

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

BE (AGRICULTURAL ENGINEERING) III SEMESTER

S. No.	Board of Study	Subject Code	Subject	Periods per week			Scheme of Exam Theory/Practical			Total Marks	Credit L+(T+P/2)
				L	T	P	ESE	CT	TA		
1	Appl. Mathematics	320351 (14)	Mathematics – III	4	1	-	80	20	20	120	5
2	Civil Engg	320352 (20)	Fluid mechanics	4	1	-	80	20	20	120	5
3	Mech. Engg	394353 (37)	Strength of materials	3	1	-	80	20	20	120	4
4	Agri. Engg	394354 (94)	Engineering properties of biological materials and food quality	4	1	-	80	20	20	120	5
5	Agri. Engg	394355 (94)	Farm power and renewable energy sources	4	1	-	80	20	20	120	5
6	Agri. Engg	394356 (94)	Crop production technology	4	1	-	80	20	20	120	5
7	Agri. Engg	394361 (94)	Engineering properties of biological material lab	-	-	3	40	-	20	60	1
8	Civil Engg	394362 (20)	Fluid Mechanics Lab	-	-	2	40	-	20	60	1
9	Agri. Engg	394363 (94)	Farm power and renewable energy sources Lab	-	-	2	40	-	20	60	1
10	Agri. Engg	394364 (94)	Crop production lab	-	-	2	40	-	20	60	1
11	Humanities	394365 (46)	Value Education	-	-	2	-	-	40	40	1
12			Library	-	-	1	-	-	-	-	-
Total				22	6	12	640	120	240	1000	34

L – Lecturer
P – Practical,
TA – Teacher’s Assessment

T- Tutorial,
ESE – End Semester Exam,

CT – Class Test

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

BE (AGRICULTURAL ENGINEERING) IV SEMESTER

S. No.	Board of Study	Subject Code	Subject	Periods per week			Scheme of Exam Theory/Practical			Total Marks	Credit L+(T+P/2)
				L	T	P	ESE	CT	TA		
1	Agri. Engg	394451 (94)	Watershed hydrology	4	1	-	80	20	20	120	5
2	Agri. Engg	394452 (94)	Soil and water conservation structures	3	1	-	80	20	20	120	4
3	Agri. Engg	394453 (94)	Crop process, Drying storage engineering	4	1	-	80	20	20	120	5
4	Mech. Engg	394454 (37)	Engineering Thermodynamics	4	1	-	80	20	20	120	5
5	Mech. Engg	394455 (37)	Numerical Analysis & Computer Programming (C & C++)	4	1	-	80	20	20	120	5
6	Civil Engg	394456 (20)	Soil mechanics	4	1	-	80	20	20	120	4
7	Civil Engg.	394461 (20)	Soil mechanics Lab	-	-	2	40	-	20	60	1
8	Agri. Engg	394462 (94)	Agricultural Topography & Land Measurement lab	-	-	2	40	-	20	60	1
9	Agri. Engg	394463 (94)	Crop process, Drying storage engineering Lab	-	-	2	40	-	20	60	1
10	Mech. Engg	394464 (37)	Numerical Analysis & Computer Programming (C & C++) Lab	-	-	2	40	-	20	60	1
11	Humanities	394465 (46)	Health, Hygiene & Yoga	-	-	2	-	-	40	40	1
12			Library	-	-	1	-	-	-	-	-
Total				23	6	11	640	120	240	1000	33

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Note: (1) Duration of all theory papers will be of Three Hours.

Note: (2) Industrial Training of six weeks is mandatory for B.E. student. It is to be completed in two parts. The first part will be in summer after IV sem. after which students have to submit a training report which will be evaluated by the college teachers during B.E. V sem.

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

BE (AGRICULTURAL ENGINEERING) V SEMESTER

S. No.	Board of Study	Subject Code	Subject	Periods per week			Scheme of Exam Theory/Practical			Total Marks	Credit L+(T+P/2)
				L	T	P	ESE	CT	TA		
1	Mech. Engg	394551 (37)	Theory of Machines	4	1	-	80	20	20	120	5
2	Civil Engg	394552 (20)	Environmental engineering	3	1	-	80	20	20	120	4
3	Agri. Engg	394553 (94)	Irrigation and drainage engineering	4	1	-	80	20	20	120	5
4	Agri. Engg	394554 (94)	Ground water, Wells and pumps	4	1	-	80	20	20	120	5
5	Agri. Engg	394555 (94)	Farm machinery and equipment's	3	1	-	80	20	20	120	4
6	Agri. Engg	394556 (94)	Dairy and food engineering	4	1	-	80	20	20	120	5
7	Agri. Engg	394561 (94)	Farm machinery and equipment's lab	-	-	2	40	-	20	60	1
8	Civil Engg	394562 (20)	Environmental engineering lab	-	-	2	40	-	20	60	1
9	Agri. Engg	394563 (94)	Dairy and food engineering Lab	-	-	2	40	-	20	60	1
10	Agri. Engg	394564 (94)	Irrigation and drainage engineering lab	-	-	2	40	-	20	60	1
11	Humanities	394565 (46)	Personality Development	-	-	2	-	-	20	20	1
12	Agri. Engg	394566 (94)	* Practical Training Evaluation/Library	-	-	2	-	-	20	20	1
Total				22	6	12	640	120	240	1000	34

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*To be completed after IV sem. and before the commencement of V Sem.

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SCHEME OF TEACHING AND EXAMINATION

BE (AGRICULTURAL ENGINEERING) VI SEMESTER

S. No.	Board of Study	Subject Code	Subject	Periods per week			Scheme of Exam Theory/Practical			Total Marks	Credit L+(T+P/2)
				L	T	P	ESE	CT	TA		
1	Civil Engg	394651 (20)	Design of structure	4	1	-	80	20	20	120	5
2	Agri. Engg	394652 (94)	Tractor system and controls	4	1	-	80	20	20	120	5
3	Agri. Engg	394653 (94)	Agriculture structures and environmental control	3	1	-	80	20	20	120	4
4	Agri. Engg	394654 (94)	Food Packaging Technology	3	1	-	80	20	20	120	4
5	Mech. Engg	394655 (37)	Machine Design	3	1	-	80	20	20	120	4
6	<i>Refer Table – I</i>		<i>Professional Elective – I</i>	4	1	-	80	20	20	120	5
7	Mech. Engg	394661 (37)	Data base management & internet lab	-	-	2	40	-	20	60	1
8	Agri. Engg	394662 (94)	Tractor system and controls lab	-	-	2	40	-	20	60	1
9	Agri. Engg	394663 (94)	Agriculture structures and environmental control Lab	-	-	3	40	-	20	60	2
10	Agri. Engg	394664 (94)	Tractor and farm machinery Lab	-	-	2	40	-	20	60	1
11	Management	394665 (76)	Management Skills	-	-	2	40	-	40	40	1
12			Library	-	-	1	-	-	-	-	-
Total				23	6	11	640	120	240	1000	33

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Note: Duration of all theory papers will be of **Three Hours except for Machine Design Paper which is for four hours.**

Note: Industrial Training of twelve weeks is mandatory for B.E. students. It is to be completed in two equal parts. The first part must have been completed in summer after 4th sem. The 2nd part to be completed to be during summer after six sem. After which students have to submit a training report which will be evaluated by college teachers during BE- VII sem.

Chhattisgarh Swami Vivekanand Technical University, Bilai

Table – I
Professional Elective – I

S. No.	Branch	Subject Code	Subject
1	Agriculture	394671 (94)	Design & maintenance of green house
2	Agriculture	394672 (94)	Waste & by product utilization
3	Agriculture	394673 (94)	Engineering Economics
4	Agriculture	394674 (94)	Development of processed products and development
5	Agriculture	394675 (94)	Mechanics of tillage & traction
6	Agriculture	394676 (94)	Computer Graphics

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

Note: (2) Choice of elective course once made for an examination cannot be changed in future examinations.

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

BE (AGRICULTURAL ENGINEERING) VII SEMESTER

S. No.	Board of Study	Subject Code	Subject	Periods per week			Scheme of Exam Theory/Practical			Total Marks	Credit L+(T+P/2)
				L	T	P	ESE	CT	TA		
1	Mech. Engg	394751 (37)	Heat & mass transfer	3	1	-	80	20	20	120	4
2	Agri. Engg	394752 (94)	Agriculture business management and entrepreneurship	4	1	-	80	20	20	120	5
3	Agri. Engg	394753 (94)	Command area development management	3	1	-	80	20	20	120	4
4	Agri. Engg	394754 (94)	Design of micro irrigation system	4	1	-	80	20	20	120	5
5	Refer Table – II		Professional Elective – II	4	1	-	80	20	20	120	5
6	Agri. Engg.	394761 (94)	Command area development management lab	-	-	2	40	-	20	60	1
7	Mech. Engg	394762 (37)	Heat & mass transfer Lab	-	-	3	40	-	20	60	2
8	Agri. Engg	394763 (94)	Design of micro irrigation system Lab	-	-	3	40	-	20	60	2
9	Agri. Engg	394764 (94)	Minor Project	-	-	3	100	-	40	140	2
10	Management	394765 (76)	Innovative & Entrepreneurial Skill	-	-	2	-	-	40	40	1
11	Agri. Engg	394766 (94)	** Practical Training Evolution/Library	-	-	1	-	-	40	40	1
Total				19	5	15	620	100	280	1000	32

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** To be completed after VI sem. and before the commencement of VII Sem.

Chhattisgarh Swami Vivekanand Technical University, Bilai

Table – II
Professional Elective – II

S.No.	Branch	Subject Code	Subject
1	Agriculture	394771 (94)	Quality Control & Total Quality Management
2	Agriculture	394772 (94)	Energy Management & Audit
3	Agriculture	394773 (94)	Systems Engineering
4	Agriculture	394774 (94)	Remote sensing and GIS applications
5	Agriculture	394775 (94)	Reservoir and farm pond design

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

Note: (2) Choice of elective course once made for an examination cannot be changed in future examinations.

Chhattisgarh Swami Vivekanand Technical University, Bhilai

SCHEME OF TEACHING AND EXAMINATION

BE (AGRICULTURAL ENGINEERING) VIII SEMESTER

S. No.	Board of Study	Subject Code	Subject	Periods per week			Scheme of Exam Theory/Practical			Total Marks	Credit L+(T+P/2)
				L	T	P	ESE	CT	TA		
1	Agri. Engg	394851 (94)	Farm power and machinery management	4	1	-	80	20	20	120	5
2	Mech. Engg	394852 (37)	Refrigeration and Air Conditioning	4	1	-	80	20	20	120	5
3	Civil Engg.	394853 (20)	Water resources engineering	4	1	-	80	20	20	120	5
4	<i>Refer Table – III</i>		<i>Professional Elective – III</i>	4	1	-	80	20	20	120	5
5	<i>Refer Table – IV</i>		<i>Open Elective – IV</i>	4	1	-	80	20	20	120	5
6	Agri. Engg.	394861 (94)	Farm power and machinery management Lab	-	-	2	40	-	20	60	1
7	Mech. Engg	394862 (37)	Refrigeration and Air Conditioning lab	-	-	2	40	-	20	60	1
8	Agri. Engg	394863 (94)	Material properties lab	-	-	2	40	-	20	60	1
9	Agri. Engg	394864 (94)	Major Project	-	-	6	100	-	80	180	3
10	Agri. Engg	394865 (94)	Report Writing & Seminar	-	-	2	-	-	40	40	1
11			Library	-	-	1	-	-	-	-	1
Total				20	5	15	620	100	280	1000	33

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Table – III

Professional Elective – III

S.No.	Branch	Subject Code	Subject
1	Agriculture	394871 (94)	Bio mass management for fodder and energy
2	Agriculture	394872 (94)	Gully and Ravine Control Structures
3	Agriculture	394873 (94)	Production technology for Agricultural machinery
4	Agriculture	394874 (94)	Food processing plant, design and layout
5	Agriculture	394875 (94)	Food Science

Note: (1) 1/4th of total strength of students subject to minimum of 20 students is required to offer and elective in the college in a particular academic session.

Note: (2) Choice of elective course once made for an examination cannot be changed in future examinations.

Chhattisgarh Swami Vivekanand Technical University, Bhilai

Table – IV
Open Electives

S.No.	Board of Studies	Code	Name of Subject
1.	Management	300851(76)	Enterprise Resource Planning
2.	Information Technology	300852(33)	E-Commerce & strategic IT
3.	Management	300853(76)	Technology Management
4.	Information Technology	300854(33)	Decision Support & Executive Information system
5.	Computer Science & Engg.	300855(22)	Software Technology
6.	Management	300856(76)	Knowledge Entrepreneurship
7.	Management	300857(76)	Finance Management
8.	Management	300858(76)	Project Planning, Management & Evaluation
9.	Mechanical Engg.	300859(37)	Safety Engineering
10.	Computer Science & Engg.	300801(22)	Bio Informatics
11.	Mechanical Engg.	300802(37)	Energy Conservation & Management
12.	Nanotechnology	300803(47)	Nanotechnology
13.	Management	300804(76)	Intellectual Property Rights
14.	Mechanical Engg.	300805(37)	Value Engineering
15.	Civil Engg.	300806(20)	Disaster Management
16.	Civil Engg.	300807(20)	Construction Management
17.	Civil Engg.	300808(20)	Ecology and Sustainable Development
18.	Chem. Engg.	300809(19)	Non Conventional Energy Sources
19.	Electrical Engg.	300810(24)	Energy Auditing and Management
20.	Mechanical Engg.	300811(37)	Managing Innovation & Entrepreneurship
21.	Information Technology	300812(33)	Biometrics
22.	Information Technology	300813(33)	Information Theory & Control
23.	Computer Science & Engg.	300814(22)	Supply Chain Management
24.	Computer Science & Engg.	300815(22)	Internet & Web Technology
25.	Electrical Engg.	300816(24)	Electrical Estimation and Costing
26.	Electrical& Electronics Engg.	300817(25)	Non Conventional Energy Sources

Note (1) - 1/4th of total strength of students subject to minimum

Note (2) - 1/4th of total strength of students is required to offer an elective in the college in a particular academic session.