ALVA'S
Education Foundation®

(A Unit of Alva's Education Foundation)
Shobhavana Campus, Mijar-574225, Moodbidri , D.K - 574225
Phone: 08258-262725, Fax: 08258-262726
Affiliated to VTU Belagavi and Approved by AICTE, New Delhi, Recognized by Govt. of Karnataka

CALENDAR OF EVENTS (ODD SEMESTER 2022-23) BE & MBA

VISION

Transformative education by pursuing excellence in Engineering and Management through enhancing skills to meet the evolving needs of the community"

MISSION

To bestow quality technical education to imbibe knowledge, creativity and ethos to students community.
To inculcate the best engineering practices through transformative education.
To develop a knowledgeable individual for a dynamic industrial scenario.
To inculcate research, entrepreneurial skills and human values in order to cater the needs of the society.

Week	Month	Days							Activities
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	
1	SEP				1	2	3	4	
2		5	6	7	8	9	10	11	19th : Commencement of VII Semester BE
3		12	13	14	15	16	17	18	22-23 : Student Mentoring
4		19	20	21	22	23	24	25	26 – 30 : Technical Talk/Club and Social Activity
5		26	27	28	29	30			
6	OCT						1	2	4th : Maha Navami & 5th : Vijaya Dashami
7		3	4	5	6	7	8	9	10th : Commencement of V Semester BE
8		10	11	12	13	14	15	16	20-21 : Student Mentoring
9		17	18	19	20	21	22	23	24th : Naraka Chaturdashi
10		24	25	26	27	28	29	30	24 – 29 : Technical Talk/Club and Social Activity
11		31							26th : Deepavali 31st : Commencement of III Semester BE
12	NOV		1	2	3	4	5	6	1st : Kannada Rajyothsava
13		7	8	9	10	11	12	13	10th -12th : 1nd IA for VII Semester BE
14		14	15	16	17	18	19	20	24-25 – Student Mentoring
15		21	22	23	24	25	26	27	20– 25 Technical Talk/Club / Social Activity
16		28	29	30					28th : Commencement of 3rd Sem MBA
17	DEC				1	2	3	4	8 - 10 : 2nd IA for VII Semester / 1st IA V Semester BE
18		5	6	7	8	9	10	11	15 - 17 : 1st IA for BE III Semester BE
19		12	13	14	15	16	17	18	22-23 : Student Mentoring
20		19	20	21	22	23	24	25	29 - 31 : 3nd IA for VII Semester BE
21		26	27	28	29	30	31		26 - 31 : Technical Talk/Club / Social Activity **30-31 Second International Conference on Data Analytics & Learning-2022 (DAL'22)** 31 : Last Working Day of VII Semester BE
22	JAN-2023							1	2 - 4 : 2nd IA for V Semester BE / 1st IA for MBA 3rd Sem
23		2	3	4	5	6	7	8	14- Makara Sankranti
24		9	10	11	12	13	14	15	16 -18 : 2nd IA for III Semester BE
25		16	17	18	19	20	21	22	20-21 : Student Mentoring
26		23	24	25	26	27	28	29	23 - 28 : Technical Talk/Club / Social Activity 24th,25th and 27th : 3nd IA for V Sem BE 26-Republic Day
27		30	31						27 : Last Working Day of V Semester BE
28	FEB-2023			1	2	3	4	5	8 - 10 : 3nd IA for III Semester BE / 2nd IA for MBA 3rd sem
29		6	7	8	9	10	11	12	18- Maha Shivaratri
30		13	14	15	16	17	18	19	11 : Last Working Day of III Semester BE
31		20	21	22	23	24	25	26	
32		27	28						
33	MAR-2023			1	2	3	4	5	9 -11 : 3nd IA for MBA 3rd sem
34		6	7	8	9	10	11	12	18 : Last Working Day of MBA 3rd Sem
35		13	14	15	16	17	18	19	

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodbidri, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF AGRICULTURAL ENGINEERING

Time Table Odd Semester 2022-23 (w.e.f 31/10/2022)

Academic Year	Scheme	Semester	Section	Class Coordinator	Room No
2022-23	2021	3	A	Deepak Kumar Kolke	502

Time / Day	9.00 To 9.50	9.50 To 10.40	10.40 To 11.00	11.00 To 11.50	11.50 To 12.40	12.40 To 1.40	1.40 To 2.30	2.30 To 3.20	3.30 To 5.00
MON	MMM (DKK/DS)		BREAK	APT (SPN)	MAT (RS)	LUNCH	FACPT LAB (SK/ VP)		
TUE	SMSS (VKS)	FACPT (SK/ VP)		KAN (YK)	MAT (PR/PKS)		BWP LAB (DKK/ SPN)		
WED	APT (KSS)	FACPT (SK/ VP)		FACPT (SK/ VP)	Library		SMSS (VKS)	Mentoring	APT TEST (SPN)
THU	AEC LAB (SV/SPN)			MMM (DKK/DS)	MAT (RS)		MAT (RS)	SMSS (VKS)	FACPT (SK/ VP)
FRI	SMSS (VKS)	MAT (RS)		Activity	SCR (MK)		SMSS LAB (SK/RR)		
SAT	FACPT (SK/ VP)	MMM (DKK/ DS)		SMSS (VKS)	Library				

Allocation of Subjects

Subjects			Staffs	Staff Code
MAT	21MAT31	Transform Calculus, Fourier Series and Numerical Techniques	Mrs. Rashmi R	RSH/ SM
FACPT	21AG32	Fundamentals of Agriculture & Crop Production Technology	Dr. Shashikumar (Theory) /Dr. Vishnu Prasanna K N (Lab)	SK/VP
SMSS	21AG33	Soil Mechanics , Surveying & Levelling	Mr. Varadaraj K S (Theory) Mr Santhosh (Lab) Mr.Ramesh Rao (Lab)	VKS SK RR
MMM	21AG34	Mechanics of Materials & Machines	Mr. Deepak Kolake/ Dr. Diwakar Shetty	DKK/DS
BWP Lab	21AGL35	Basic Workshop Practice Lab	Mr. Deepak Kolake/ Mr. Sudheer P N (Lab)	DKK/SPN
SCR	21UH36	Social Connect and Responsibility	Dr. Madhumala K	MK
SK	21KSK37	Samskrutika Kannada	Dr. Yogish Kairodi	YK
AEC	21AG38X	Ability Enhancement Course - III	Mr. Subramanya V/ Sudheer P N	SV/SPN
APS		APTITUDE	Sudheer P N	SPN

Time Table Coordinator

H.O.D
H.O.D.
Dept. of Agricultural Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodubidire - 574225

Principal
Alva's Institute of Engg. & Technology,
Mijar, MOODBIDRI - 574 225, D.K

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF AGRICULTURAL ENGINEERING

INDIVIDUAL TIMETABLE (ODD SEMESTER 2021-22)

ame of the Faculty	Dr. SHASHIKUMAR (SK)					With Effect From: 31-10-2022			
Period	1	2		3	4		5	6	7	No. of Units
Time ay	09.00 – 09.50	09.50 – 10.40		11.00-11.50	11.50-12.40		1.40-2.30	2.30-3.20	3.20-5.00	
onday			TEA BREAK			LUNCH BREAK	FACPT (3 SEM)			3
ıes[illegible]y		FACPT (3 SEM)								2
ednesday		FACPT (3 SEM)		FACPT (3 SEM)				Mentoring		4
ıursday									FACPT (3 SEM)	2
iday										0
ıturday	FACPT (3 SEM)									2

:her Activities: HEAD OF THE DEPARTMENT, ANTI RAGGING COMMITTEE COORDINATION, ONSULTANCY CELL HEAD, INNOVATIVE & WE and IIC COORDINATION.

Total Units* **13**

* EXCLUDING OTHER ACTIVITIES

Shashikumar
HOD

H.O.D.
Dept. of Agricultural Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodubidire - 574225

PRINCIPAL

PRINCIPAL
Alva's Institute of Engg. & Technology,
Mijar, MOODBIDRI - 574 225, D.K

FUNDAMENTALS OF AGRICULTURE & CROP PRODUCTION TECHNOLOGY (IPCC)			
Course Code	**21AG32**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	3:0:2:0	SEE Marks	50
Total Hours of Pedagogy	40 hours Theory + 8 Lab slots	Total Marks	100
Credits	04	Exam Hours	03

**** Additional one hour may be considered for Instructions if required***

Course objectives:

- Imparting knowledge on different crops, crop nutrition and growth
- Describing crop-water relations in association to crop growth and development
- Illustrating crop management, cropping pattern and weed management
- Imparting the fundamentals of crop production technology of crops
- Providing knowledge on the importance and practices followed in growing crops

Teaching-Learning Process (General Instructions)

These are sample Strategies; which teachers can use to accelerate the attainment of the various course outcomes.

1. Adopt different types of teaching methods to develop the outcomes through PowerPoint presentations and Video demonstrations or Simulations.
2. Chalk and Talk method for Problem Solving.
3. Arrange visits to show the live working models other than laboratory topics.
4. Adopt collaborative (Group Learning) Learning in the class.
5. Adopt Problem Based Learning (PBL), which fosters students Analytical skills and develops thinking skills such as evaluating, generalizing, and analysing information.
6. Conduct Laboratory Demonstrations and Practical Experiments to enhance experiential skills.

MODULE-1 **8 HOURS**

Agronomy, its definition, scope and role of Agronomist. Tillage-objectives of tillage, types of tillage, tillage implements and factors affecting tillage, Effect of tillage on soil and crop growth. Tilth: its definition, characteristics and ideal tilth, Modern concepts of tillage, minimum, zero and stubble mulch tillage, importance of puddling. Conventional tillage practices and their effects, modern tillage practices and their advantages; optimum tillage with different tillage implements and their effect on soil properties.

Teaching-Learning Process	1. PowerPoint Presentation 2. Chalk and Talk are used for Problem Solving (In-general) 3. Video demonstration or Simulations 4. Laboratory Demonstrations and Practical Experiments

MODULE- 2 **8 HOURS**

Seed, its definition, characteristics of quality seed, seed treatment and its objectives. Seed dormancy, causes of seed dormancy and multiplication, stages of seed. Methods of sowing seed and sowing implements. Effect of plant population on growth and yield, Planting geometry viz., solid, paired and skipped row planting.

Importance of manures and fertilizers and its classification. Methods and time of application of manures, fertilizers and green manuring. Nutrient use efficiency and factors affecting nutrient use efficiency.

Scheduling of Irrigation and Fertilizers: Irrigation schedules for different crops in different soils and agro-climatic regions, fertigations, irrigation methods. Plant Protection Measures- Pesticides, types of weedicides and insecticides available to control different weed flora, pests and diseases and their mode of action; time of application and symptoms.

Teaching-Learning Process	1. PowerPoint Presentation 2. Chalk and Talk are used for Problem Solving (In-general) 3. Video demonstration or Simulations 4. Laboratory Demonstrations and Practical Experiments

MODULE-3 **8 HOURS**

H.O.D.
Dept. of Agricultural Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodubidire - 574225

Weeds, its definition, characteristics of weeds, merits and demerits of weeds, classification of weeds, meaning of crop weed competition and its period in different crops. Principles and methods of weed management viz., cultural, mechanical, chemical, biological weed control methods and integrated weed management. Classification of herbicides, its selectivity and resistance, Allelopathic effect of weed. Crop harvesting, signs of maturity in different field crops, Physiological and crop maturity, Method of harvesting	
Teaching-Learning Process	1. PowerPoint Presentation 2. Chalk and Talk are used for Problem Solving (In-general) 3. Video demonstration or Simulations 4. Laboratory Demonstrations and Practical Experiments
MODULE-4	**8 HOURS**
Introduction: Concepts in crop production; geographical distribution of crops and cropping systems; economic importance. Crop Classification: Cereals, pulses, oilseeds, fiber crops, forage crops, medicinal and aromatic crops and horticultural crops. **Cropping Systems for Major Agro-Ecological Regions:** Detailed descriptions of rice based cropping systems, sugarcane based cropping systems, cotton based cropping systems, pulses and oilseeds based cropping systems, their suitability in different agro-ecological regions. Crop rotation, its definition, principles and advantages of crop rotation. Study of crop adaptation and its distribution. Growth and development, its definition, growth curve and factors affecting growth and development.	
Teaching-Learning Process	1. PowerPoint Presentation 2. Chalk and Talk are used for Problem Solving (In-general) 3. Video demonstration or Simulations 4. Laboratory Demonstrations and Practical Experiments
MODULE-5	**8 HOURS**
Crop Eco Systems: Irrigated and rain fed eco systems, strategies of crop production in tropical and sub- tropical regions in the two major eco systems under different crops. Modern Techniques of Raising Field and Horticultural Crops Techniques of nursery raising, method of planting, fertilization, irrigation scheduling, weed control, and other practices to optimize yield, economic evaluations. **Crop Growth Assessment:** Crop, growth parameters and their measurements.	
Teaching-Learning Process	1. PowerPoint Presentation 2. Chalk and Talk are used for Problem Solving (In-general) 3. Video demonstration or Simulations 4. Laboratory Demonstrations and Practical Experiments

PRACTICAL COMPONENT OF IPCC *(May cover all / major modules)*

SI.NO	**Experiments**
1	Identification of crops, seeds, fertilizers, pesticides & Tillage implements
2	Effect of sowing depth on germination and seedling vigour
3	Study of yield contributing characters and yield estimation
4	Seed germination and viability test
5	Numerical exercises on fertilizer requirement
6	Plant Population and water requirement
7	Use of tillage implements (reversible plough, one way plough, harrow, leveller, seed drill)
8	Study of soil moisture measuring devices
9	Measurement of field capacity, bulk density and infiltration rate
10	Measurement of irrigation water
11	Study of crop varieties and agronomic experiments at experimental farm
12	Morphological description of Kharif season crops (rice).

Course outcomes (Course Skill Set):

At the end of the course the student will be able to:

- Express knowledge gained on the principles of agronomy

- Recognize the various nutrients and their effects on plant health
- Plan irrigation measures for plant growth and development
- Manage weeds in a field
- Plan for sustainable agricultural production
- Apply scientific methods and tools in field preparation and for designing cropping
- Comprehend the fundamentals of crop production of cereals
- Decide on the crops, fertilizers and irrigation measures for production of pulses
- Plan for sustainable crop production of oilseeds
- Explain the techniques involved in crop production of fibre and forage crops
- Correlate parameters involved in crop cultivation and practices of crop cultivation

Assessment Details (both CIE and SEE)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 40% of the maximum marks (20 marks). A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures not less than 35% (18 Marks out of 50) in the semester-end examination(SEE), and a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together

CIE for the theory component of IPCC

Two Tests each of **20 Marks (duration 01 hour)**

- First test at the end of 5th week of the semester
- Second test at the end of the 10th week of the semester

Two assignments each of **10 Marks**

- First assignment at the end of 4th week of the semester
- Second assignment at the end of 9th week of the semester

Scaled-down marks of two tests and two assignments added will be CIE marks for the theory component of IPCC for **30 marks.**

CIE for the practical component of IPCC

- On completion of every experiment/program in the laboratory, the students shall be evaluated and marks shall be awarded on the same day. The**15 marks** are for conducting the experiment and preparation of the laboratory record, the other **05 marks shall be for the test** conducted at the end of the semester.
- The CIE marks awarded in the case of the Practical component shall be based on the continuous evaluation of the laboratory report. Each experiment report can be evaluated for 10 marks. Marks of all experiments' write-ups are added and scaled down to 15 marks.
- The laboratory test **(duration 03 hours)** at the end of the 15th week of the semester /after completion of all the experiments (whichever is early) shall be conducted for 50 marks and scaled down to 05 marks.

Scaled-down marks of write-up evaluations and tests added will be CIE marks for the laboratory component of IPCC for **20 marks.**

SEE for IPCC

Theory SEE will be conducted by University as per the scheduled timetable, with common question papers for the course (duration 03 hours)

3. The question paper will have ten questions. Each question is set for 20 marks.
4. There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub-questions), **should have a mix of topics** under that module.
5. The students have to answer 5 full questions, selecting one full question from each module.

The theory portion of the IPCC shall be for both CIE and SEE, whereas the practical portion will have a CIE component only. Questions mentioned in the SEE paper shall include questions from the practical component).

- The minimum marks to be secured in CIE to appear for SEE shall be the 12 (40% of maximum marks-30) in the

theory component and 08 (40% of maximum marks -20) in the practical component. The laboratory component of the IPCC shall be for CIE only. However, in SEE, the questions from the laboratory component shall be included. The maximum of 04/05 questions to be set from the practical component of IPCC, the total marks of all questions should not be more than the 20 marks.

- SEE will be conducted for 100 marks and students shall secure 35% of the maximum marks to qualify in the SEE. Marks secured will be scaled down to 50.

Suggested Learning Resources:

Books

1. Crop production and field experimentation by V.G. Vaidya, K.R. Sahastrabudhe and V.S. Khuspe. Continental Prakashan, Vijaynagar, Pune.
2. Hand book of Agriculture, ICAR Publication.
3. Modern techniques of raising field corps by Chidda Singh. Oxford and IBH Publishing Co. Ltd., Bangalore.
4. Principles of Agronomy by Sankaran S. and V.T. SubbiahMudliyar, 1991. The Bangalore Printing and Publishing Co. Ltd., Bangalore.
5. Agronomy by S.C. Panda, 2006. Agribios Publication, New Delhi.
6. Crop Production and Management by Y.B. Moranchan. Oxford and IBH Publishing Co. Ltd., Bangalore.
7. Principles of Agronomy by S.R. Reddy, Kalyani Publishers, Ludhiana, India.
8. Principles of Crop Production by Martin J.H. and Leonard W.H. the Mac Million Company, New York – 1962.
9. Scientific Crop Production (Vol. I and II). Thakur C. Metropolitan Books Co. Pvt. Ltd., New Delhi.
10. Fundamentals of Agronomy. Gopal Chandra De. 1980. Oxford and IBH Publishing Co. Ltd., Bangalore
11. Singh, Chidda "Modem technique of raising of field crops". Oxford and IBH Publishing Company Pvt. Ltd., 1994.
12. Suresh Singh Tomar, YagyaDev Mishra and Shailendra Singh Kushah. 2018. Production Technology of Rabi Crops. Biotech books, New Delhi, India.
13. Rajendra Prasad. 2017. Textbook of field crops production, Volume 1 and 2 (Foodgrain crops & Commercial Crops). ICAR, India.
14. ingh, R.P., Reddy, P.S. and Kiresur, V.(eds.). "Efficient Management of Dryland Crops in India". Indian Society of Oilseed Research, DOR Rajendra Nagar, Hyderabad, 1997.
15. Joshi M. 2015. Textbook of Field Crops. Prentice Hall India Learning Private Limited, India.

Web links and Video Lectures (e-Resources):

https://www.youtube.com/watch?v=AnnZFYXnlfw

https://www.youtube.com/watch?v=8ulpy_GFLDk

https://www.youtube.com/watch?v=NCp93xbSwWM

https://www.youtube.com/watch?v=60qVUwLP1s8

https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg3-chapter8-1.pdf

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning

- Quizzes
- Assignments
- Seminars
- Mini Projects

Dept. of Agricultural Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodubidire - 574225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(A Unit of Alva's Education Foundation)
Shobhavana Campus, Mijar-574225, Moodbidri, D.K
Phone: 08258-262725, Fax: 08258-262726
Affiliated to VTU Belagavi and Approved by AICTE, New Delhi, Recognized by Govt. of Karnataka

ATTENDANCE BOOK

Academic Year : 2022-23

Semester : IIIrd Section.....

Period of the Semester : From 31/10/2022 to 16/4/2023

Subject with Code : FUNDAMENTALS OF AGRICULTURE & CROP PRODUCTION TECHNOLOGY (21AR32)

Name of the Faculty : Dr. SHASHIKUMAR

Department : AGRICULTURAL ENGINEERING

VISION OF THE INSTITUTE

"Transformative education by pursuing excellence in Engineering and Management through enhancing skills to meet the evolving needs of the community"

MISSION OF THE INSTITUTE

- To bestow quality technical education to imbibe knowledge, creativity and ethos to students community.
- To inculcate the best engineering practices through transformative education.
- To develop a knowledgeable individual for a dynamic industrial scenario.
- To inculcate research, entrepreneurial skills and human values in order to cater the needs of the society.

VISION OF THE DEPARTMENT

To serve the country by producing high-caliber technocrats who can combine farming with engineering & technology interventions & contribute to global food security & sustainable growth in agricultural production

MISSION OF THE DEPARTMENT

M1: To impart knowledge by establishing an environment that is conducive to teaching & learning

M2: To create agricultural engineers who are both technically proficient & morally admirable in order to benefit society.

M3: To develop & enhance novel technologies to address current & foreseeable issues in agriculture.

COURSE OUTCOMES

CO1	Explain knowledge gained on the principles of Agronomy Recognize the various nutrients & their effects on plant health
CO2	Plan irrigation measures for plant growth & development manage weeds in a field
CO3	Plan for sustainable agricultural production Apply scientific methods & tools in field preparation & for designing crop
CO4	comprehend the fundamentals of crop production of cereals Decide on the crops, fertilizer, irrigation measures for production of crop
CO5	plan for sustainable crop production of oil seeds Explain the techniques involved in crop production of fibres, forage crop
CO6	Correlate parameters involved in crop cultivation & practices of crop cultivation

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	2		2			2								2		
CO2		2												1	1	
CO3	2	2	2	2									1	2		2
CO4		2		2					2		2		1	2	1	2
CO5	2	2	2	2	2								1	1	1	2
CO6																

AIET	Lesson Plan & Execution	Format No.	ACD 08
		Issue No.	01
		Rev. No.	00

Name of the faculty	Dr. Shashikumar
Semester and Section	III rd
Date of Commencement	31/10/2022
Last Working Day of the Semester	11/2/2023
Source Materials List	
1. Principle of Agronomy	S. R. Reddy
2. Crop production & field experimentation	V.G. Vaidya, K. R. Sabastrabudhe & V.S. Khuspe
3. Fundamentals of Agronomy	Gopal chandra De
4. modern techniques for raising field crops	Chidda singh
5. Text book of field crop production	Rajendra prasad
Subject Name	Fundamentals of Agriculture & crop production Technology

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
1	2/11/22	Agronomy, its definition, scope & role of Agronomist	1	Agronomy, its definition, scope & role of Agronomist	2/11/22	1
1	3/11/22	Tillage - objectives of tillage, types of tillage, tillage implements & factors affecting tillage implements	1	Tillage - objective of tillage, types of tillage	3/11/22	1
1	5/11/22	Effect of tillage on soil & crop growth, Tilth it's definition, characteristic	1	tillage implements & factors affecting implements effect of tillage, tilth & its definition, characteristic	5/11/22	1
1	8/11/22	ideal tilth, modern concepts of tillage; minimum, zero, stubble mulch tillage	3	topics covered	8/11/23	3

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
		module-I				
2	9/11/22	Importance of puddling	3	Topics covered	9/11/23	3
1	10/11/22	conventional tillage practices & their effects	3	Topics covered	10/11/23	3
1	12/11/22	modern tillage practices & their advantages	3	Topics covered	12/11/22	3
1	15/11/22	optimum tillage with different tillage implements & their effect on soil properties	3	Topics covered	15/11/23	3
module-2 2	16/11/22	Seeds, ~~to~~ its definition characteristics of quality seed, seed treatment & its objective	1	Topics covered	16/11/22	1
1	17/11/22	seed dormancy, causes of seed dormancy & multiplication, stages of seed	1	Topics covered	17/11/22	1
1	19/11/22	methods of sowing seed & sowing implements. Effect of plant population on growth & yield	1	Topics covered	19/11/22	1
1	22/11/22	planting geometry viz. paired & staggered row planting. Importance of manures & fertilizers & its classification.	1	Topics covered	22/11/22	1
2	23/11/22	methods & time of application of manures, fertilizers & green manuring. Nutrient use efficiency	1	Topics covered	23/11/22	1
1	26/11/22	Factors affecting nutrient use efficiency. scheduling of irrigation & fertilizers	1	Topics covered	26/11/22	1
1	28/11/22	Irrigation schedule for different crops in different soils & agro climatic regions, fertigations	1	Topics covered	28/11/22	1
1	1/12/22	irrigation methods, plant protection measures - pesticides, types of weedicides &	1	Topics covered	1/12/22	1
1	3/12/22	Insecticides available to control different weed flora, pests & diseases & their mode of action	1	Topics covered	3/12/22	1

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
		module-3				
1	6/12/22	Weeds, it's definition, characteristics of weeds, merits & demerits of weeds, classification of weeds	1	Topics covered	6/12/22	1
1	10/12/22	meaning of crop weed competition & its period in different crops	1	Topics covered	10/12/22	1
1	17/12/22	Principles & methods of weed management viz. cultural	1	Topics covered	17/12/22	1
1	20/12/22	mechanical, chemical biological weed control methods	1	Topics covered	20/12/22	1
2	21/12/22	Integrated weed management, classification of herbicide	1	Topics covered	21/12/22	1
1	22/12/22	it's selectivity & resistance, Allelopathic effect of weed	1	selectivity & resistance of weed	22/12/22	1
1	24/12/22	crop harvesting, sign of maturity in different crops	1	Allelopathic effect of weed crop harvesting	24/12/22	1
1	29/12/22	psycholological & crop maturity, method of harvesting	1	sign of maturity in different crops psycholological crop maturity	29/12/22	1
		module-4				
1	31/12/22	Introduction of crop production, geographical distribution of crops & cropping system	1	method of harvesting introduction of crop production geographical distribution of crop	31/12/22	1
1	3/1/23	crop classification	1	cropping system crop classification	3/1/23	1
1	4/1/23	cropping systems for major Agro-Ecological regions	2	Topics covered	4/1/23	2
1	5/1/23	Rice based cropping systems, sugarcane based cropping system cotton cropping system	2	Topics covered	5/1/23	2
1	7/1/23	pulses & oil seed based cropping system, their suitability in different agro-ecological regions	2	Topics covered	7/1/23	2

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
1	10/1/23	Crop rotation, it's definition, principles & advantages of crop rotation	2	Crop rotation, it's definition	10/1/23	2
1	11/1/23	study of crop adaptation & it's distribution. growth & development, its definition	2	principle & advantages of crop rotation	11/1/23	2
1	12/1/23	Growth curve & factors affecting growth & development.	2	study of crop adaptation & it's distribution	12/1/23	2
1	14/1/23	module-5 Crop Eco systems, irrigated & rainfed ecosystems	2	growth & development, it's definition	14/1/23	2
1	16/1/23	strategies for crop production in tropical & subtropical regions in the two major eco system	2	growth curve	16/1/23	2
1	18/1/23	modern techniques of raising field & horticultural crops	4	factors affecting growth & development	18/1/23	4
1	19/1/23	of nursery raising, method of planting	2	Crop Ecosystems	19/1/23	2
1	21/1/23	fertilization, irrigation scheduling, weed control	4	irrigated & rainfed ecosystems	21/1/23	4
1	28/1/23	other practices to optimize yield.	4	strategies for crop production in tropical &	28/1/23	4
1	31/1/23	Economic evaluation	4	subtropical regions in the two major eco-system	31/1/23	4
1	2/2/23	crop, growth parameters	4	modern techniques of raising field & horticultural crops	2/2/23	4
1	7/2/23	growth measurements	4	of nursery raising field & horticultural	7/2/23	4
1	14/2/23		4	crops, method of planting	14/2/23	4

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
1	15/2/23		4	Fertilization, irrigation scheduling	15/2/23	4
1	21/2/23		2	weed control	21/2/23	2
1	22/2/23		2	other practices to optimize yield	22/2/23	2
1	25/2/23		2	Economic Evaluations	25/2/23	2
1	27/2/23		2	crop, growth parameters	27/2/23	2
1	28/2/23		1	growth measurement	28/2/23	1
1	2/3/23			module-I revision	2/3/23	2
1	4/3/23			module-I revision	4/3/23	
1	7/3/23			module-II revision	7/3/23	
1	8/3/23			-11-		
1	11/3/23			modules-III revision	11/3/23	
1	15/3/23			-11-		
1	25/3/23			module-IV revision	25/3/23	

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
1	28/3/23			module - 8 revision	28/3/23	
1	29/3/23			Important topics discussed	29/3/23	

Others	Planned	Actual	Remarks
Special Classes	3	3	
Tutorials			
Assignments	2	2	
Seminars			
IA Tests	3	3	
Portions Covered in the entire Semester	Fully completed with revision		
Course Effectiveness			
Students Feedback	Good feedback received		
Students Responce	Positive response received		
Result	No. of Students AP	No. of Students Passed	% of Result

Faculty in Charge

Signature of Principal (& Remarks if any)

PRINCIPAL
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225, D.K

HOD's Signature

HOD
Dept. of Agricultural Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodubidri - 574225

ALVA'S INSTITUTE OF ENGINEERING TECHNOLOGY

MIJAR MOODBIDRI - 574 225

ATTENDANCE CUM INTERNAL ASSESSMENT

Class : II year I st sem

Subject : Fundamentals of Agriculture & Crop production Technology

No. of Classes held : 62

Sl. No.	U.S.N.	Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	No. of Class Attended	% of Attendance	Internal Assessment (20) I	II	P.T. III	Average Marks
		Date / Month	7/11	7/11	5/11	8/11	9/11	9/11	10/11	12/11	15/11	16/11	16/11	17/11	19/11	22/11	26/11	28/11	1/12	7/12	8/12	10/12	12/12	20/12	21/12	21/12	22/12	24/12	29/12	31/12								
1	21AG001	A BHOOMIKA REDDY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	59	95.2	16	14	18	15
2	21AG002	ABHISHEK K S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	A	22	23	24	25	26	27	28	29	56	88.7	20	20	20	20
3	21AG003	AJITH MALI PATIL	A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	54	87.1	16	17	19	17
4	21AG004	AMARNATH I	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	56	91.9	16	18	14	17
5	21AG005	ANANYA K	1	2	3	4	5	6	7	8	9	10	11	12	13	14	A	17	18	19	20	21	22	23	24	25	26	27	28	29			59	93.5	11	15	17	13
6	21AG006	CHAITRA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	56	90.3	14	16	16	14
7	21AG007	CHANDAN B.M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	58	93.5	19	20	20	20
8	21AG008	CHANDU. S	A	A	A	A	A	A	A	A	A	A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	A	20	46	74.0	A	A	A	
9	21AG009	CHETHAN P	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	A	29	54	87.5	19	16	14	18
10	21AG010	DEEPAK. M.S	1	A	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	A	A	26	27	58	93.6	17	17	14	17
11	21AG011	DEEPAK R	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		56	90.3	19	17	14	18
12	21AG012	H.P.Y. SACHIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	A	55	88.7	12	13	18	13
13	21AG013	HAFEEL NIYAZ	A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	A	16	17	18	19	20	21	22	23	24	25	26	27			58	93.6	11	13	8	12
14	21AG014	JEEVAN KUMAR H.N	A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	A	20	21	22	23	24	25	26	27	28	29	61	98.38	18	19	14	19
15	21AG015	K.A. PREKSHA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	55	88.7	19	17	18	18
16	21AG016	KEERTHAN ALVA	1	2	3	4	5	6	7	8	9	10	11	12	A	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	A		55	88.7	15	16	12	16
17	21AG017	KEERTHANA M RAM	A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	A	28	56	90.3	16	12	16	14
18	21AG018	KIRAN .V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	A	A	56	90.3	20	20	20	20
19	21AG019	MANASI A.P	A	A	1	2	3	4	5	6	7	8	9	10	11	A	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27		55	88.7	15	14	17	15
20	21AG020	MANSOOR PE	1	A	2	3	4	5	6	7	8	9	10	11	12	A	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		57	91.9	20	20	18	20
21	21AG021	MONISHA S	A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	58	93.6	18	20	19	19
22	21AG022	NAGASHREE N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	56	90.3	20	18	19	19
23	21AG023	NAVYA .K	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	A	19	20	21	22	23	24	25	26	27	28	29	55	88.7	18	20	18	19
24	21AG024	POORNACHANDRA	A	A	1	2	3	4	5	6	7	8	9	10	11	A	13	14	15	A	16	17	18	19	20	21	22	23	24	25	26		57	91.9	18	15	13	17
25	21AG025	PRANEETH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	55	88.7	19	19	14	19
26	21AG026	REGAN AIDON SALDANHA	A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	A	17	18	19	20	21	22	23	24	25	26	27	A	28		60	96.7	16	15	13	16
27	21AG027	SAHANA M GOWDA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	59	95.1	20	19	19	20
28	21AG028	SANTHOSH .M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	56	90.3	20	20	20	20
29	21AG029	SAWAN SHETTY	A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	A	16	17	18	19	20	21	22	23	24	25	26	27	28		57	91.9	16	17	13	17
30	21AG030	SHREEHARSHA .K.S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	59	95.1	18	19	18	19
Staff Initials																																						

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

MIJAR, MOODBIDRI - 574 225

ATTENDANCE CUM INTERNAL ASSESSMENT

Class : IInd year 3rd sem

Subject : FACPT

No. of Classes held : 62

Sl. No.	U.S.N.	Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	No. of Class Attended	% of Attendance	Internal Assessment (25) I	II	III	Average Marks
		Date / Month	7/11	7/11	8/11	8/11	9/11	9/11	10/11	12/11	15/11	15/11	16/11	17/11	19/11	22/11	26/11	28/11	1/12	7/12	6/12	12/12	13/12	20/12	21/12	21/12	22/12	27/12	29/12	29/12	31/12							
1	21AG031	SNEHA M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	A	17	18	19	20	21	22	23	24	25	26	27	A	28			55	88.7	20	20	20	20
2	21AG032	SUSHA S SHETTY	A	1	2	3	4	5	6	7	8	9	10	11	12	13	16	17	18	19	20	21	22	23	24	25	26	27	A	28			57	91.9	12	14	17	13
3	21AG033	SUTHEEJ	1	2	3	4	5	6	7	8	9	10	11	12	13	14	17	18	19	20	21	22	23	24	25	26	27	28	29	30			55	88.7	17	18	13	18
4	21AG034	TARUN K	1	2	3	4	5	6	7	8	9	10	11	12	13	14	17	18	19	20	21	22	23	24	25	26	27	28	29	30			60	96.7	15	19	16	17
5	21AG035	TEJASKUMAR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	17	18	19	20	21	22	23	24	25	26	27	28	29	30			60	96.7	20	20	20	20
6	21AG036	USAMA MEHABOOBSAB KOPPAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	17	18	A	A	19	20	21	22	23	24	25	26	27	28			58	93.5	17	14	17	16
7																																						
8																																						
9																																						
10																																						
11																																						
12																																						
13																																						
14																																						
15																																						
16																																						
17																																						
18																																						
19																																						
20																																						
21																																						
22																																						
23																																						
24																																						
25																																						
26																																						
27																																						
28																																						
29																																						
30																																						
Staff Initials																																						

AIET	ASSIGNMENTS	Format No. Issue No. Rev. No.	ACD 10 01 00

Department	Agricultural Engineering	Academic Year	2022-23
		Semester	III

Sl.No.	Title	Books / Journals / Magazines referred	Date of Announcement	Date of Submission	Signature of the faculty
1	Assignment-I	Principles of Agronomy by S.R Reddy	23/11/22	29/11/23	[illegible]
2	Assignment-II	-do-	9/1/23	16/1/23	[illegible]

AIET	INTERNAL EXAM RESULT ANALYSIS	Format No.	ACD 12
		Issue No.	01
		Rev. No.	00

Department	Agricultural Engineering	Semester	III
		Subject Code	21AG32
Total No. of Students	36	Academic Year	2022-23

Test	Date	Number of Students					Signature		Remarks
		Attended	0-~~14~~	~~15-20~~ 8-14	~~21-25~~ 15-20		Faculty	HOD	
T_1	8/12/22	35	0	2	33		[illegible]	[illegible]	
T_2	23/1/23	35	0	4	31		[illegible]	[illegible]	
T_3	24/3/23	35	0	2	33		[illegible]	[illegible]	
T_4									
T_5									

Signature of Staff in - charge

HOD's Signature

H.O.D.

Dept. of Agricultural Engineering
Alva's Institute of Engg & Technology
Mijar, Moodubidire - 574225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi.
Recognized by Government of Karnataka.
A+, Accredited by NAAC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaict08@gmail.com

Department of Agricultural Engineering (2022-23)

IInd Year IIIrd Semester Student Roll List

Sl. No	USN Number	Name of the student
1	4AL21AG001	A BHOOMIKA REDDY
2	4AL21AG002	ABHISHEK K S
3	4AL21AG003	AJITH MALI PATIL
4	4AL21AG004	AMARNATH I
5	4AL21AG005	ANANYA K
6	4AL21AG006	CHAITRA
7	4AL21AG007	CHANDAN B M
8	4AL21AG008	CHANDU S
9	4AL21AG009	CHETHAN P
10	4AL21AG010	DEEPAK M S
11	4AL21AG011	DEEPAK R
12	4AL21AG012	H P Y SACHIN
13	4AL21AG013	HAFEEL NIYAZ
14	4AL21AG014	JEEVAN KUMAR H N
15	4AL21AG015	K A PREKSHA
16	4AL21AG016	KEERTHAN ALVA
17	4AL21AG017	KEERTHANA M RAM
18	4AL21AG018	KIRAN V
19	4AL21AG019	MANASI ANILRAO PAPPALE
20	4AL21AG020	MANSOOR P E
21	4AL21AG021	MONISHA S
22	4AL21AG022	NAGASHREE N
23	4AL21AG023	NAVYA K
24	4AL21AG024	POORNACHANDRA
25	4AL21AG025	PRANEETH
26	4AL21AG026	REGAN AIDON SALDANHA
27	4AL21AG027	SAHANA M GOWDA
28	4AL21AG028	SANTHOSH M
29	4AL21AG029	SAWAN SHETTY
30	4AL21AG030	SHREEHARSHA K S
31	4AL21AG031	SNEHA M
32	4AL21AG032	SUSHA S SHETTY
33	4AL21AG033	SUTHEEJ
34	4AL21AG034	TARUN K
35	4AL21AG035	TEJASKUMAR
36	4AL21AG036	USAMA MEHABOOBSAB KOPPAL

H.O.D. HOD
Dept. of Agricultural Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodubidire - 574225

ALVA'S

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY, MOODBIDRI

DEPARTMENT OF AGRICULTURAL ENGINEERING

I-INTERNAL ASSESSMENT

Semester: **3**
Subject: **Fundamentals of Agriculture & Crop Production Technology** Date: **08/12/2022**
Max Marks: **20** Time: **9:30 TO 10:30 AM**
Faculty Name: **Dr. Shashikumar**

Answer any 2 FULL questions selecting one full question from each part

Question#	Question	Marks	CO	BT/CL
	PART-A			
a	What are the objectives of tillage	1	CO1	L1
b	Discuss about Modern Concepts of Tillage	4	CO1	L1
c	Write the scope of Agronomy	5	CO1	L1
	OR			
a	Explain in briefly about classification of crops	5	CO1	L1
b	Illustrate about major soils of India	5	CO1	L2
	PART-B			
a	Describe about sowing methods	5	CO2	L1
b	Explain in briefly about Factors affecting plant population	5	CO2	L2
	OR			
a	Calculate the recommended dose of fertilizer for rice crop sown in the area of 1.25 ha (12500 sq.m) if N, P2O5, K2O is supplied as 120:60:40 kg/ha through Urea, DAP (Diammonium phosphate) and MOP (Muriate of potash). [Urea: 46%, N, DAP: 46%, P:18% N: MOP: 60% K2O].	5	CO2	L4
b	How do you define plant geometry?	1	CO2	L1
c	Explain about different types plant geometry	4	CO2	L2

Signature of Faculty

Signature of IQAC member

Signature of IQAC chairman

H.O.D.
Dept. of Agricultural Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodubidire - 574225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K - 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF AGRICULTURAL ENGINEERING

I INTERNAL ASSESSMENT TEST SCHEME OF VALUATION

Semester: III
Subject Code: 21AG32
Subject Title: Fundamentals of Agriculture and Crop Production Technology
Modules Covered: 2
Approved by:
Date: 08/12/2022
Time: 9.30 am - 10.30 am
Maximum Marks: 20
COs Covered: 2

Signature of Faculty | Signature of IQAC Member | Signature of IQAC Chairman

Q. No.	Solution	Marks
1 a	The main objectives of tillage are * To control the weeds effectively * To prepare a good seed bed which helps the germination of seeds * To control/destroy the pest/diseases	1
1. b	The modern concepts of tillage are classified as 1. minimum tillage 2. Zero tillage 3. Stubble mulch tillage 4. conservation tillage Minimum tillage :- It aims at reducing tillage operations to the minimum necessity for ensuring a good seed bed. Zero tillage :- The new crop is planted in the residues of the previous crop without any prior soil tillage/seed bed preparation & it is possible when all the weeds are controlled by the use of herbicides. Stubble mulch tillage :- soil is protected at all times either by growing a crop / by leaving the crop residues on the surface during fallow periods. sweeps/blades are generally used to cut the soil upto 12 to 15cm depth in the first operation after harvest & depth of cut is reduced during subsequent operations Conservation tillage :- The major objective is to conserve soil & soil moisture. It is a system of tillage in which organic residues are not inverted into the soil such that they remain on surface as protective cover	4

Q. No.	Solution	Marks
1.c	The main scope of Agronomy is briefed here under, * Identification of proper season for cultivation of wide range of crops * proper methods of cultivation are needed to reduce the cost of cultivation * Availability & application of chemical fertilizer at right time * Availability of herbicides for control of weeds * Intensive cropping is the need of the day & proper timed & space intensification not only increase the production but also reduces the environmental hazards.	5
2.a.	Classification of crops are done on various basis 1. Based on ontogony 2. Based on economic use 3. Based on botany 4. Based on season 5. climate	1
	Based on ontogony a) Annual crop b) perennial crop c) Biennial crop	1
	Based on economic use a) cereals b) millets c) oil seed d) pulse e) sugar crop f) fibre crop	1
	Based on season a) Kharif crop b) Rabi crop c) zaid crop	1
	Based on climatic condition 1) Tropical crop 2) Subtropical crop 3) Temperate crop 4) Pedon crop	1

Q. No.	Solution	Marks
2. b	The major soils of India are enlisted below soil is defined as the thin layer of earth crust made up of disintegrated & decomposed rocks, complex mineral compound, organic matter, water/air & living organism like bacteria, fungi, insect & worms. major soils of India are 1. Alluvial soil 2. Black soil 3. Red soil 4. Laterite soil 5. Desert soil 6. Forest soil 7. Problem soil	1 2
	Alluvial soil is the most extensive soil found in India. It has a total area of 48 m.ha & comes under river alluvium. Black soil has around 32 mha of area in India.	2
3. a	Sowing methods are 1. Broad casting 2. Dibbling 3. Sowing behind the plough 4 Seed drilling 5. Nursery transplanting	2
	Broad casting is also called as random scattering. Dibbling is the placing of seed in a hole made up by dibbler unit. It is practised on plain surface & ridges & furrows / beds & channels Sowing behind the plough is done by manual/ mechanical means. Drilling is the process of seed in continuous manner in the furrow.	3

Q. No.	Solution	Marks
3.b	Factors affecting plant population are A. Genetic factor 1. Size of the plant 2. Elasticity of the plant 3. Foraging area / soil cover 4. Dry matter partitioning 5. crop variety B. Environmental factors 1. Time of sowing 2. Rainfall / irrigation 3. Fertilizer application 4. Seed rate	5
	OR	
4.a	MOP = 86 kg	1
	DAP = 106 kg	1
	Nitrogen = 46 kg	1
	Urea = 250 kg	1
	conclusion	1

Q. No.	Solution	Marks
4.b	The arrangement of the plants in different rows & columns in an area to utilize the natural resources efficiently is called crop geometry.	1
4.c.	The different types of plant geometries are	
	1. Random geometry It is due to broad casting method of sowing & no equal space is maintained.	1
	2. Square plant geometry Light is uniformly available, movement of wind is not blocked & mechanization can be possible.	1
	3) Rectangular method of sowing a) Solid row b) paired row c) Skip row d) Triangular method	2

ALVA'S

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY, MOODBIDRI

DEPARTMENT OF AGRICULTURAL ENGINEERING

II-INTERNAL ASSESSMENT

Semester: **3**
Subject: **Fundamentals of Agriculture & Crop Production Technology** Date: **23/01/2023**
Max Marks: **20** Time: **3:00 TO 4:00 PM**
Faculty Name: **Dr. Shashikumar**

Answer any 2 FULL questions selecting one full question from each part

Question #		Question	Marks	CO	BT/CL
		PART-A			
1	a	Define irrigation scheduling?	1	CO2	L1
	b	Discuss about irrigation methods	4	CO2	L1
	c	Differentiate between manures and fertilizers	5	CO2	L2
		OR			
2	a	Explain in briefly about drip irrigation method	5	CO2	L1
	b	Illustrate about characteristics and its benefits of weed with an example	5	CO3	L2
		PART-B			
3	a	Describe about method of crop harvesting	5	CO3	L1
	b	Explain in briefly about types of herbicide	5	CO3	L1
		OR			
4	a	Write the classification of weeds	5	CO3	L1
	b	What are the advantages of IWM?	1	CO3	L1
	c	Explain briefly about different weeding methods	4	CO3	L1

Signature of Faculty **Signature of IQAC member** **Signature of IQAC chairman**

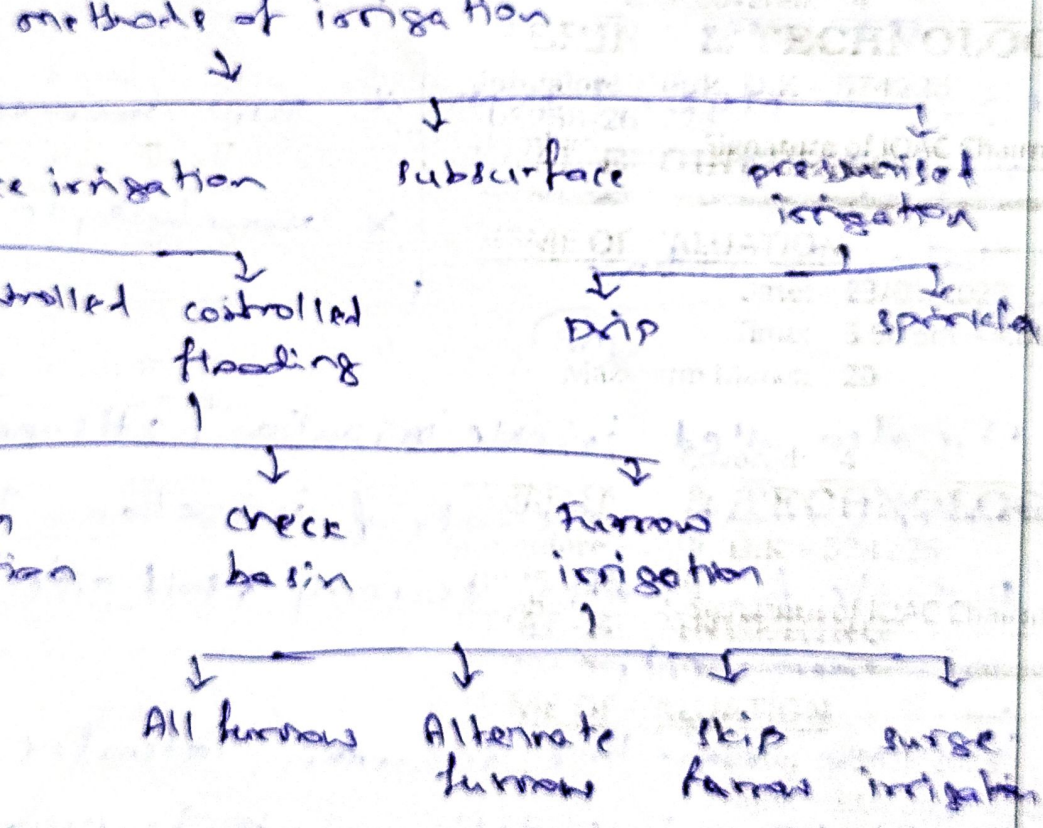
H.O.D.
Dept. of Agricultural Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodubidire - 574225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF AGRICULTURAL ENGINEERING

II INTERNAL ASSESSMENT TEST SCHEME OF VALUATION

Semester: III
Subject Code: 21AG32
Subject Title: Fundamentals of Agriculture and Crop Production Technology
Modules Covered: 3
Date: 23/01/2023
Time: 3.00 pm – 4.00 pm
Maximum Marks: 20
COs' Covered: 4
Approved by:

Signature of Faculty | Signature of IQAC Member | Signature of IQAC Chairman

Q. No.	Solution	Marks
1a	It is defined as frequency with which water is to be applied based on need of the crop & nature of soil	1
1b	 surface irrigation method are being classified based on slope, shaped size of the field, the end conditions & how water flows into & over the field.	4

Q. No.	Solution		Marks
1. c	Manure	Fertilizer	
	* organic in nature	* Inorganic in nature	
	* slow acting	* Quick acting	
	* Having low nutrient value	* High nutrient value	5
	* Having no definite chemical composition	* Having definite chemical composition	
	* obtained from plant, animal & human resources	* mined / manufactured.	
	* Improve physical properties of soil	* Dont improve	
	* Bulky in nature	* Non-bulky in nature	

(OR)

2. a Its also called trickle irrigation. It is one of the latest & modern methods of irrigation. It is suitable for water scarcity & salt affected soil. 5

Drip components

* pump, main line, sub-main, laterals & emitters
* The main line delivers water to submain & the submain into laterals.
* The emitters which are attached to the laterals distribute water for irrigation.
* The main, submains pipes are usually made of PVC pipes & laterals of LLDPE.
* The other components include pressure regulator, filters, valves, water meter, fertilizer device.

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF AGRICULTURAL ENGINEERING

Q. No.	Solution	Marks
2.b.	Characteristics of Weed 1. Prolific seed production 2. Dormancy in seed 3. Competitiveness & Agressiveness 4. Vegetative propogated 5. Morphological similarities 6. Evasiveness	3
	Benefits of weed 1. maintain soil fertility 2. control soil erosion 3. Used as a fodder 4. Have medical value	2
3.a.	In general there are three methods of harvesting 1. Hand harvesting 2. Harvesting with hand tools 3. Harvesting with machinery Hand harvesting has a number of advantage over machine harvest. People can accurately determine product quality, allowing accurate selection of mature product. Harvesting with hand tools when harvesting tree fruits, where some of the clipper is used to remove the fruit from the tree, & then the fruit is placed into harvesting containers. Harvesting with machinery used for fresh market crops & especially for food processing unit	5

Q. No.	Solution	Marks
3.b	There are 4 types of herbicides 1. Selective herbicide are those which kill only weeds without injuring crop plants. e.g. 2,4-D, Atrazine, pendimethalin 2. Non selective herbicide are those which kill all kinds of vegetations eg:- Diquat, paraquat, Fenoxaprop-ethyl 3. contact herbicides which kill directly the plant cell 4. Translocated / systemic herbicide are first absorbed in the foliage / through roots & are then translocated to other parts of the plant.	5
4.a.	The classification of weeds narrated below. A) Basis of life cycle → Annual, → Biennial, → Perennial B) Basis of site dominance → obligate, → Facultative C) Basis of parasitic nature D). Basis of morphological characteristic E) other basis 1. Relative weed 2. Absolute weed 3. Rogue	5

Q. No.	Solution	Page No.: 5 Marks
4.b	The advantages of IWM are * It shifts the crop weed competition in favour of crop * Prevents weed shift towards perenial nature * Prevents resistance in weeds to herbicides	1
4.c	There are two major weed control methods 1. Preventive method 2. control method ↓ mechanical, cropping/cultural, Biological, chemical Preventive measures includes * Use clean seed * Use well decomposed Fym/compost * cut the weeds before seeding mechanical method includes * Hand weeding * Hand pulling * Burning * Flooding * Hoeing * Tillage Cultural method includes 1. crop rotation 2. kind of crop 3. use of fertilizers 4. Dated rate of planting/sowing	5

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF AGRICULTURAL ENGINEERING

Q. No.	Solution	Marks
	Biological method use the living organisms to kill the weeds, Chemical method use chemicals to kill the weeds	

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi. Recognized by Government of Karnataka.
A+, Accredited by NAAC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail.com

DEPARTMENT OF AGRICULTURAL ENGINEERING
III-INTERNAL ASSESSMENT

Semester: **3**
Subject: **Fundamentals of Agriculture & Crop Production Technology** Date: **16/03/2023**
Max Marks: **20** Time: **3:00 TO 4:00 PM**
Faculty Name: **Dr. Shashikumar**

Answer any 2 FULL questions selecting one full question from each part

Question #		Question	Marks	CO	BT/CL
		PART-A			
1	a	Define cropping system and cropping pattern?	2	CO4	L1
	b	Discuss about crop rotation	4	CO4	L1
	c	Differentiate between crop adaptation and distribution	5	CO4	L2
		OR			
2	a	Explain in briefly about rice-based cropping system	5	CO4	L1
	b	Illustrate about sugarcane-based cropping system with an example	5	CO4	L2
		PART-B			
3	a	Differentiate between rainfed and irrigated farming	5	CO5	L2
	b	Explain in briefly about factors affecting on growth of a plant	5	CO5	L1
		OR			
4	a	Describe the arecanut crop production techniques	5	CO5	L1
	b	Explain briefly about different moisture measuring devices	5	CO5	L1

Shashikumar
Signature of Faculty

Signature of IQAC member

Shashikumar
Signature of IQAC chairman

H.O.D.
Dept. of Agricultural Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodubidire - 574225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi. Recognized by Government of Karnataka.
A+, Accredited by NAAC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail.com

III INTERNAL ASSESSMENT TEST SCHEME OF VALUATION

Semester: III
Subject Code: 21AG32
Subject Title: Fundamentals of Agriculture and Crop Production Technology
Modules Covered: 5
Date: 16/03/2023
Time: 3.00 pm – 4.00 pm
Maximum Marks: 20
COs' Covered: 4 &5
Approved by:

Signature of Faculty | Signature of IQAC Member | Signature of IQAC Chairman

Q. No.	Solution	Marks
1.a	Cropping system :- It is an order in which the crops are cultivated on a piece of land over a fixed period of time	1
	Cropping pattern :- The yearly sequence & spatial arrangement of crops is called cropping pattern.	1
1.b.	Crop Rotation It is a process of growing diffrent crops in succession on a piece of land in a specific period of time with an object to get maximum profit from least investment without impairing soil fertility.	1
	principles of crop rotation * The leguminous crops should be grown after non leguminous crops. * More exhaustive crops should be followed by less exhaustive crop * selection of crop should be problem based * selection of crop should be demand based	3

Q. No.	Solution	Marks
1.c.	**crop adaptation** * ability of a crop to respond positively to changes in agricultural operations * There are 4 types 1. specific genotypic adaptation 2. General 3. specific population adaptation 4. General **crop distribution** * crop seasons in India 1. Kharif 2. Rabi 3. Zaid * Kharif crops :- jowar bajra, maize, cotton jute * Rabi crop :- wheat, oat gram, pea, barley, tomato, onion * Zaid crop :- cucumber bitter guard	5
2.a	**Rice based cropping system** * It includes low land & upland crops. 1. mixed varietal cropping of rice 2. Intercropping rice with other crops 3. Relay/pairal/uterax cropping 4. sequential cropping	5
2.b	**sugarcane based cropping system** It includes all the cropping systems like, mixed, inter, relay & sequential cropping system. The crop suitable for growing in sequence cropping systems are rice, banana, turmeric, groundnut, cowpea, black gram etc...	5

Q. No.	Solution	Marks
3.a	**Rainfed farming** / **irrigated farming** * In a certain part of the year crop is grown where rainfall received / * Through out the year * crops having drought tolerance / * According to need, the crops are selected * Duration of crops depends on the rainfall duration / * Depending upon the need * mixed cropping is beneficial / * Generally pure cropping is done	5
3.b	Factors affecting on growth of a plant → Internal factor → Genetic factor → External factors → Climate → soil → Solar radiation → Temperature → Wind → Biological factor → physiographic → socio economic factor	5

Q. No.	Solution	Marks
4.a	Arecanut crop production techniques * It is suitable for all types of soil condition * It grows well in the rainfall of 75 or 4500 mm. * Temperature - 4°C to 40°C * Altitude above 1000 m MSL * Season - June-december * planting is done in the pit of 90x90x90cm with a spacing of 2.75m on either way * Banana is the most suitable crop for intercrop	5
4.b	Different moisture measuring devices are Tensiometer: * It consist of cup, plate, vacuum gauge, Reservoir. * It is used for testing soil moisture of deep rooted crops & shallow rooted crops pressure membrane & pressure plate: * It is having ceramic plate, soil specimen, Water, basket, Rubber membrane * 0.33 bar / 15 bar pressure should be applied Neutron moisture meter: * quickly & continuously come to know the soil moisture. * Alluminium tube of d - 50 - 100cm length is used	5

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi. Recognized by Government of Karnataka.
A+, Accredited by NAAC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail.com

DEPARTMENT OF AGRICULTURAL ENGINEERING
PRACTICAL INTERNAL ASSESSMENT

Semester: **3**
Subject: **Fundamentals of Agriculture & Crop Production Technology** Date: **30/03/2023**
Max Marks: **20** Time: **2:00 TO 5:00 PM**
Faculty Name: **Dr. Shashikumar**

Question No		Questions	Marks
1	a	Write the procedure involved in determining the morphological characteristics of rice crops	10
	b	Calculate the plant population for following plants a) Rice (20 X 10) cm b) Wheat (22.5 X 10) cm c) Maize (60 X 20) cm d) Sorghum (45 X 15) cm	10
2		What will be the recommended dose of fertilizer for rice crop sown in the area of 1 ha (10000 sq.m) if N, P2O5, K2O is supplied as 120:60:60 kg/ha through Urea, DAP (Diammonium phosphate) and MOP (Muriate of potash). [Urea: 46%, N, DAP: 46%, P;18% N: MOP: 60% K2O]	15
OR			
3		Describe the experimental procedure of seed germination test and conduct a germination test	35

Signature of Faculty **Signature of IQAC member** **Signature of IQAC chairman**

H.O.D.
Dept. of Agricultural Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodubidire - 574225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi.
Recognized by Government of Karnataka.
A+, Accredited by NAAC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail.com

The assignment questions are assigned to students to write in assignment book are enlisted below.

Question No.	Assignment –I	Marks allocated
1	**Write a note on the following topics** Agro climatic zones of India Major soils of India Effect of tillage on soil and crop growth Merit and demerit of weeds Weed competition and its impact on crop	10 Marks
	Assignment –II	
2	**Write a note on the followings topics** Integrated weed management Classifications of weed Different methods of weed management Classification of crops Rice based, sugarcane based, cotton based cropping system Soil moisture measuring devices	10 Marks

H.O.D.
Dept. of Agricultural Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodubidire - 574225

CBCS SCHEME

USN 4AL21AG028

21AG32

Third Semester B.E. Degree Examination, Jan./Feb. 2023
Fundamentals of Agriculture and Crop Production Technology

Time: 3 hrs. Max. Marks: 100

Note: ***Answer any FIVE full questions, choosing ONE full question from each module.***

Module-1

1 a. What are the objectives of tillage? (03 Marks)
b. Discuss about modern concepts of tillage. (10 Marks)
c. Write in briefly about scope of agronomy. (07 Marks)

OR

2 a. Explain in briefly about classification of crops. (10 Marks)
b. Illustrate about major soils of India. (10 Marks)

Module-2

3 a. Describe about sowing methods of seed. (10 Marks)
b. Explain in briefly about factors affecting plant population. (10 Marks)

OR

4 a. Calculate the recommended dose of fertilizer for rice crop grown in the area of 1.25 ha (12500 sq.m) if N, P_2O_5, K_2O is supplied as 120 : 60 : 40 kg/ha through area, DAP (Diammonium phosphate) and MOP (Muriate of Potash)
[Urea : 46%, DAP : 46%, P : 18% N, MOP : 60%K_2O] (10 Marks)
b. Explain in briefly about plant geometry. (10 Marks)

Module-3

5 a. What are the characteristics of Weed? (05 Marks)
b. Discuss about classification of Weeds. (10 Marks)
c. Distinguish between herbicidal selectivity and Allelopathic effect of Weed. (05 Marks)

OR

6 a. Write the classification of herbicides. (06 Marks)
b. Describe about different methods of herbicides application. (06 Marks)
c. Explain in briefly about integrated Weed management. (08 Marks)

Module-4

7 a. Describe about rice based cropping system. (10 Marks)
b. Explain in briefly about cotton cropping system. (10 Marks)

OR

8 a. Differentiate between cereals and pulses. (10 Marks)
b. Write about sugarcane cropping system. (10 Marks)

Module-5

9 a. Explain about different methods of Weed control. (10 Marks)
b. Illustrate about irrigation scheduling. (10 Marks)

OR

10 a. Discuss irrigation water measurement devices. (10 Marks)
b. Explain about measurement of field capacity and bulk density. (10 Marks)

* * * * *

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi. Recognized by Government of Karnataka.
A+, Accredited by NAAC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail.com

Final Internal Assessment Marks and Attendance

SECTION:A SEM=III

Attendance Percentage as on: 31/03/2023

Maximum Marks = 40; Minimum Attendance of Percentage = 85%

Roll No	USN	Name	(21MAT31)		(21AG32)		(21AG33)		(21AG34)		(21AGL35)		21AG381		21SCR36		21KSK37	
			MARKS	ATT %	MARKS	ATT %	MARKS	ATT %	MARKS	ATT %	MARKS	ATT %	MARKS	ATT %	MARKS	ATT %	MARKS	ATT %
1	4AL21AG001	A BHOOMIKA REDDY	41	85.00	43	95.2	44	97	44	92.0	47	100.0	49	90.0	50	92.3	47	87.0
2	4AL21AG002	ABHISHEK K S	50	86.00	50	88.7	49	91	48	89.0	49	94.0	47	100.0	50	100.0	50	100.0
3	4AL21AG003	AJITH MALI PATIL	37	85.00	46	87.1	45	87	48	89.0	48	94.0	47	92.3	50	92.3	39	92.3
4	4AL21AG004	AMARNATH I	38	85.00	40	91.9	46	94	42	87.0	46	88.0	47	90.0	41	92.3	33	92.3
5	4AL21AG005	ANANYA K	35	95.00	40	93.5	40	95	45	94.0	47	100.0	47	87.0	50	92.3	33	87.0
6	4AL21AG006	CHAITRA	30	89.00	40	90.3	44	92	38	89.0	45	100.0	49	92.3	42	92.3	46	92.3
7	4AL21AG007	CHANDAN B M	41	85.00	50	93.5	50	95	48	89.0	50	94.0	49	100.0	50	100.0	36	100.0
8	4AL21AG008	CHANDU S	A	74	A	74.0	A	74	A	74.0	A	74.0	A	74.0	A	74.0	A	74.0
9	4AL21AG009	CHETHAN P	32	85.00	40	93.5	46	95	46	89.0	49	100.0	41	92.3	50	92.3	40	92.3
10	4AL21AG010	DEEPAK M S	44	85.00	39	88.7	46	91	43	89.0	49	88.0	47	92.3	41	92.3	42	92.3
11	4AL21AG011	DEEPAK R	38	91.00	42	93.5	48	95	45	94.0	48	88.0	47	100.0	38	100.0	39	100.0
12	4AL21AG012	H P Y SACHIN	30	93.00	40	85.5	38	87	42	87.0	46	88.0	47	92.3	44	92.3	41	92.3
13	4AL21AG013	HAFEEL NIYAZ	22	85.48	24	85.5	24	85	29	85.0	42	88.0	40	92.3	41	92.3	39	92.3
14	4AL21AG014	JEEVAN KUMAR H N	36	85.00	42	93.5	46	95	42	92.0	48	94.0	47	100.0	40	100.0	38	100.0
15	4AL21AG015	K A PREKSHA	39	99.00	46	100.0	42	100	43	99.0	47	100.0	48	92.3	50	92.3	45	92.3
16	4AL21AG016	KEERTHAN ALVA	24	85.00	36	87.1	29	89	37	87.0	46	88.0	47	92.3	38	92.3	39	92.3
17	4AL21AG017	KEERTHANA M RAM	28	85.00	39	87.1	33	89	32	85.0	46	88.0	47	92.3	46	92.3	47	92.3
18	4AL21AG018	KIRAN V	50	97.00	50	91.9	49	94	50	92.0	50	94.0	49	92.3	50	92.3	50	92.3
19	4AL21AG019	MANASI ANILRAO PAPPALE	29	91.00	42	90.3	40	92	36	89.0	47	100.0	48	92.3	50	92.3	40	92.3
20	4AL21AG020	MANSOOR P E	46	85.00	47	88.7	46	91	45	89.0	48	94.0	47	92.3	41	92.3	34	92.3
21	4AL21AG021	MONISHA S	46	89.00	48	90.3	50	92	48	89.0	48	88.0	49	100.0	50	100.0	50	100.0
22	4AL21AG022	NAGASHREE N	50	99.00	48	95.2	49	97	46	94.0	39	94.0	49	92.3	50	92.3	47	92.3
23	4AL21AG023	NAVYA K	45	85.00	47	91.9	50	94	49	88.0	49	94.0	48	100.0	50	100.0	46	100.0
24	4AL21AG024	POORNACHANDRA	34	85.00	39	88.7	41	91	37	86.0	47	88.0	40	92.3	37	92.3	38	92.3
25	4AL21AG025	PRANEETH	46	91.00	43	95.2	47	97	42	92.0	48	88.0	47	100.0	37	100.0	40	100.0
26	4AL21AG026	REGAN AIDON SALDANHA	39	87.00	39	91.9	47	94	42	88.0	48	88.0	47	92.3	37	92.3	31	92.3
27	4AL21AG027	SAHANA M GOWDA	49	91.00	49	98.4	50	100	48	94.0	39	94.0	47	100.0	50	100.0	48	100.0
28	4AL21AG028	SANTHOSH M	50	89.00	50	95.2	50	97	50	91.0	50	100.0	49	92.3	50	92.3	50	92.3
29	4AL21AG029	SAWAN SHETTY	37	85.00	39	85.5	47	87	39	87.0	47	88.0	40	92.3	37	92.3	48	92.3
30	4AL21AG030	SHREEHARSHA K S	39	97.00	47	91.9	44	94	47	91.0	47	94.0	49	92.3	50	92.3	41	92.3
31	4AL21AG031	SNEHA M	44	91.00	50	87.1	50	89	46	91.0	49	88.0	47	92.3	50	92.3	46	92.3
32	4AL21AG032	SUSHA S SHETTY	23	86.00	39	93.5	39	95	41	91.0	48	88.0	47	92.3	45	92.3	46	92.3
33	4AL21AG033	SUTHEEJ	37	93.00	40	88.7	46	91	40	87.0	48	94.0	47	92.3	39	92.3	37	92.3

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi. Recognized by Government of Karnataka.
A+, Accredited by NAAC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725; Mob:7022262724,7026262725,mail:principalaiet08@gmail.com

SECTION:A SEM=III

Final Internal Assessment Marks and Attendance

Attendance Percentage as on: 31/03/2023

Maximum Marks = 40; Minimum Attendance of Percentage = 85%

Roll No	USN	Name	(21MAT31)		(21AG32)		(21AG33)		(21AG34)		(21AGL35)		21AG381		21SCR36		21KSK37	
			MARKS	ATT %	MARKS	ATT %	MARKS	ATT %	MARKS	ATT %	MARKS	ATT %	MARKS	ATT %	MARKS	ATT %	MARKS	ATT %
34	4AL21AG034	TARUN K	33	91.00	43	96.8	46	99	43	96.0	47	94.0	49	92.3	43	92.3	40	92.3
35	4AL21AG035	TEJASKUMAR	50	88.00	50	93.5	49	95	50	91.0	50	94.0	49	100.0	46	100.0	50	100.0
36	4AL21AG036	USAMA MEHABOOBSAB KOPPAL	47	85.00	43	95.2	46	97	46	86.0	47	88.0	49	92.3	44	92.3	42	92.3
		No of Students Absent	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	
		0 - 20 marks	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
		21 - 30 marks	7.0		1.0		2.0		1.0		0.0		0.0		0.0		0.0	
		30 - 50 marks	28.0		34.0		33.0		34.0		35.0		35.0		35.0		35.0	
Staff Signature with Date			RS		SKR		VKS		DKK		DKK		SM		MK		YK	

Class Coordinator 12/4/23

HOD

H.O.D.
Dept. of Agricultural Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodubidire - 574225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
(Unit of Alva's Education Foundation (R), Moodbidri)
Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi. Recognized by Government of Karnataka.
A+, Accredited by NAAC & NBA (ECE & CSE)
Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka
Ph: 08258-262725; Mob:722262724,7026262725,mail:principalaiet08@gmail.com

ALVA'S

Result Analysis of Final Internal Marks

SECTION:A SEM III Total No. of Students: 36

SUBJECT	No. of students absent	0 – 20	21 – 30	31 - 50
Transform Calculus, Fourier Series and Numerical Techniques (21MAT31)	1	0	7	28
Fundamentals of Agriculture & Crop Production Technology (21AG32)	1	0	1	34
Soil Mechanics , Surveying & Levelling (21AG33)	1	0	2	33
Mechanics of Materials & Machines (21AG34)	1	0	1	34
Basic Workshop Practice Lab (21AGL35)	1	0	1	34
Introduction to PYTHON (AEC-III) (21AG381)	1	0	0	35
Social connect and responsibilty (21SCR36)	1	0	0	35
Samskrithika kannada (21KSK37)	1	0	0	35

Class Coordinator

HOD

H.O.D.
Dept. of Agricultural Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodubidire - 574225

Principal

PRINCIPAL
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225, D.K

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

(Unit of Alva's Education Foundation (R), Moodbidri)

Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi. Recognized by Government of Karnataka.

A+, Accredited by NACC & NBA (ECE & CSE)

Shobhavana Campus, MIJAR-574225, Moodbidri, D.K., Karnataka Ph: 08258-262725;

Mob:7022262724,7026262725,mail:principalaiet08@gmail.com

DEPARTMENT OF AGRICULTURE ENGINEERING

COs, PEOs, PSOs and COs-POs/PSOs mapping Matrix with justification

SEMESTER III	
Sub Code: 21AG32	Sub Name: Fundamentals of Agriculture & Crop Production Technology
Academic Year: 2022-23	Course Teacher: Dr. Shashikumar

COURSE OUTCOMES: After studying this course, students will be able to:

21AG32.1 Express knowledge gained on the principles of agronomy and recognize the various nutrients and their effects on plant health

21AG32.2 Plan irrigation measures for plant growth and development and also manage weeds in a field

21AG32.3 Plan for sustainable agricultural production and Apply scientific methods and tools in field preparation and for designing cropping

21AG32.4 Comprehend the fundamentals of crop production of cereals and Decide on the crops, fertilizers and irrigation measures for production of pulses

21AG32.5 Plan for sustainable crop production of oilseeds and Explain the techniques involved in crop production of fibre and forage crops.

CO-PO /CO-PSO MAPPING MATRIX:

CO NUMBERS	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
21AG32.1	2		2											2	
21AG32.2		2												1	1
21AG32.3	2	2	2	2									1	2	
21AG32.4		2		2									1	2	1
21AG32.5	2	2	2	2									1	1	1
AVERAGE	2	2	2	2									0.6	1.6	0.6

CO-PO /CO-PSO MAPPING MATRIX JUSTIFICATION:

CO NUMBERS	PO/PSO NUMBERS	JUSTIFICATION
21AG32.1	PO1	To Apply the knowledge of mathematics and engineering fundamentals to moderate nutrient requirement of a crop

	PO3	To design a crop pattern suitable for a particular crop
	POS2	To develop moderate level skills needed to pursue career in agriculture sector
21AG32.2	**PO2**	To identify the weeds and necessary herbicides suggested
	PSO2	To develop moderate level skills needed to make weed management in agriculture sector
	PSO3	Understand the mass production of commercial crops
21AG32.3	**PO1**	To Apply the knowledge of mathematics and engineering fundamentals to adopt scientific methods and tools in field preparation and for designing cropping
	PO2	Identify the existing problems in crop production
	PO3	Design proper method and tools for better crop production
	PO4	Conduct field experiments to know the germination percentage and effect of chemicals on pest or diseases
	PSO1	Develop a integration weed and pest management techniques
	PSO2	To develop moderate level skills needed to make weed and pest management in agriculture sector
21AG32.4	**PO2**	Comprehend the problems of weed growth and disease attack on cereals and pulse crop
	PO4	Design of cropping pattern and irrigation schedule should be moderated
	PSO1	Develop a integration weed and pest management techniques for cereals and pulse crop
	PSO2	To develop moderate level skills needed to make weed and pest management for cereals and pulse crop
	PSO3	Understand the mass production of cereals and pulse crop
21AG32.5	**PO1**	To Apply the knowledge of mathematics and engineering fundamentals to adopt scientific methods and tools in field preparation and for designing oil seed and forage crop
	PO2	Comprehend the problems of weed growth and disease attack on oilseed and forage
	PO3	To design a crop pattern suitable for a oil seed and forage crop
	PO4	Design of cropping pattern and irrigation schedule should be moderated
	PSO1	Develop a integration weed and pest management techniques for oilseed and forage crop
	PSO2	To develop moderate level skills needed to make weed and pest management for oilseed and forage crop
	PSO3	Understand the mass production of oilseed and forage crop

Course Teacher **IQAC Member** **IQAC Chairman**