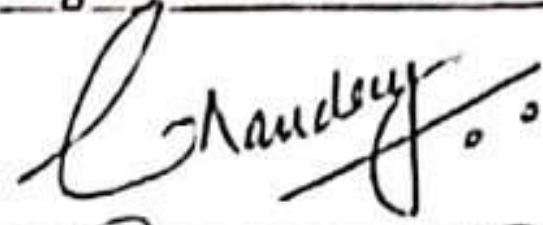

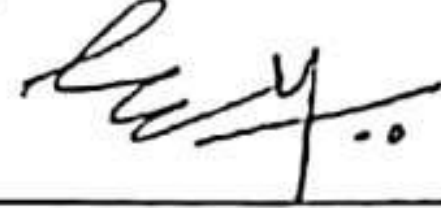



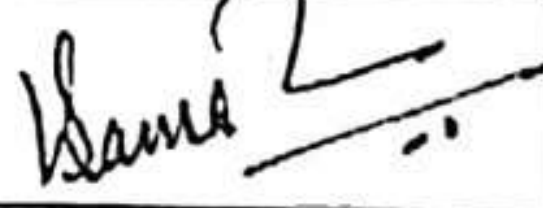





Date of Meeting: 08-06-2019

Minutes of Meetings (BoS, School of Agriculture)

A meeting of Board of Studies (BoS) in School of Agriculture has conducted on 08-06-2019 at 10:30 AM to 2:00 PM in the Conference room of VSB Block, Sithouli Campus, ITM, University, Gwalior, for upgrading the current course curricula of undergraduate programme as per "Fifth Deans' Committee" recommendation. The details of recommendations given by the panel members are attached.

Members of BoS

SN	Panel Members Name	Designation	Signature
1	Prof.(Dr.) Girish Pandey	Chairperson of BoS, ITM University, Gwalior	
s2	Prof.(Dr.) K.N. Nagaich	External Expert, Director Instructions, RVSKVV, Gwalior	
3.	Dr. R.K. Tiwari	External Expert, Principal Scientist (Horticulture) ICAR- CAFRI	
4	Prof.(Dr.) S.S.Tomar	Internal Expert, Professor Agronomy	
5	Dr. P.S Chauhan	Internal Expert, Assistant Professor	
6	Dr. Mahesh Singh	Internal Expert, Assistant Professor	
7	Dr. Shama Parveen	Internal Expert, Assistant Professor	
8	Dr. Aparna Dubey	Internal Expert, Assistant Professor	
9	Mr. Rahul Ojha	Internal Expert, Assistant Professor	
10	Ms. Sakshi Parashar	Internal Expert, Assistant Professor	


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The Board of Studies (BoS) has recommended following issues for onward transmission to the Academic Council for their approval as per "Fifth Deans' Committee" report.

Agenda Points for BoS Meeting (dated 08-06- 2019)

1. Augmentation of new courses
2. Modification in the course code
3. Modification in syllabus as per V Dean's committee.

**Recommendations of Board of Studies
Agenda and action taken plan for previous BoS dated-11-06-2018**

Agenda	ATR
Up-gradation for the current course curricula of undergraduate programme as per proposed introduction of new program as per Fifth Deans' Committee recommendation.	The upgradation of course curriculum and introduction of new program was recommended by the BoS committee which was as per 5 th Deans' committee recommendations.
The degree of B.Sc. (Ag.) should be designated as B.Sc.(Hons.) Agriculture as per Fifth Deans' Committee recommendation.	The nomenclature of undergraduate programme was approved for modification as B.Sc.(Hons) Agriculture by the BoS committee and recommended for Academic council.
As per the ordinance for B.Sc.(Hons.) Agriculture, the maximum credit limit for one semester should be modified as 25 to accommodated courses within stipulated time frame.	The BoS committee approved the maximum credit limit for one semester as 25 credits and recommended to the academic council

1. Addition of new courses in experiential learning programme "ELP- GPB- 402 Seed Testing and Quality Assessment" and elective ELCT-SS-221 Soil, Plant, Water and Seed Testing of B.Sc.(Hons) Agriculture was recommended for the academic council by the BoS committee.(Annexure I).
2. The course code for Crop Physiology (CP) should be replaced by PPH (Plant Physiology) in M.Sc.(Ag) Agronomy/Horticulture/Genetics and Plant Breeding was approved by BoS to the academic council.
3. Modification in the syllabus of the courses, "AENG-121 Soil and Water Conservation Engineering", "ENTO-121 Fundamentals of Entomology I (Insect Morphology and Taxonomy)", "HORT- 211 Production Technology for Vegetables and Spices", "AE- 221 Agricultural Marketing, Trade and Prices", "SS-311 Manures, Fertilizers and Soil Fertility Management", "GPB- 322 Principles of Seed Technology", "ELP- AGRON-401 Agricultural waste management" and "ELP- HORT-405 Protected Cultivation of High value Horticulture Crops" was approved by BoS and recommended for the upcoming academic council.(Annexure II)

Any other points

- a. The board has advised to consult the scheme of various universities/institutions for necessary deviation Fifth Deans' Committee report.

All the agenda points of BoS were discussed in detail in support of necessary documents and same was recommended.

The meeting was ended with vote of thanks by chairperson.



Dean & Chairperson (BoS)
School of Agriculture



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Syllabus-2019-2020
(SOAG)(BSc_HonsAgriculture)

Title of the Course	Seed Testing and Quality Assessment
Course Code	ELP-GPB-402 [P]

Part A

Year	Semester	Credits	L	T	P	C
			0	0	10	10
Course Type	Lab only					
Course Category	Discipline Electives					
Pre-Requisite/s			Co-Requisite/s			
Course Outcomes & Bloom's Level	<p>CO1- Assess the actual planting value of the seed in terms of its germination capacity(BL1-Remember)</p> <p>CO2- Evaluation of seed quality attributes of the seed lots which have to be offered for sale. (BL2-Understand)</p> <p>CO3- Analyze the quality maintenance challenges of commercial Seed.(BL3-Apply)</p> <p>CO4- Evaluate the role of quality seed and their effect on farming society & seed industry. (BL4-Analyze)</p>					
Courses Elements	Skill Development ✓ Entrepreneurship ✓ Employability ✓ Professional Ethics X Gender X Human Values X Environment X	SDG (Goals)	SDG2(Zero hunger) SDG3(Good health and well-being) SDG8(Decent work and economic growth) SDG12(Responsible consumption and production) SDG15(Life on land)			

Part B

Modules	Contents	Pedagogy	Hours
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Part C

Modules	Title	Indicative-ABCA/PBL/ Experiments/Field work/ Internships	Bloom's Level	Hours
Module 1	Seed sampling techniques	Field work	BL2-Understand	20
Module 2	Physical purity test:	Field work	BL2-Understand	20
Module 3	Germination Test:	Field work	BL3-Apply	20
Module 4	Seed Viability Test:	Field work	BL3-Apply	20
Module 5	Seed Vigour test:	Field work	BL3-Apply	20
Module 6	Electrophoresis test/ Test Weight & Seed Index:	Field work	BL3-Apply	20
Module 7	Seed moisture Test:	Field work	BL3-Apply	20
Module 8	Seed Treatment for quality enhancement:	Field work	BL4-Analyze	20

Part D(Marks Distribution)

Theory					
Total Marks	Minimum Passing Marks	External Evaluation	Min. External Evaluation	Internal Evaluation	Min. Internal Evaluation
Practical					
Total Marks	Minimum Passing Marks	External Evaluation	Min. External Evaluation	Internal Evaluation	Min. Internal Evaluation
100	41			100	

Part E

Books	Agarwal, R.L. (2012). Seed Technology. Oxford & IBH Publishing Company Pvt. Ltd., New Delhi. Chakrabarthi, S.K. (2010). Seed Production and Quality Control. Kalyani Publisher, New Delhi.
Articles	
References Books	
MOOC Courses	
Videos	

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Syllabus-2019-2020

(SOAG)(BSc_HonsAgriculture)

Title of the Course	Soil, Plant, Water and Seed Testing
Course Code	ELCT-SS-221[T]


Part A

Year	Semester	Credits	L	T	P	C
			2	0	1	3
Course Type	Embedded theory and lab					
Course Category	Discipline Electives					
Pre-Requisite/s	Fundamentals of Soil Sciences	Co-Requisite/s	Fundamentals of Soil Sciences			
Course Outcomes & Bloom's Level	CO1- Acquire the knowledge of working procedure and maintenance of the sophisticated instruments commonly used in Soil and Plant analysis(BL1-Remember) CO2- Understand the Principles of Soil, Water and Plant Testing Analysis(BL2-Understand) CO3- Apply the Working Methods of Soil and Water Testing Instruments(BL3-Apply) CO4- Analyse the Methods of Seed Testing (BL4-Analyze) CO5- Demonstrate Techniques of Soil, Plant, Water and Seed Testing(BL5-Evaluate)					
Courses Elements	Skill Development ✓ Entrepreneurship ✓ Employability ✓ Professional Ethics X Gender X Human Values X Environment X	SDG (Goals)	SDG2(Zero hunger) SDG3(Good health and well-being) SDG9(Industry Innovation and Infrastructure) SDG12(Responsible consumption and production) SDG13(Climate action) SDG15(Life on land) SDG17(Partnerships for the goals)			







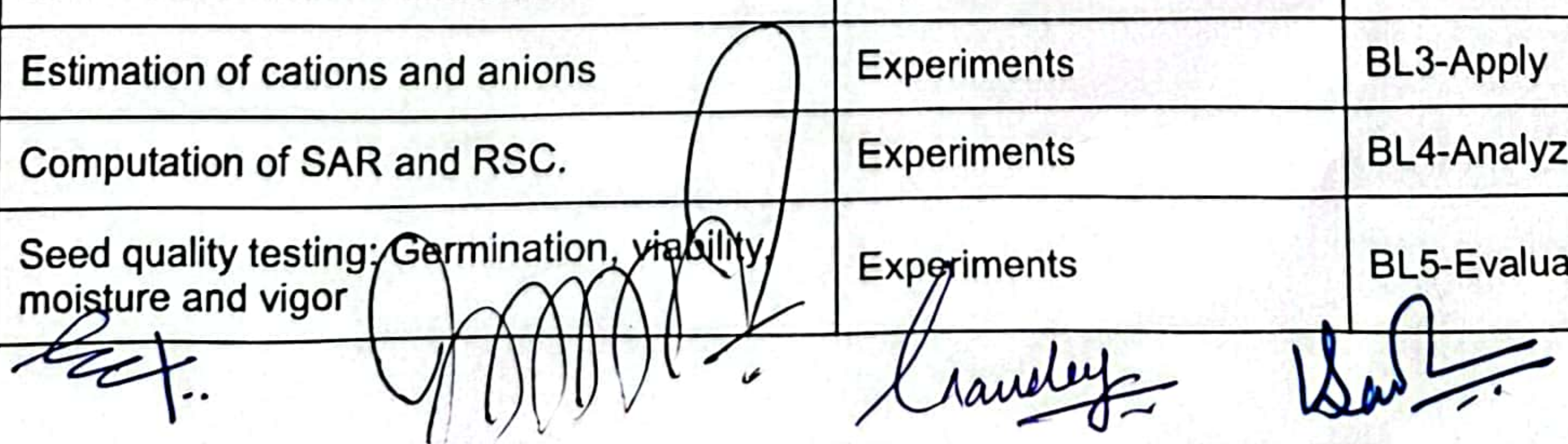

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Part B

Modules	Contents	Pedagogy	Hours
Unit 1	Origin, geographical distribution, economic importance, soil and climatic requirements, varieties, cultural practices and yield of Rabi cereals crops, viz., Wheat and Barley	Guided Questioning, Fieldwork and outdoor learning, Problem-based learning and Brainstorming	6
Unit 2	Interpretation of analytical data viz., pH, EC, organic carbon, N, P, K, S and micronutrients (Fe, Mn, Zn, Cu, B) and nutrient index. Plant analysis: Sampling stages and plant part to be sampled	Guided Questioning, Fieldwork and outdoor learning, Problem-based learning and Brainstorming	6
Unit 3	Analysis of nutrients, Quantitative rating of plant analysis data and interpretation of results, critical nutrient concentration, critical nutrient ranges	Guided Questioning, Fieldwork and outdoor learning, Problem-based learning and Brainstorming	6
Unit 4	Water analysis: Quality criteria, classification and suitability of irrigation water and water quality index. Use of soil testing kit for major and micronutrient analysis.	Guided Questioning, Fieldwork and outdoor learning, Problem-based learning and Brainstorming	6
Unit 5	Seed: Introduction, definition and importance, seed germination, viability, vigour and storage.	Guided Questioning, Fieldwork and outdoor learning, Problem-based learning and Brainstorming	8

Part C

Modules	Title	Indicative-ABCA/PBL/ Experiments/Field work/ Internships	Bloom's Level	Hours
Practical 1	Standardization of solutions and reagents.	Experiments	BL2-Understand	2
Practical 2	Collection and preparation of soil Sample	Experiments	BL2-Understand	2
Practical 3	Estimation of pH, EC, organic carbon, NPKS, micronutrients, CFC and exchangeable sodium in soil.	Experiments	BL2-Understand	2
Practical 4	Determination of EC and pH of saturation extract/paste.	Experiments	BL2-Understand	2
Practical 5	Estimation of cations and anions	Experiments	BL2-Understand	2
Practical 6	Estimation of cations and anions	Experiments	BL3-Apply	2
Practical 7	Computation of SAR and RSC.	Experiments	BL4-Analyze	2
Practical 8	Seed quality testing: Germination, viability, moisture and vigor	Experiments	BL5-Evaluate	2



Part D(Marks Distribution)

Theory					
Total Marks	Minimum Passing Marks	External Evaluation	Min. External Evaluation	Internal Evaluation	Min. Internal Evaluation
70	26	40		30	
Practical					
Total Marks	Minimum Passing Marks	External Evaluation	Min. External Evaluation	Internal Evaluation	Min. Internal Evaluation
30	15				

Part E

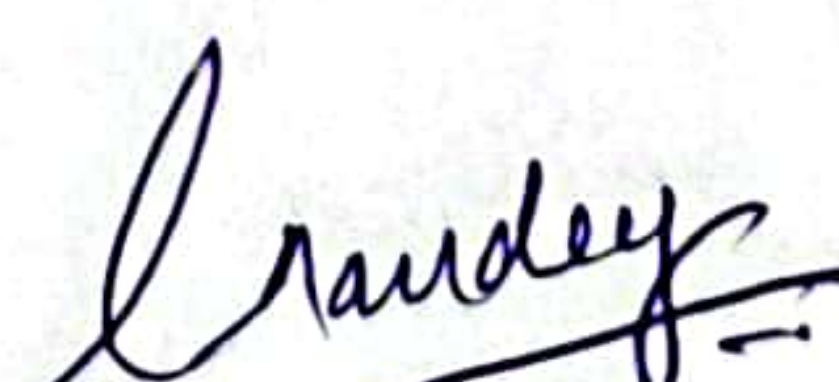
Books	1. Das, D.K. 2014. Introductory Soil Science, Kalyani Publishers, New Delhi 2. Tandon, H.L.S. 2013. Methods of Analysis of Soils, Plants, Waters, Fertilizers and Organic Manures. Fertilizer Development and Consultation Organization, New Delhi 2. Tandon, H.L.S. Methods of Analysis of Soils, Plants, Waters, Fertilizers and organic Manures. Fertilizer development and consultation organization, New Delhi 3. Chopra, S.L and Kanwar, J.S. 2010. Analytical Agricultural Chemistry. Kalyani Publishers, New Delhi.
Articles	
References Books	
MOOC Courses	
Videos	

Course Articulation Matrix

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO2	-	2	-	1	1	-	-	-	-	-	-	-	-	-	-
CO3	-	-	2	-	3	-	-	-	-	-	-	-	-	-	-
CO4	-	2	-	1	-	-	-	-	-	-	-	-	-	-	-
CO5	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-









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Course Articulation Matrix

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO
CO1	-	-	-	1	1	-	-	-	-	-	-	-	3	-	-
CO2	-	2	3	2	2	1	-	-	-	-	-	-	-	3	-
CO3	3	-	2	2	2	2	-	-	-	-	-	-	-	1	2
CO4	-	1	-	1	-	-	-	-	-	-	1	1	1	-	-
CO5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Dr. Omveer Singh
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