गुरू घासीदास विश्वविद्यालय (केन्नेय विश्वविद्यालय अधिनेयम 2009 ज्ञ. 25 के अंतर्गत स्वापित केन्नेय विश्वविद्यालय) कोनी, बिलासपर - 495009 (छ.ग.)



Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

# Minutes of Meetings (MoM) of Board of Studies (BoS)

The scheduled meeting of member of Board of Studies (BoS) of Department of Forestry, Wildlife and Environmental Sciences, School of Studies of Natural Resources, Guru Ghasidas Vishwavidyalaya, Bilaspur was held on dated 18.06.2015 at 11:00 am in hall to design and discuss the B. Sc. (Forestry) 4 Year Degree Program scheme and syllabi.

The following members were present in the meeting:

- 1. Prof. N. P. Todaria (External Expert Member BoS, Dept. of Forestry, H. N. B. Garhwal, Central University, UK)
- 2. Prof. S. S. Singh (Member BoS, Dept. of Forestry, Wildlife and Environmental Sciences)
- 3. Dr S. S. Dhuria (Member BoS, Associate Professor, Dept. of Forestry, Wildlife and Environmental Sciences)
- 4. Dr. Garima Tiwari (Member BoS, Assistant Professor, Dept. of Forestry, Wildlife and Environmental Sciences)

Following points were discussed during the meeting

- Prof. N.P. Todaria External Examinees sent revised syllabus as per guidelines of CBCS on 18/06/2015 s a expert
- B.Sc. Forestry 4 years 8 semester and M.Sc. Forestry and Environmental sciences 2 Years four semester syllabus has been discussed restructured and finalized as per the need of choice-based credit system.
- The entire syllabus of both programs was revised and made as per the choice-based credit system.
- B. Sc. Forestry program will have a total of 184 credit point and M.Sc. Forestry Program will have 98 credit points in total.
- B.Sc. Forestry Syllabus will have 40 papers up to VII Semester and VIII Semester will have following training program :
  - Forest Institutes and Industrial Visits.
  - Forestry Operations (Working Experience)
  - Socio-Economic Survey Village Attachment
- The students will prepare the report based on the above trainings and evaluation will be done by one external examiner and two internal examiners.
- There will be one student project in B.Sc. Forestry program which will be allotted in III Semester and will be evaluated by a panel of two teachers of the department at the end of IV Semester.
- M.Sc. Forestry and Environmental Sciences syllabus will have 18 papers up to III Semester and IV Semester have following:
  - Field Training (Attachment with State Forest Department)



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- Industrial Training
- Computational Skills
- $\circ \quad Student \ Project$
- The students will prepare the report based on the above trainings and evaluation will be done by one external examiner and two internal examiners.
- Student project will be evaluated by a panel of two teachers of the department.
- There will be two specializations i.e,
  - Forest Genetic Resources (FGR)
  - Forest Management (FM)
- Above subjects will be offered to the student as per their choice in the III Semester of the M.Sc. program.
- Minimum passing marks for each theory papers, practical, student project and trainings will be 40%.
- Computation of SGPA and CGPA will be done as per the UGC guidelines.
- Credit details, marks distribution and course content have been mentioned in the syllabus of B.Sc. Forestry and M.Sc. Forestry and Environmental Sciences program.
- The study tour to forest operation sites, forest nursery, wildlife habitat and plantation sites will be conducted as per the requirement in each semester.

The following new courses were introduced in the of B. Sc. (Forestry) Four-year degree program:

- 1. B. Sc. (Forestry)Bio Statistics and Computer Application2. B. Sc. (Forestry)Forest Institutes and Industrial Visit/training3. B. Sc. (Forestry)Forestry Operations (Working Experience)4. B. Sc. (Forestry)Socio-economic survey village attachment
- 5. B. Sc. (Forestry) Student Project

विभागाध्यक्ष Head वानिकी, वन्यजीव एवं पर्यावरण बिभाग tment of Forestry, Wildlife and Environmental Science गुरू घासीदास विश्वविद्यालय, विलासपुर (छ.ग.) Soru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

Signature & Seal of HoD

गुरू घासीदास विश्वविद्यालय (केटीय विश्वविद्यालय अधिन्यम 2009 ज्ञ. 25 के अंतर्गत स्वापित केन्द्रीय विश्ववेद्यात्य) कोनी, बिलासपुर - 495009 (छ.ग.)



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# **Syllabus and Scheme**

COURSE SYLLABUS FOR

B.Sc. FORESTRY (w. e. f. 2015-16)



# "SCHOOL OF NATURAL RESOURCES"

DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES GURU GHASIDAS VISHWAVIDYALAYA BILASPUR-495009, CHHATTISGARH (A Central University established by the Central University Act. 2009 No. 25 of 2009)

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S.No.	Title of Paper	Lecture	Tutorial	Practical	Credit
01.	Bio Statistics and Commune				
	Bio Statistics and Computer Application	3	1	1	5
02.	Forest Engineering & Surveying	3		1	4
03.	Wood Products & Utilization	3		1	
04.		3		1	4
	World Forestry Systems	2	1	1	4
05.	Entrepreneurship Development and communication skills	2	1		3

## B.Sc. VIII<sup>th</sup> Semester

S.No.	Title of Paper	Credits
01.	Forest Institutes and Industrial Visit/training Project report writing, Presentation & Viva-voce	8
02.	Project report writing, Presentation & Viva-voca	9
03.	Socio-economic survey - village attachment	8
	Total Credits	25

## Grand Total of Credits = 184

- The student project will be allotted in III semester and will be evaluated at the end of IV semester. Students may choose any project related to their curriculum. There will be no supervisor for this project.
- Visits to forest operation sites, forest nursery, wildlife habitat and plantation sites will be conducted as per the requirement of curriculum.

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गुरू घासीदास विश्वविद्यालय (केट्रीय विश्वविद्यालय अधिन्यम 2009 ज्ञ. 25 के अंतर्गत स्वापित केन्द्रीय विश्वविद्यालय) कोनी, बिलासपुर - 495009 (छ.ग.)



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CR.9 (9)

CR.8 (8)

CR.1 (1)

### SEMESTER -VII

#### PAPER I. BIOSTATISTICS AND COMPUTER APPLICATION

Definition and application of statistics, types and source of data, classification and tabulation of data, frequency distribution, graphical representation of data, (Bar diagram, pie chart, histogram, frequency polygon) measures of central tendency (mean, median, mode) measures of Dispersion (range, standard deviation, Mean deviation, Quartile deviation, variance, coefficient of variation), Probability, Test of signification: basic concepts,(Z-Test, X<sup>2</sup>-Test, t-Test, F-test,), regression, Correlation : (scatter diagram, correlation co-efficient, its properties).Computer application: Introduction to computers and personal computers, basic concepts, operating system, MS Office, Excel, Power Point, introduction to Multi-Media, application of Statistical software's in Forestry.

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#### **SEMESTER - VIII**

FOREST INSTITUTES AND INDUSTRIAL VISIT/ TRAINING.

Works to be undertaken:

- Study the nature of industrial and business organization- structure
- Raw material- Collection and processing of raw material.
- Production and management process.
- Marketing and financial management.

**\*** FORESTRY OPERATIONS (WORKING EXPERIENCE)

Visit to modern forest nurseries, Herbal garden and watersheds. Study the felling and logging operations, timer lots and important industrial products. Study working plan. Enumeration, volume and yield calculation and component history file. Study the CAT(Catchment area treatment plan) and FDA(Forest development agencies). Use of Forestry equipments/instruments. Study the regeneration and management of important Forestry tree species. Sample plots, layout studies, stump analysis, preparation of local volume table.

## SOCIO-ECONOMIC SURVEY- VILLAGE ATTACHMENT.

# Data collection with respect to village profile in respect of socio-economic and cultural status, farm technology used etc. Bench mark survey of plant resources ( cropping pattern, yield system etc). Schedule development, tabulation, analysis and preparing plan of work. Understanding local Forestry and other village level institutions ( Panchayat, village forest community, corporations, youth/women groups etc.). People's participations in development programmes with special reference to Forestry. Exercise on the use of extension methods and teaching aids for transfer of technology.

✤ STUDENT PROJECT

111ing 59.6.15

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Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

# Minutes of Meetings (MoM) of Board of Studies (BoS)

The scheduled meeting of member of Board of Studies (BoS) of Department of Forestry, Wildlife and Environmental Sciences, School of Studies of Natural Resources, Guru Ghasidas Vishwavidyalaya, Bilaspur was held on dated 26.07.2018 at 11:00 am in E class room to design and discuss the B. Sc (Forestry) Four Years Degree Program and syllabi.

The following members were present in the meeting:

- 1. Prof. Lalji Singh (External Expert Member BoS, Dept. of Agroforestry, IGKV, Raipur)
- 2. Prof. S. S. Singh (Member BoS, Dept. of Forestry, Wildlife and Environmental Sciences)
- 3. Dr. S. C. Tiwari (HOD, Associate Prof., Dept. of Forestry, Wildlife and Environmental Sciences -cum Chairman, BOS)
- 4. Dr S. S. Dhuria (Member BoS, Associate Professor, Dept. of Forestry, Wildlife and Environmental Sciences)
- 5. Dr. Gunjan Patil (Member BoS, Assistant Professor, Dept. of Forestry, Wildlife and Environmental Sciences)

Following points were discussed during the meeting

- 1. The syllabus of B. Sc. Forestry (4 years/ 8 Semesters) framed as per the guidelines of CBCS pattern recommended by UGC has been discussed thoroughly and was passed by the committee for the implementation from academic session 2018-19.
- 2. The course curriculum of M. Sc Forestry and Environmental Sciences was discussed and it was resolved that this course is well framed and contemporary with the course curriculum of other forestry institution in the country. Since it is at Forestry, Wildlife and Environmental Sciences at par with the needs of the current scenario so presently needs no revision.
- 3. The committee also resolved that the syllabus of M. Sc. Forestry and Environmental Sciences will be the syllabus for VRET examination of PhD program in forestry.

गुरु घासीदास विश्वविद्यालय (केदीय विस्तविद्यालय अधिनेयम 2009 क. 25 के अंतर्गत खारित केन्द्रीय विश्वविद्यालय) कोनी, बिलासपुर - 495009 (छ.ग.)



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The following new courses were introduced in the of B. Sc. (Forestry) Four-year degree program:

1.NR/FR/CC/01/L

English Communication

2.NR/FR/EC/01/01/P

3.NR/FR/EC/02/02/P

4.Summer internship

ECA Extracurricular activity, Field visit/ NSS/ Swachhta/ Physical Education/ Plantation Activities ECA Extracurricular activity, Field visit/ NSS/ Swachhta/ Physical Education/ Plantation Activities Swayam Swachhta/NSS/Industrial visit/UBA/ Others

यिभागाध्यक्ष Head वानिकी, वन्यजीव एवं पर्यावरण बिभाग ःtment of Forestry, Wildlife and Environmental Science गुरु घासीदास विश्वविद्यालय, बिलासपुर (छ.ग.) buru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

Signature & Seal of HoD

Criteria – I (1.2.1)

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## Scheme and Syllabus

Sentester	Course Opted Core-01	Course Code	Name of the course	Credit	He
1		NR/FR/CR/01/01/L	Principles and Practices of Silviculture	4	4
	Core-01 Practical	NR/FR/CR/01/01/P		2	4
	Core-02	NR/FR/CR/01/02/L	Fundamentals of Soil Science	4	-4
	Core-02 Practical	NR/FR/CR/01/02/P		2	4
	Crusts GE of	NR/FR/CR/01/08/L	Basic Mathematics		_
	Ability Enhancement	and the second second		1.06	4
	Conspulsory (CC-01)	NR/FR/CC/01/L	English Communication	4	4
	Extracurricular Activity (EC-01)	NR/FR/EC/01/01/P	ECA-Extracurricular activity Field visit/ NSS/ Swachhra/ Physical Education/ Plantation Activities	2	2
			TOTAL	24	20
	Care of Cole of	NR/FR/CR/02/04/L	Introductory Botany		
П	Core -04 Practical	NR/FR/CR/02/04/P	introductory Botany	4	-4
	Core -05	NR/FR/CR/02/05/L	Forest Ecology and	2	4
	Core -05 Proctical	NR/FR/CR/02/05/P	Biodiversity Conservation		
	Core -06	NR/FR/CR/02/06/L	Fundamentals of Wildlife	2	4
	Core -06	NR/FR/CR/02/06/P		4	4
	Practical Ability			2	4
	Enhancement Compulsory (CC-02)	NR/FR/CC/02/02/L	Environmental Studies	4	4
	Extracurricular Activity-		ECA-Extracutricular activity/		-
	(EC-02)	NR/FR/BC/02/02/P	Field visit/ NSS/ Swnchlita/ vocational Training/ Sports/ Plantation activities	2	-4
B		SUMMER (NC) Internship: 15 days	Swayam Swachhta / NSS / Industrial visit/ UBA/others	2	100
210			Total	26	132
200	Core -07 N	R/FR/CR/03/07/L For	est Mensuration	4	
m B	Core -07 Practical NI	R/FR/CR/03/07/P		2	4
5	Core -08 NI	R/FR/CR/03/08/L Cyt	ogenetics and Plant Breeding		4
	Core -08 NI	R/FR/CR/03/08/P	h	2	4

New Course Introduced

Criteria – I (1.2.1)

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Find text or tools Q

#### suggested dooks:

1. Agrawal, R. S. (2012) Elementary Mathematics. Kalyani Publishers, New Delhi.

2. NCERT, Elementary Mathematics.

3. Hall and Knight: Higher Algebra, Book place, New Delhi.

## **ENGLISH COMMUNICATION**

#### **CR:** 4

Introduction: Theory of Communication, Types and modes of Communication. Language of Communication: Verbal and Non-verbal (Spoken and Written) Personal, Social and Business, Barriers and Strategies, Intra-personal, Inter-personal and Group communication, Speaking Skills: Monologue, Dialogue, Group Discussion, Effective Communication/ Mis- Communication, Interview, Public Speech. Reading and Understanding: Close Reading, Comprehension, Summary Paraphrasing, Analysis and Interpretation, Translation (from Indian language to English and vice-versa), Literary/Knowledge Texts. Writing Skills: Documenting, Report Writing, Making notes, Letter writing

#### Suggested Readings:

1. Fluency in English - Part II, Oxford University Press, 2006.

2. Business English, Pearson, 2008.

3. Language, Literature and Creativity, Orient Blackswan, 2013.

4. Language through Literature (forthcoming) ed. Dr. Gauri Mishra, Dr. Ranjana Kaul, Dr Brati Biswas SSEingl-Cuby 26/07/18