of energy, energy policies and regulations, and energy-environment interface etc. The programme exhibits its uniqueness fostering the much sought-after leadership skills through the management energy courses. Thus, the programme enables the students to tackle practical problems of design, development, deployment in the industry, and to pursue academics as well as frontiers of research. The objective of the programme is to provide specialist manpower to meet the challenges of the energy sector.

DIPLOMA IN RENEWABLE ENERGYPROGRAMME STRUCTURE OF DIPLOMA IN RENEWABLE ENERGY

One Year Programme (Semester - I)

S. No.	Paper No.	Subject Name	Component	Credit			
				L	T	P	C
1	RE-101	Energy sources and Energy Scenario	Skills	3	2	0	5
2	RE-102	Renewable energy sources and technology	Skills	3	2	0	5
3	RE-103	Solar energy	Skills	3	2	0	5
4	RE-104	Functional English & Communication Skills	General Education	2	1	0	3
5	RE-105	Practical and Project work	Skills	0	0	12	12
Total Credit of Semester-I				30			

One Year Programme (Semester - II)

S. No.	Paper No.	Subject Name	Component	Credit			
				L	T	P	C
1	RE-106	New Energy Resources	Skills	3	2	0	5
2	RE-107	Solar photovoltaic technology	Skills	3	2	0	5
3	RE-108	Energy management and auditing	Skills	3	2	0	5
4	RE-109	Fundamental of Computer & Information Technology	General Education	2	1	0	3
5	RE-110	Practical and Project work	Skills			12	12
Total Credit of Semester-II				30			

- L – Lecture, T- Tutorial, P- Practical, C – Credit
- After successful completion of I st semester, student will be awarded **Certificate in Renewable Energy.**
- After successful completion of II nd semester, student will be awarded **Diploma in Renewable Energy.**

SEMESTER - I

RE-101 Energy Sources and Energy Scenario

Unit I

Introduction to Energy

Definition and units of energy and power, Conversion, Energy terms, calorific value, Forms of energy, Classification of energy sources Quality and concentration of energy sources,Energy and Thermodynamics, Energy parameters, Conservation of energy, Energy flow diagram to the earth. Origin of fossil fuels, Time scale of fossil fuels, Role of energy in economic development and social transformation, Energy security.

Unit II

Energy and Growing Economy

Commercial energy production, Final energy consumption, Energy needs of growing economy, Long term energy scenario, Energy pricing, Energy sector reforms, Energy conservation and its importance, Energy strategy for the future, Energy Conservation Act-2001 and its features.

Unit III

Global Energy Scene

Energy consumption in various sectors, projected energy consumption for the next century, exponential increase in energy consumption, energy resources, coal, oil, natural gas, nuclear power and hydroelectricity, impact of exponential rise in energy consumption on global economy, future energy options.

Unit IV

Indian Energy Scene

Commercial and non-commercial forms of energy, energy consumption pattern and its variation as a function of time, India's Power Scene, Gas-Based Generating Plants, Nuclear Power Programme, urban and rural energy consumption, energy as a factor limiting growth, need for use of new and renewable energy sources, Socio-economic impacts, Rural development, Poverty alleviation, Employment; Security of supply and use, Environmental and ethical concerns, Economical aspects of renewable energy systems vs large hydro and thermal power projects.

Suggested reading references

- Bani P. Banerjee, Energy and the Environment in India, Oxford University Press, New Delhi.
- G. D. Rai, Non- conventional Sources of Energy, Khanna Publishers, Delhi.
- Gopal kumar, Energy Independence Vision of a Hybrid, Unbound Future, Deep and Deep Publications Pvt. Ltd., New Delhi.
- D. K. Asthana, Meera Asthana, Environment Problems and Solutions, S. Chand and Company Ltd., New Delhi.
- Abdul Mubeen, M. Emran Khan, M. Muzaffarul Hasan, Energy and Environment, Anamaya Publishers, New Delhi.
- Upender Pandel, M. P. Poonia, Energy Technologies for Sustainable Development, Prime Publishing, Ghaziabad (UP).
- Renewable Energy Sources and Emerging Technologies, Kothari D.P. and Singal K. C, New Arrivals - PHI; 2 edition (2011)
- Other relevant books also be used.

RE-102 Renewable energy sources and technology

Unit I

Non-conventional energy sources:

Introduction to Non-conventional energy sources, Solar energy, Wind energy/power, Energy from biomass and biogas, Ocean energy ,Wave energy, Tidal energy/power, Geothermal energy, Hydrogen energy, Thermo-electric power, Fuel cell, Magneto-Hydro-dynamic (MHD) generator.

Unit II

Renewable and Non-renewable energy sources:

Renewable (Non-conventional) energy sources, Non-renewable energy sources, Alternative energy sources, Energy Scenario in India context, ElectricityGeneration from Non-conventional energy sources, Impact on environment, Fuels, Classification of fuels, Solid fuels ,Liquid fuels, Gaseous fuels.

Unit III

Solar Thermal Technologies:

Solar Thermal Energy Systems: Absorption and Radiation, Heat Gain and Loss, Solar Cooking Systems ,Principle of Cooking, Cooking by Boiling, Speed of Cooking, Energy Required for Cooking, Types of Solar Cooker, Solar Distillation System , Distillation: Natural Process for Purifying Water.

Unit IV

Wind Energy:

Wind Flow, Motion of Wind , Vertical Wind Speed Variation,Distribution of Wind Speeds, Power in the Wind, Conversion of Wind Power: Wind Turbine, Efficiency of Wind Power Conversion: Cp, Types of Wind Turbines, Components of a Wind Turbine, Worldwide Wind Installations Wind Turbine Sizing and systems Design , Energy Derived from a Wind Turbine.

Suggested reading references

- Renewable Energy Technologies: A Practical Guide for Beginners, Chetan Singh Solanki, PHI|School Books (2008)
- Fundamentals of Renewable Energy Systems Paperback – D. Mukherjee, New Age International Publisher; First edition (2011)
- Renewable Energy Sources and Emerging Technologies, Kothari D.P. and Singal K. C, New Arrivals - PHI; 2 edition (2011)
- G. D. Rai, Non- conventional Sources of Energy, Khanna Publishers, Delhi.
- Other relevant books also be used.

RE-103 Solar energy

Unit I

Solar Radiation

Solar radiation: extra-terrestrial and terrestrial, Radiation measuring instruments, Radiation measurements and predictions

Unit II

Basics of Solar Thermal Conversion

Solar thermal conversion: basics, Flat plate collectors-liquid and air type, Theory of flat plate collectors, Selective coatings

Unit III

Solar thermal systems and applications

Advanced collectors: ETC, Solar Pond, Concentrators: optical design of concentrators, Solar water heaters, Solar dryers, Solar stills, Economics of solar thermal conversion systems

Unit IV

Solar thermal Energy conversion

Solar cooling and refrigeration, Thermal storage, Conversion of heat into mechanical energy, Active and passive heating of buildings, Solar thermal power generation

Suggested reading references

- Goswami DY. Kreith F. Kreider JF. Principles of Solar Engineering, Taylor & Francis, 1999
- Tiwari GN. Solar Energy, Fundamentals design, modeling and Applications. Narosa, 2002
- Duffie JA. Beckman WA. Solar Engineering of Thermal Processes, John Wiley, 2006
- Kishore VVN. Renewable Energy Engineering and Technologies, TERI, 2009
- Other relevant books also be used.

RE-104 Functional English & Communication Skills

UNIT-I

Grammar:- Determiners, Tenses, Defining a Verb, Chief forms of a Verb, Tense and Time, Further Division of Tenses, Active – Passive Voice, Introduction, Defining the Voice, Some General rules regarding the change of voice, Modals & Auxiliaries,

UNIT-II

Business Letters: Introduction, Functions of a Business Letter, Inward Structure / Layout of a Business Letter, Other Important Parts of Business Letter, Outward appearance of a business letter, Arrangement Styles, Salient Features of a Business Letter, Legal Aspects of a business Letters, Kinds of Business Letter, Inquiry and Reply Order and Reply Cancellation of order Complaint /Adjustment Sales Letter.

UNIT-III

Report Writing: Introduction, The Nature of a Report, Functions of a Report, Preparing a Report, Types of Reports, Business report, Press report.Job Application / Resume Writing

UNIT-IV

Conversation Skills: Conversations based on everyday situation / Dialogue Writing. Introduction, Nature of Conversations, Purpose of conversation, Guidelines for Effective Conversation Skills,

UNIT-V

Communication Skills: Communication – Meaning, Features & Process, Verbal & Non – Verbal comm. Verbal, Oral Communication, Written Communication, Non – Verbal, Body language, Space, Para language Others, Group discussion skills, Meaning, Characteristic, Do's & Don'ts, Relevance, Moderating a group discussion, Presentation skills meaning, Planning a presentation skills, Preparing a presentation skills, Delivering a presentation skills, Presentation skills, Public Speaking, Meaning, Essential of effective public speaking, Facing Interviews, Importance, Do's & Don'ts

Suggested reading references

- Recommended Reading: Alexander, Michael. A History of English Literature, Basingstoke Hampshire: Palgrave Macmillan, 2000
- Birch, Dinah ed. The Oxford Companion to English Literature, Oxford: OUP, 2009
- Sanders, Andrew. The Short Oxford History of English Literature, Oxford: OUP, 2004
- Widdowson, Peter . The Palgrave Guide to English Literature and its Contexts 1500-2000,
- Basingstoke Hampshire:Palgrave Macmillan, 2004
- Rain and Martin English grammar book.
- Other relevant books also be used.

RE-105 Practical and Project work (Semester - I)

A. Design and construction of

1. Box type solar cooker
2. Solar distillation plant
3. Biomass densification i.e. pelletisation, briquetting and cubing machine, direct and indirect solar dryer
4. KVIC biogas plant
5. Deenbandhu biogas plant
6. Biomass gasifier
7. Biogas appliances
8. Improved cook stoves
9. Wind energy Conversion Devices
10. Solar water heater and solar dryer

Case Study related to Techno – economics of different Renewable energy device.

B. List of Required Equipment

- Automobile flue Gas Analyzer
- Automatic moisture analyzer
- Bio diesel pilot plant with stratification unit
- Forced Convective and Microwave dryer
- Hydrogen gas set and testing unit

SEMESTER - II

RE-106 New Energy Resources

Unit I

Energy Resources

Need of energy systems and materials, Application to supplement and expedite energy conservation efforts, Addressing environmental concern, Suitability as CDM., Hydrogen Energy- Basics of Hydrogen Energy, Production methods, Storage and transportation, Applications. Fuel Cell working, Basic thermodynamic and electrochemical principles, Classifications, Applications for power generations.

Unit II

Ocean and Geothermal Energy

Ocean energy- Origin,Types of geothermal energy sites, Geothermal Power plants, Ocean energy resources, Ocean energy routes, Ocean thermal energy conversion, Wave energy conversion, Tidal energy conversion Geothermal Energy- Origin, Types of geothermal energy sites, Geothermal Power plants

Unit III

Magnetohydrodynamic (MHD) energy conversion

Principle of operation, Classifications, Features of MHD Systems, Magnetic and Electric Storage System-Super conducting magnetic energy storage (SMES) systems, Capacitor and super capacitor

Unit IV

Electrochemical Energy Storage System

Batteries, Types, Working principles, Role of carbon nanotubes in electrode

Suggested reading references

- Narayan R. Biswanathan B. *Chemical and Electrochemical Energy Systems*, University Press (India)Ltd. 1998.
- J W Twidell & A D Weir, *Renewable Energy Resources*, ELBS, 2006
- Tiwari GN. Ghoshal MK. *Fundamental of Renewable Energy Sources*, Narosa, 2007.
- Other relevant books also be used.

RE-107 Solar photovoltaic technology

Unit-I

Basics of Solar Photovoltaics

Principle of photovoltaic conversion, Technology for fabrication of photovoltaic devices

Unit-II

Solar Photovoltaic energy conversion and utilization

Photovoltaic power generation systems. Off-grid systems, Grid connected systems, Organic solar cells, Electrochemical energy storage: Batteries, Economics of solar photovoltaic systems.

Unit-III

Power electronics for Photovoltaic systems

Off-grid power control and management systems, Grid-connected power control and management systems

Unit-IV

Solar Photocatalysis

Solar photocatalysis: mechanism, Kinetics, Nano-catalysts: system design, Performance parameters, Applications of solar photo-catalysis

Suggested reading references

- Solar Photovoltaics: Fundamentals, Technologies and Applications, Chetan Singh Solanki PHI; 3 edition 2015
- Solar Photovoltaic Technology and Systems: A Manual for Technicians, Trainers and Engineers, Chetan Singh Solanki PHI (1 January 2013)
- Science & Technology of Photovoltaics P Jayrama Reddy, BS Publications ,CRC Press 2010
- From Sunlight to Electricity: A Practical Handbook on Solar Photovoltaic Applications, Suneel Deambi, The Energy and Resources Institute, TERI (30 January 2009)
- Other relevant books also be used.

RE-108 Energy management and auditing

Unit 1

Energy and its various forms

Commercial and Non-commercial energy, primary energy resources, commercial energy production, Energy pricing, energy security, energy conservation and its importance, Electricity tariff, load management and maximum demand control, Thermal energy contents of fuel, heat capacity, sensible and latent heat, heat transfer, Stochiometric air-fuel ratio, Flue gas analysis

Unit 2

Energy management and auditing

Concept of energy management programme , Energy auditing services; basic components of an Energy audit, types of energy audit, Industrial, commercial and residential audit planning, Understanding energy costs, bench marking, energy performance index, Understanding energy used pattern, system efficiencies, input energy requirements optimization, Fuel & energy substitution, Energy conservation act and its features, Duties and responsibilities of energy managers and auditors, Energy audit instruments/ tools

Unit 3

Energy Action Planning

Energy management systems, Management commitment and energy conservation policy, Energy performance assessment: Data collection and management, analysis of data, baseline, and benchmarking, Estimation of energy savings potential, Action planning, training planning.

Unit 4

Financial and Project Management

Financial analysis techniques : simple payback period, return on investment, net present value, internal rate of return, cash flows and sensitivity analysis, Financing options, energy performance contracts and role of ESCOs., Project definition and scope, Technical design and Financing, Project planning techniques; CPM and PERT, case studies

Suggested reading references

- General Aspect of Energy Management and Energy Audit, 2010, BEE Guide book
- Energy Efficiency in Thermal Utilities, 2010, BEE guide book
- Energy Efficiency in Electrical Utilities, 2010, BEE guide book
- Turner WC. Energy Management Handbook, 5th Edition, The Fairmont Press, 2005
- Capehart, Turner, Kennedy. Guide to Energy Management. Fifth Ed. The Fairmount Press, 2006.
- Thumann, Younger. Handbook of Energy Audit. Sixth Ed. The Fairmount Press, 2003.
- Thumann, Mehta. Handbook of Energy Engineering. Fifth Ed. The Fairmount Press, 2001
- Other relevant books also be used.

RE-109 Fundamental of Computer & Information Technology

Unit-I

Basics & Booting Procedure:- Introduction to Computers, Characteristics, Data Processing Cycle, History and Generations of Computers, Classification of Computer by Processing, Capabilities, Micro, Mini, Mainframe and Super, Computers, Layered Approach of Operating System,, booting process, software and Types of Software. Hardware and Peripherals .

Unit-II

Word Processing Using Ms Word:- Introduction to Word, Font, Paragraph, Style, Editing, Pages, tables, Illustrations, bookmark, hyperlink, Header, Footer, Text, symbol, Page layout ribbon, Foot, Note End note, Caption, Mail merge,, Spell check, comments, Document View, Show Hide, Zoom, Window and Office, Button Options, Printing documents, Password Protection.

Unit-III

Spread Sheet Using Ms Excel:- Sheet Introduction, Selecting row, column, Cell, changing height, and Formula bar, Cell Referencing - Relative, Absolute, Mixed,, Calculative Examples like salary sheet, mark, sheet etc., Conditional formatting, inserting, deleting, Row or column, Cell, Changing height and width, Pivot table and, Pivot chart, types of different chart, editing, Charts, Print Preview and Page Layout, Useful, Functions from Function Library. Data sorting and subtotaling, filter, protecting sheet.

Unit-IV

Presentation Using Ms Power Point:- Inserting new slide, different layout of slide, Inserting date, slide number, movie, sound, object, header footer, Designing slide, theme and background, custom animation, slide transition Rehearse timings, slide show , Setup slide, show, hide slide, different views of slide, Use of slide master, Printing handout, slide etc.

Unit-V

Internet:- Introduction to Internet, Use of Internet, Applications of Internet, World wide web (web page, web site,, web client and web server), Web browsers, Search engines, Email, Blogs and forums, Social media and chatting, E-commerce, FTP, Bookmarks, Internet Search, Basic search, Tips and Tricks for search, IP addressing. HTML..

Suggested reading references

- Anurag Seetha, "Introduction to Computers and Information Technology", Ram Prasad & Sons, Bhopal.
- S.K.Basandra, "Computers Today ", Galgotia Publications. Alexis Leon & Mathews Leon, " Fundamentals of Information technology ", Vikas Publishing House, New Delhi.
- DOS Quick reference by Rajeev Mathur, Galgotia Publications
- Linux Complete by BPB Publications Peter Norton Complete Guide to Linux by Peter Norton, Techmedia Publications
- Level Module M 1.1 Information technology by Khanna Book Publications, NewDelhi • Windows XP Complete Reference. BPB Publications
- Windows XP Complete Reference. BPB Publications MS Office XP complete BPB publication
- MS Windows XP Home edition complete, BPB Publications I.T. Tools and Applications, A. Mansoor, Pragya Publications
- Ms Office XP complete BPB publication ISBN 81-7656-564-4 • Ms Access 2002 fast&easy by Faithe Wempen PHI .ISBN 81-203- 1893
- Vb.Net Programming Black Book By Steven Holzner –Dreamtech Publications
- Mastering Vb.Net By Evangelos Petroutsos- Bpb Publications
- Introduction To .Net Framework-Worx Publication
- Other relevant books also be used.

RE-110 Practical and Project work (Semester - II)

A. Green Technologies

1. Fabrication and evaluation methods of solar cells
2. study of VI characteristics of solar PV system
3. Performance evaluation of solar PV pumps for lighting powe
4. Study of MHD generation system details
5. Study of thermo ionic power conversion systems
6. Study of different batteries used in PV system and identification the defects in biogas plant and its repair.

B. Carbon Credit

Case study related to CR and CDM

C. Waste Recycling and Resource Recovery System

Incineration, Bio-methanation, direct combustion and recycling methods

List of Required Equipment

- Solar Air condition test ring
- Solar Thermal Training Cart
- Solar Photovoltaic Training Cart
- Energy Audit Kit for industrial application
- Energy methods for domestic and industrial application
- On line venture meter, Orifice meter, Pitot tube meter and other flow meter.
- **Structural Mechanics Apparatus** (Complete set) Single Cantilever, Cantilever with four Members, Simple Roof Truss, Roof Truss with Angled Tie Rods, A Composite frame work, King Post Roof truss, Standard Roof Truss, Roof Truss with Loads or standard Roof Truss, Mansard Roof Truss, Island Roof Truss, N Type Girder, Warren Girder, Framed Arc and North Light Roof Truss.

WOMEN'S STUDIES AND RESEARCH CENTRE,
RANI DURGVATI UNIVERSITY,
JABALPUR. (M.P.)

SYLLABUS

ADVANCED CERTIFICATE COURSE
IN
GARBH SANSKAR (ACGS)

(Effective for Academic Session 2021-22)

WOMEN'S STUDIES AND RESEARCH CENTRE,
RANI DURGAWATI UNIVERSITY,
Saraswati Vihar, Pachpedi, Jabalpur, Madhya Pradesh 482001

ADVANCED CERTIFICATE COURSE IN GARBH SANSKAR (ACGS)

Program Outcomes (POs):

Garbh sanskar advance certificate cource, Giving birth should be your greatest achievement not your greatest fear. Garbh sanskar simply means educating your baby inside your womb. It is a complete guideline to get a divine child from ayurvedic point of view. Garbh sanskar is a process to achieve physical, mental, spiritual, emotional, social development & perfection for the mother & baby.with this process a parents get healthy & expected child. The literal meaning of garbh sanskar is educating the fetus in the womb. Many parents found this interesting and felt quite satisfied too. In Indian culture it is believed that education of real and traditional values and parenting starts right from the time the fetus is confirmed in the womb. This is why when anyone gets pregnant in home, the elder people advice to have positive thoughts and emotions to the pregnant woman.

Program Specific Outcomes (PSOs):

The ACGS Course objectives are to prepare candidates with update knowledge and skill in the field of ayurveda. It will develop skills in brief regarding all the procedure in Garbhsanskar. The advantages of garbh sanskar are not only that you educate your child and there is development of a bond between the mother and the child. In fact, this has a great impact on the health of the mother also. The positive thinking and attitude promotes physical well being of the mother.

Total Duration of Course: 3 Months

Course Outcomes:

This course is specially designed for all those who are genuinely interested in propagating the concept of GARBHA SANSKAR in the society, to up bring a healthy, multi-talented and most importantly a cultured, value based new generation. In fact, GARBHA SANSKAR is a very powerful medium to shape up to three generations in the society, by inculcating Sanskaras. In short, this is a missionary, selfless service to the society.

Career Options

Assistant in Ayurveda Clinic
Assistant in Garbhsankar Clinic or Organization
Parental Education

WOMEN'S STUDIES AND RESEARCH CENTRE,
RANI DURGAWATI UNIVERSITY,
Saraswati Vihar, Pachpedi, Jabalpur, Madhya Pradesh 482001

Syllabus for ADVANCED CERTIFICATE COURSE IN GARBH SANSKAR (ACGS)

Course of Study

S. No.	Subjects	Subject code	L/Week	Credit
1.	Medical Science	ACGS-101	02	05
2.	Science of Garbh Sanskar	ACGS-102	02	05
3.	Epigenetics & life style modifications	ACGS-103	02	05
4.	Yoga and Pranayam	ACGS-104	02	05
5.	Foetal Communication	ACGS-105	02	05
6.	Therapies in Garbh Sanskar	ACGS-106	02	05
	Grand Total		12	30

Medical Science
Subject Code: ACGS-101
Min. Hrs.: 20

- Anatomy
- Physiology of
  Menstrual Cycle
  Fertilization
- Use of contraception after marriage for planned pregnancy.
- Nutritional Supplements prior to conception Eg. Folic acid.
- Preparation of Pregnancy
- Journey during pregnancy.
- Development of fetus in 1st, 2nd & 3rd trimester.
- Maternal changes during pregnancy.
- Symptoms of early pregnancy.
- Insight into complications during pregnancy, labour & post pregnancy.
- Labour · 1st, 2nd, & 3rd stages.
- Placenta
- Investigations
- High Risk Pregnancies
- Importance of Daily foetal movement count. Myths
- Contraception after delivery
- Breast feeding, spacing of pregnancies.

WOMEN'S STUDIES AND RESEARCH CENTRE,
RANI DURGAWATI UNIVERSITY,
Saraswati Vihar, Pachpedi, Jabalpur, Madhya Pradesh 482001

Science of Garbh Sanskar
Subject Code : ACGS-102
Min. Hrs. : 16

Introductio:

- All Sanskar (Sanskaron ki Parampara)
- Definition
- Science behind sanskar
- Vaidic parampara of 16 Sanskars
- Present Scenario
- Sanskar and Epigenetics
- Scientific explanation of Garbh Sanskar

Garbh Sanskar Ceremony

- The ceremony has five steps each with a message
- Inhalation of medicinal herbs.
- Worshipping the womb.
- Consolation & Reading about the life style modifications expected from the mother to be an auto suggestive mechanism
- Special oblations
- Charu Grahan

Yogyopathy with Garbhpusthi havan samagri for high risk cases

- Advanced science of Yagya and its use in treating diseases.
- Special medicinal herbs are used in havan samagri the fumes of which when
- Inhaled by the patient results in treatment of various ailments - It is a research based science known as Yagyopathy.

WOMEN'S STUDIES AND RESEARCH CENTRE,
RANI DURGAWATI UNIVERSITY,
Saraswati Vihar, Pachpedi, Jabalpur, Madhya Pradesh 482001

Epigenetics & life style modifications
Subject Code : ACGS-103
Min. Hrs :16

Epigenetics

- Epigenetics
- Adulthood disease of foetal origin.

Life Style Modifications

- Stress Management
- Eelectro magnetic radiation from Laptop, Mobile & Wifi.
- Science behind thoughts and feelings - Quantum Theory
- Ideal life style modifications and environmental effect on foetus

- Diet

  - Importance of diet including nutraceuticals in diet.
  - Supplementing diet with folic acid, iron, calcium, iodine, DHA etc. prior to conception (at least 3 months before)
  - Ideal diet for healthy mind, body & soul
  - During pregnancy importance of Balanced diet.
  - Diet with growth, immune and brain nutrients and digestive elements for mother and foetus.
  - Specific requirements during the three trimesters.
  - Myths regarding diet during pregnancy.
  - Importance of adequate calories and healthy diet during Breast feeding

WOMEN'S STUDIES AND RESEARCH CENTRE,
RANI DURGAWATI UNIVERSITY,
Saraswati Vihar, Pachpedi, Jabalpur, Madhya Pradesh 482001

Yoga and Pranayam
Subject Code:ACGS~04
Min. Hrs.: 14

- Asan -Sookshma Vyayam.
- Asan -
  - Pre conception
  - Antenatal
  - Postnatal

- Pranayarn
  - Preconception
    - Nadi Shodhan
    - Anulom Vilom
    - Bhrahmari
    - Pranakarshak.
    - Om Chanting
    - Bhastrika
    - KapalBhati

  - Antenatal (All except Bhastrika and Kapal Bhati)

- Dhyan

  - Guided meditation
  - Surya Dhyan
  - Teen Shareeron Ka Dhyaan
  - Naad Yog
  - Any other important asan

WOMEN'S STUDIES AND RESEARCH CENTRE,
RANI DURGAWATI UNIVERSITY,
Saraswati Vihar, Pachpedi, Jabalpur, Madhya Pradesh 482001

Foetal Communication
Subject Code : ACGS-105
Min. Hrs.: 14

Foetal Communication

- To keep pace with rapidly growing foetal brain mother establishes conversation with child in uterus by various means –

  - Music
  - Story telling
  - Thought transfer
  - Sermons
  - In all her daily routines.

WOMEN'S STUDIES AND RESEARCH CENTRE,
RANI DURGAWATI UNIVERSITY,
Saraswati Vihar, Pachpedi, Jabalpur, Madhya Pradesh 482001

Therapies in Garbh Sanskar
Subject Code : ACGS106
Min. Hrs.: 16

Therapies

- Music - Presently developing as a mode of therapy
- Helpful in distress situations
- Reduces B.P.
- Increases neuron genesis & Synaptogenesis
- Improves bonding between mother & child.
- Sketching, Drawing, Painting, Clay moulding, colour therapy -practical classes.

WOMEN'S STUDIES AND RESEARCH CENTRE,
RANI DURGVATI UNIVERSITY,
JABALPUR. (M.P.)

REVISED SYLLABUS

Learning Outcomes based Curriculum Framework (LOCF)

CERTIFICATE COURSE IN WOMEN EMPOWERMENT AND DEVELOPMENT (CWED)

(CBCS pattern effective from 2020-21)

WOMEN'S STUDIES AND RESEARCH CENTRE,
RANI DURGAVATI VISHWAVIDYALAYA, JABALPUR.
CERTIFICATE COURSE (Three Months)
CERTIFICATE COURSE IN WOMEN EMPOWERMENT AND DEVELOPMENT (CWED)

Learning Outcomes based Curriculum Framework (LOCF)

Course Code : CWED

Program Outcomes (POs):

- The course aims to offer a structured program of study in the field of gender and development to students with little or no previous knowledge or academic training in either the principal subject area or in gender studies.
- The course will introduce students to a comprehensive set of topics dealing with the principal issues in the area of gender and development and will be multidisciplinary.

Program Specific outcomes (PSOs)

Students will be able to:

- Analyse and explain gender differences and disadvantages for women in national and international contexts
- Identify, summarise and evaluate different approaches to understanding gender and development

Course Outcomes:

Students successfully completing this programme will be able to pursue their careers in the following areas:

- Higher studies and research programmes.
- Public sector, Non-governmental Organisations both at National and International level;
- Specialised areas like Media, Communications, Corporate sector, Writing, Editing, Journalism, Gender Training Programmes.

Course Duration:

Three Months

REGULATIONS FOR CERTIFICATE COURSE IN WOMEN EMPOWERMENT & Development

1. The course duration shall be of 3 months.
2. Total intake capacity of the course will be 20-25 participants.
3. Graduates and undergraduates (12 th Pass) from all subject disciplines with a minimum of 45% aggregate in the qualifying examination shall be eligible for admission.
4. The admission form can be obtained from the university or the Women's Studies Centre at the university campus. The duly filled form should be submit to along with a draft of Rs 1200/- (twelve hundred only), in favour of, Registrar, Rani Durgavati Vishwavidyalaya, Jabalpur.
5. There shall be a total of three papers of 100 marks each, with two theory papers and one practical paper including field study.
6. The candidates have to appear tor an examination comprising of Written Examination, Assignment and Presentation for successful completion of the course comprising of internal and external assessment.
7. Candidates would be declared qualified as follows:-

Marks secured in course end examination	Result
~60%	A Grade
~50%<60%	B Grade
~40% & Below 50%	C Grade
Less then 40%	D Grade

8. Grace marks (1 to 2) can be given in any two of the papers

TEACHING & EVALUATION SCHEME

Paper Code	Name of Paper	Internal Marks	External Marks	Total	Credit
CCWE01	UNDER - STANDING GENDER	30	70	100	10
CCWE02	GENDER-DEVELOPMENT AND WOMEN'S AWEARNESS	30	70	100	10
CCWE03	PRACTICAL PAPER INCLUDING FIELD STUDY	40	60	100	10
Grand total		100	200	300	30

Detail Syllabus

Paper- I UNDER - STANDING GENDER (CCWE01)

Topics-

1. Gender ideology, Gender Discrimination, Gender Budgeting, Gender Equality.
2. Gender Development and Indian Nation state: Landmark Policies, Plans, Reports and Commissions.
3. Gender issues in Urban and Rural Livelihood.
4. Development status of women in various religions.
5. Participation in organized and unorganized sectors in urban and rural perspective.
6. Role of education in women empowerment.

Paper- II GENDER-DEVELOPMENT AND WOMEN'S AWEARNESS (CCWE02)

Topics –

1. Concept, Nature, Objective of Women Empowerment, Personality Development - an effective tool in women empowerment, capacity building of women managers at both personal as well as professional fronts.
2. Determinants of women empowerment: Education, Health, Economics Status, socio-political environment etc.
3. Constitutional provisions, legal rights, Central and State government policies for women empowerment.
4. Self help Groups: Concept, Importance & role in women empowerment. Microfinance, vocational training programs, role of zila udyog Kendra and banks (co-operative and women banks) and Social welfare programs. NGOs: Concept. structure, setting up a NGO, fund raising. Role of NGOs in women empowerment.
5. Entrepreneurship: Concept, Importance, Characteristics, setting up an enterprise. fund raising, marketing of products/services, problems faced by entrepreneurs and overcoming them.

Paper- III PRACTICAL PAPER INCLUDING FIELD STUDY (CWED03)

One Project (Research Work) to be prepared related to syllabus with relevant agencies, NGO, Government and non-government organization.