

Sant Gadge Baba Amravati University, Amravati

DIRECTION

No.12 /2015

Date : 27/08/2015

Subject :- Examinations leading to the Diploma/Advance Diploma/ Degree in the subjects Farm Equipment and Machinery and Vehicle Testing of B. Voc. courses.

Whereas, the University Grants Commission, New Delhi vide its D.O.No.F.2-2/2014 (B.Voc.), dated 16/5/2014 has granted approval for starting the B.Voc. Degree programme in the subjects Farm Equipment & Machinery, and Vehicle Testing to Late Bhaskarrao Shingne Arts College, Khamgaon from the academic session 2014-2015,

AND

Whereas, the Academic Council in its meeting held on 29.9.2014 vide Item No. 52 has granted affiliation to the said college for starting the courses under the U.G.C.B.Voc. Degree programme in the subjects Farm Equipment & Machinery, and Vehicle Testing from the academic session 2014-2015,

AND

Whereas, the Hon'ble Vice-Chancellor has constituted the Ad-hoc Committee on 16/9/2014 under the Chairmanship of Hon'ble Dean, Faculty of Science for preparing draft Scheme of teaching & examinations, draft Syllabus, and other details for the subjects Farm Equipment & Machinery, and Vehicle Testing B.Voc. degree course, and also deciding Faculty and Board of Studies for respective courses sanctioned to the college,

AND

Whereas, the Deans' Committee under the chairmanship of Hon'ble Vice-Chancellor in its meeting held on dated 7/4/2015 has considered the guidelines of U.G.C. for introduction of Bachelor of Vocation (B.Voc.) degree programme in the University and the colleges under the National Skills Qualification Framework (N.S.Q.F.) scheme and decided to forward the recommendations of the Ad-hoc Committee to the Faculty regarding the draft Schemes of teaching & examination, draft syllabi, provisions to be incorporated in the draft Ordinance, Board of Studies and Faculty of the B.Voc. degree programme,

AND

Whereas, the draft Syllabi, Scheme of teaching & examinations as prepared and recommended by the Ad-hoc Committee were placed before the Faculty of Engineering & Technology in its meeting held on 15/4/2015 and the Faculty resolved to accept and recommended to the Academic Council to constitute an independent "Faculty of Vocational Studies" for the B.Voc. degree Course,

AND

Whereas, the Academic Council in its meeting held on 6/5/2015 vide Item No. 53 has considered the guidelines of U.G.C. for introduction of Bachelor of Vocation (B.Voc.) degree programme in the University and the colleges under the National Skills Qualification Framework (N.S.Q.F.) scheme, while considering the recommendations of the Ad-hoc Committee regarding draft Schemes, draft syllabi and other provisions to be incorporated in the draft Ordinance of B.Voc. degree course to the said college and council resolved as under :-

- i) Recommended to Management Council to institute the degree in the University.
- ii) Approved the recommendations of syllabus of the General Components prepared by the Ad-hoc Committee
- iii) The Course will be in the Faculty of Engineering & Technology.

iv) Hon'ble Vice-Chancellor shall take the necessary actions u/s 14 (7) & 14 (8) of the Maharashtra Universities Act, 1994 regarding the legislation of the Course.

AND

Whereas, the decision of the Academic Council was placed before the Ad-hoc Committee in its meeting held on 26/6/2015, and the Committee recommended to the faculty as under :-

“The scheme of examinations along with the syllabi of the subjects (i) Farm Equipment & Machinery and (ii) Vehicle Testing of B.Voc. Degree Course and the provisions to be incorporated in the Ordinance as per U.G.C. Guidelines.”

AND

Whereas, the Faculty of Engineering & Technology in its meeting held on 16/7/2015 vide Item No. 36 has accepted the draft Scheme of teaching & examinations, draft Syllabi and detail provisions to be incorporated in the Ordinance in the subjects of Farm Equipment & Machinery, and Vehicle Testing of the B.Voc. degree course and recommended to the Academic Council for further consideration and approval,

AND

Whereas, the Hon'ble Vice-Chancellor on 14/8/2015 has accepted the recommendations of the Faculty of Engineering & Technology regarding the provisions to be incorporated in the draft Ordinance along with the draft Scheme of teaching & examinations and the draft Syllabi of the subjects (i) Farm Equipment & Machinery, and (ii) Vehicle Testing of the B.Voc. degree courses under Section 14 (7) of the Maharashtra Universities Act, 1994,

AND

Whereas, the Scheme of teaching & examinations and other provisions for the B.Voc. Degree course is required to be regulated by an Ordinance/Regulation and preparing the Ordinance/Regulation for the said course is time consuming process,

AND

Whereas, the admissions of the students in the above said course are to be made in the concerned colleges of the University from the academic session 2014-2015 and onwards,

Now, therefore, I, Dr. M.K.Khedkar, the Hon'ble Vice-Chancellor of Sant Gadge Baba Amravati University, Amravati in exercise of the powers conferred upon me under Sub-Section 8 of section 14 of the Maharashtra Universities Act, 1994, do hereby direct as under :-

- 1) This Direction may be called “Examinations leading to the Diploma/Advance Diploma/Degree in the subjects Farm Equipment and Machinery, and Vehicle Testing of B.Voc. Degree Courses” in the Faculty of Engineering & Technology , Direction, 2015.
2. This direction shall come into force with effect from the academic sessions as shown below:
 - (i) academic session 2014-2015 for Semester I & II
 - (ii) academic session 2015-2016 for Semester III & IV
 - (iii) academic session 2016-2017 for Semester V & VI
3. Notwithstanding the integrated nature of a course spread over more than one academic year, the Ordinances in force at the time a student joins a course shall hold good only for the examination held during or at the end of the academic year. Nothing in these Ordinances shall be deemed to debar the University from amending the ordinances subsequently and the amended ordinances, if any, shall apply to all the students whether old or new.
4. Bachelor of Vocation (B. Voc.) is launched under the scheme of University Grants Commission on skill development based higher education leading to Bachelor of Vocation (B. Voc.) degree with multiple exits as Diploma/Advanced Diploma under the National Skill Qualification framework. The B.Voc. programme incorporate specific job roles and their

National Occupational Standards along broad based general education. The following shall be the examinations levels that are leading to the Diploma/ Advance Diploma/ Degree of Bachelor of Vocation namely :-

- (i) the B.Voc. Part-I Examination (Leading to Diploma in Farm Equipment and Machinery/ Vehicle Testing)
 - (ii) the BVoc. Part-II Examination (Leading to Advance Diploma Farm Equipment and Machinery/ Vehicle Testing) and
 - (iii) the B.Voc. Final Examination (Leading to Degree of Bachelor of Vocation in Farm Equipment and Machinery/ Vehicle Testing)
5. This direction offers Bachelor degree programme under the vocational scheme formulated by UGC through establishing National Skill Qualification Framework (NSQF). This programme is of a three academic years course. If a student fails to continue studies of a Three year course, she/he will entitled to award diploma as per the Table I.

Table-I

Sr. No.	Semester	Award	Corresponding NSQF level
1.	Semester I & II	Diploma in Farm Equipment and Machinery/ Vehicle Testing	5
2.	Semester III & IV	Advanced Diploma in Farm Equipment and Machinery/ Vehicle Testing	6
3.	Semester V & VI	Bachelor Degree in Farm Equipment and Machinery/ Vehicle Testing	7

6. Admission and Eligibility:

6.1. The duration of the course leading to the Bachelor of Vocational Degree in Farm Equipment and Machinery & Vehicle Testing shall be as specified in the table I, and each year shall be divided into two semesters.

6.2. The admissions to the courses shall be made in the following manner:

Candidate seeking admission to Bachelor's degree in Farm Equipment and Machinery/ Vehicle Testing should have passed 10+2 from a recognized board or its equivalent. A student can also seek admission to this programme (Advance Diploma/ Degree) on the basis of qualifying examination in the respective subject from statutory University /affiliated college/ Institution/ autonomous college/ constituent College, whatever the case may be. As per the scheme of examination proposed by the Board of Studies.

Semester Scheme: Admissions covered under the Semester/12 month scheme are made in a year in one cycles, may be in the month of May or June or after the declaration of results entry level qualification examination.

6.3. A candidate seeking admission to the course leading to the award of a Bachelor of Vocation Degree shall fulfill any of the following conditions:

Passed senior secondary examination on the pattern of 10+2 in any discipline, from a recognized Board of Education or 3-Year Diploma from the Board of Technical Education, any State of India, after Matriculation or an equivalent examination recognized by the University for advance Diploma/ Degree.

7. Subject to his/her compliance with the provisions of this Direction and other directions pertaining to Examination in force from time to time, the applicant for admission, at the end of the course of study of a particular semester/session, to an Examination specified in column (1) of the table below, shall be eligible to appear if,
- he/she satisfies with the conditions in the table and the provisions thereunder.
 - he/she complies with the provisions of the ordinance pertaining to the Examination in general from time to time.

TABLE-II

Name of Exam	The student should have passed the Exam.	The Student should have satisfactorily completed the following semester	The student should have passed following examination
01	02	03	04
First Semester	XII standard Examination or equivalent	.....	.....
Second Semester	.....	I Semester	.....
Third Semester	.....	II Semester	2/3rd heads of I & II Sem. combined together
Fourth Semester	.....	III Semester	- - - -
Fifth Semester	I & II Semester	IV Semester	2/3rd heads of III & IV Sem. combined together
Sixth Semester	-----	V Semester	-----

8. The schemes of teaching and examinations shall be as provided under Appendix – A to F appended with this direction.
9. The fees structure shall be as prescribed by the University from time to time.
10. The assessment for the general education component should be done by the university as per their prevailing standards and procedures. The assessment for the skill development components should necessarily focus on practical demonstrations of the skills acquired. The University shall like to consult the respective Sector Skill Council for designing the examination and assessment pattern for the skill development components. The university may also consider using the designated assessors of Sector Skill Councils/industry associations for the conduct of practical assessment. The system of evaluation will be as follows: As a part of internal assessment, each assignment/test/viva-voce/project will be evaluated in terms of marks/ grades. If the mark system offered by the Sector Skill Councils/industry associations them the marks of separate assignments and the final (semester-end) examination will be added together and then converted into a grade and later a grade point average. Results will be declared for each semester and the final examination will give total grades and grade point average.

11. The computation of Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) of an examinee shall be as given below:-

The marks will be given in all examinations which will include college/ **industrial** assessment marks and the total marks for each Theory / Practical shall be converted into Grades as per Table III

SGPA shall be calculated based on Grade Points corresponding to Grade as given in Table III and the Credits allotted to respective Theory / Practical shown in the scheme for respective semester.

SGPA shall be computed for every semester and CGPA shall be computed only in VI semester. The CGPA of VI semester shall be calculated based on SGPA of V and SGPA of VI semester as per following computation :-

$$\text{SGPA} = \frac{C_1 \times G_1 + C_2 \times G_2 + \dots + C_n \times G_n}{C_1 + C_2 + \dots + C_n}$$

Where, C_1 = Credit of individual Theory / Practical
 G_1 = Corresponding Grade Point obtained in the respective Theory / Practical

$$\text{CGPA} = \frac{(\text{SGPA})_V \times (\text{Cr})_V + (\text{SGPA})_{VI} \times (\text{Cr})_{VI}}{(\text{Cr})_V + (\text{Cr})_{VI}}$$

Where, $(\text{SGPA})_V$ = SGPA of V Semester
 $(\text{Cr})_V$ = Total Credits for V Semester
 $(\text{SGPA})_{VI}$ = SGPA of VI Semester
 $(\text{Cr})_{VI}$ = Total Credits for VI Semester

CGPA equal to 6.00 and above shall be considered as equivalent to First Class which shall be mentioned on Grade Card of VI Semester as a foot note.

TABLE III
THEORY and PRACTICAL

Grade	Percentage of Marks	Grade Points
AA	$80 \leq \text{Marks} \leq 100$	10
AB	$70 \leq \text{Marks} \leq 80$	9
BB	$60 \leq \text{Marks} \leq 70$	8
BC	$55 \leq \text{Marks} \leq 60$	7
CC	$50 \leq \text{Marks} \leq 55$	6
CD	$45 \leq \text{Marks} \leq 50$	5
DD	$40 \leq \text{Marks} \leq 45$	4
FF	$00 \leq \text{Marks} \leq 40$	0
ZZ	Absent in Examination	—

12. The list of successful candidates after the completion of the final year examination of the concerned programme shall be arranged in three divisions on the basis of the aggregate marks obtained in his Diploma/ Advance Diploma/Bachelor's degree:
- (i) Those who obtained CGPA 8.00 or more- First Class (Exemplary)
 - (ii) Those who obtain CGPA 7.50 or more but less than 8- First class with distinction.
 - (iii) Those who obtain CGPA 6 or more but less than 7.5- First Class.
 - (iv) Those who obtain CGPA 5.50 or more but less than 6.00 - Higher Second Class.
 - (v) Those who obtain CGPA 4.00 or more but less than 5.45 - Second Class.
 - (vi) Those who obtained Less than 4.00- Fail.
13. **Curriculum**
- a. The curriculum in each of the years of the programme would be a suitable mix of **General Education Components and Skill Development Components**.
 - b. The University should develop the curriculum in consultation with industry. The industry representatives should be an integral part of the academic bodies of the University/ college. While doing so, they should work towards aligning the skills components of the curriculum with the National Occupation Standards (N.O.S.s) developed by the respective Sector Skill Councils.
 - c. Monitoring, evaluation and updating of the curriculum needs to be done periodically in consultation with Sector Skill Councils/industry associations, keeping in view their requirements and changes in NOSs and monitored through Skill component development committee of the University.
 - d. The scope of the subjects shall be as indicated in the syllabi.
 - e. The medium of instruction and examination shall be English.
14. Provisions of Ordinance No.18 of 2001 in respect of an Ordinance to provide grace marks for passing in a Head of passing and improvement of Division (Higher Class) and getting distinction in the subject and condonation of deficiency of marks in a subject in all the faculties governed by this Direction.
15. **Examination and Minimum Pass Marks:**
- 15.1. Examinations of all Semesters of General Education Component will be held in as per the schedule of University on the dates notified by the University, however, the examinations for Skill component of the course should be conducted by the respective Sector Skill Councils. In case, there is no Sector Skill Council for a specific trade, the examination shall be conducted by an allied Sector Council or the Industry partner, under the vigilance of Skill component development committee of the university.
 - 15.2. Every candidate shall be examined in the subject(s) as per criteria laid down in the concerned Scheme of Examinations/Syllabus prescribed for the programme by the Academic Council from time to time.
 - 15.3. The minimum percentage of marks for passing any Semester examination shall be 40% in each paper (theory/practical/workshop/viva-voce/training report/project report as per scheme of examination and internal assessment/ sessionals, wherever applicable and provisions of ordinance no.6, under sub-clause 5, 8 , 10 and 32 shall be applicable to this Ordinance.
 - 15.4. The evaluation of work-shop/project reports/training reports and the conduct of practical examinations and viva-voce, etc. wherever applicable, shall be done by sector skill council/ Industry partner. The Examination for General Component will be conducted at the examination centre approved by the

University; however, for the skill component will be conducted at the examination centre identified by the sector skill council/ Industry partner in consultation with Skill component development committee of the university. Marks allotted to the students shall be submitted to the office of the Controller of Examinations within 15 days of the conduct of examinations as per method follow by Examination Section of the University. In the event to non-fulfillment of the above conditions, students of each Study centers will be marked as absent and result will be declared accordingly. The Study College may also invite examiners from Panel of Examiners prepared by the University Board of Studies in concern subject as per the existing norms for general component.

15.5. The provisions under the Ordinance No. 16 of 2007 shall be applicable regarding re-valuation for general component and for skill education component re-valuation/ re-assessment should be done by the respective sector skill council/ Industry partner as per the mechanism instrumented by them and submitted the marks to the controller of Examination within the 8 days.

15.6. If in case he/she is unable to pass assessments design and instituted by respective sector skill council/ Industry partner will entitled to avail two additional re-assessment attempts only after the completion of an intensive bridge course offered by the respective sector skill council/ Industry partner.

16. Shifting from one course to another course:

The students who are pursuing any of the equivalent courses from any statutory University/ Institute/ College/Board as a regular student and unable to continue by any justified reason shall be entitled to get admitted to this programme, as the case may be, provided all such candidates shall be examined as per the scheme of examination/ scheme of equivalence approved by the board of studies from time to time.

17. Miscellaneous Provisions:

17.1. Skill component development committee:

There shall be a Skill Component Development Committee at the University level shall be constituted by Hon,ble Vice-Chancellor as under:

- i) Dean of the respective Faculty (Chairman).
- ii) One member nominated by concern Board of Studies (Member).
- iii) One member nominated by board of Examination (Member).
- iv) One member nominated by respective Sector Skill Council/ Industry partner (Member).
- v) One member nominated by Controller of Examination (Member).
- vi) One member nominated by Head of the Institute of respective subject study center of statutory University /affiliated College/ Institution/ autonomous college/ constituent College, whatever the case may be (Member).

Duties and responsibilities of the Skill Component development Committee shall be as under:

- a) To develop skill component in collaboration with respective sector skill council/ Industry partner.
- b) Monitoring, evaluation and updating of the curriculum to be done periodically in consultation with Sector Skill Councils/industry associations and align the skills components of the curriculum with the National Occupation Standards (NOOSs) developed by the respective Sector Skill Councils
- c) To approve timetable for skill component examinations.

- d) Monitoring of examinations in collaboration with Sector Skill Councils/Industry Associations.
- e) To decide the award of Joint certificate if demand by the student.
- f) Submission of marks of skill component to the University Examination Section.
- g) To remove the difficulties if any faced during implementation of the skill component examination and report it to Hon'ble Vice-chancellor for further action.
- h) Any other matter as it think fit for the effective implementation of the course.

17.2. As soon as possible, after the termination of the examination the Controller of Examinations shall publish a list of candidates who have passed the Semester examination, as the case may be as per rule.

17.3. The University after the completion of course, will award the diploma /advance diploma/ degree to the eligible students ONLY on payment of the prescribed fees. If the student is found to be not eligible even after completing the programme, University shall have right to cancel/with-hold his/her final result and the student shall have no legal right to claim the refund of fee or any financial or non-financial compensation.

17.4. Notwithstanding the integrated nature of the course(s) which is/are spread over more than one academic year the Ordinance in force at the time a student joins the course shall hold good only for the examination held during or at the end of the academic year and nothing in this Ordinance shall be deemed to debar the University from amending the Ordinance and the amended Ordinance, if any, shall apply to all the students whether old or new.

17.5. Any other provision not contained in the above shall be governed by the rules and regulations framed by the University from time to time.

Date : 26/08/2015

Sd/-
(Dr.M.K.Khedkar)
Vice-Chancellor

SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI
TEACHING & EXAMINATION SCHEME
DIPLOMA (ONE YEAR), ADVANCE DIPLOMA (TWO YEARS), BACHELOR OF VOCATION (B.VOC)
(THREE YEARS DEGREE COURSE – SEMESTER PATTERN)
Farm Equipment & Machinery (Semester I)

General Education Component Credits : 12
Skill Development Component Credits : 18

APPENDIX – A

Sr. No.	Sub. Code	Subjects	Teaching Scheme (Hrs/Week)			Credits	Examination Scheme					
			Th.	Pr.	Total		Duration (Hrs)	Max. Marks		Total Marks	Min. Passing Marks	
								External Marks	Internal Marks (IA)		Th.	Pr.
01	1BVCGEC1	Communication Skills – I	3	-	3	3	3	40	10	50	20	-
02	1BVCGEC2	Applied Computer Skills – I	3	-	3	3	3	40	10	50	20	-
03	1BVCFEM3	Basic of Automobile-I	3	-	3	3	3	40	10	50	20	-
04	1BVCFEM4	Workshop Technology-1	2	-	2	2	3	40	10	50	20	-
05	1BVCFEM5	Farm Tractor-1	3	-	3	3	3	40	10	50	20	-
06	1BVCGEC6	Communication Skills – 1- Lab.	-	3	3	3	2	25	25	50	-	20
07	1BVCGEC7	Applied Computer Skills – 1- Lab.	-	3	3	3	2	25	25	50	-	20
08	1BVCFEM8	Basic Automobile-1- Lab.	-	3	3	3	3	25	25	50	-	20
09	1BVCFEM9	Workshop Technology –1-Lab.	-	3	3	3	3	25	25	50	-	20
10	1BVCFEM10	Farm Tractor-1- Lab.	-	3	3	3	3	25	25	50	-	20
11	1BVCFEM11	Field work/ industrial visit	-	2	2	1			50	50	-	20
		Total	14	17	31	30		325	225	550	100	120

Notes:

1. Th = Theory; Practical; WS-Workshop/LB=Labs/FW-Field Work/ IA=Internal Assessment
2. Minimum marks for passing will be 40% of the total marks allotted to that paper/practical.
3. Credit \Calculations

One credit would mean equivalent of 15 periods of 60 minutes each, for Theory & Practical.

For internship / field work, the Credit Weight age for equivalent hours shall be 50% of that for lectures.

The Strength of Batch of Practical/Workshop/internship/Field visit/Production for Under Graduates classes shall be 16 with an additional; of 10% with the permission of Hon'ble Vice-Chancellor.

SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI

Farm Equipment & Machinery (Semester II)

General Education Component Credits : 12

Skill Development Component Credits : 18

APPENDIX - B

Sr. No.	Sub. Code	Subjects	Teaching Scheme (Hrs/Week)			Credits	Examination Scheme					
			Th.	Pr.	Total		Duration (Hrs)	Max. Marks		Total Marks	Min. Passing Marks	
								External Marks	Internal Marks (IA)		Th.	Pr.
01	2BVCGEC1	Communication Skills - II	3	-	3	3	3	40	10	50	20	-
02	2BVCGEC2	Applied Computer Skills - II	3	-	3	3	3	40	10	50	20	-
03	2BVCFEM3	Basic of Automobile-II	3	-	3	3	3	40	10	50	20	-
04	2BVCFEM4	Workshop Technology-II	2	-	2	2	3	40	10	50	20	-
05	2BVCFEM5	Farm Tractor-II	3		3	3	3	40	10	50	20	
06	2BVCGEC6	Communication Skills - II- Lab.	-	3	3	3	2	25	25	50	-	20
07	2BVCGEC7	Applied Computer Skills - II- Lab.	-	3	3	3	2	25	25	50	-	20
08	2BVCFEM8	Basic Automobile-II- Lab.	-	3	3	3	3	25	25	50	-	20
09	2BVCFEM9	Workshop Technology -II-Lab.	-	3	3	3	3	25	25	50	-	20
10	2BVCFEM10	Farm Tractor-II- Lab		3	3	3	3	25	25	50	-	20
11	2BVCFEM11	Field work/ industrial visit	-	2	2	1			50	50	-	20
		Total	14	17	31	30		325	225	550	100	120

Notes:

1. Th = Theory; Practical; WS-Workshop/LB=Labs/FW-Field Work/ IA=Internal Assessment
2. Minimum marks for passing will be 40% of the total marks allotted to that paper/practical.
3. Credit \Calculations

One credit would mean equivalent of 15 periods of 60 minutes each, for Theory & Practical.

For internship / field work, the Credit Weight age for equivalent hours shall be 50% of that for lectures.

The Strength of Batch of Practical/Workshop/internship/Field visit/Production for Under Graduates classes shall be 16 with an additional; of 10% with the permission of Hon'ble Vice-Chancellor.

General Education Component Credits : 12

Skill Development Component Credits : 18

APPENDIX - C

Sr. No.	Sub. Code	Subjects	Teaching Scheme (Hrs/Week)			Credits	Examination Scheme					
			Th.	Pr.	Total		Duration (Hrs)	Max. Marks		Total Marks	Min. Passing Marks	
								External Marks	Internal Marks (IA)		Th.	Pr.
01	3BVCGEC1	English & Communication Skill - III	3	-	3	3	3	40	10	50	20	-
02	3BVCGEC2	Applied Computer Skill - III	3	-	3	3	3	40	10	50	20	-
03	3BVCFEM3	Farm Machinery & Testing - I	3	-	3	3	3	40	10	50	20	-
04	3BVCFEM4	Farm Equipment & Machinery - I	2	-	2	2	3	40	10	50	20	-
05	3BVCFEM5	Farm Machinery Electrical System	3		3	3	3	40	10	50	20	
06	3BVCGEC6	Communication Skills - III- Lab.	-	3	3	3	2	25	25	50	-	20
07	3BVCGEC7	Applied Computer Skills - III- Lab.	-	3	3	3	2	25	25	50	-	20
08	3BVCFEM8	Farm Machinery Testing -I- Lab.	-	3	3	3	3	25	25	50	-	20
09	3BVCFEM9	Farm Equipment & Machinery - I-Lab.	-	3	3	3	3	25	25	50	-	20
10	3BVCFEM10	Farm Machinery Electrical Syst.-Lab.		3	3	3	3	25	25	50	-	20
11	3BVCFEM11	Field work/ industrial visit	-	2	2	1			50	50	-	20
		Total	14	17	31	30		325	225	550	100	120

Notes:

1. Th = Theory; Practical; WS-Workshop/LB=Labs/FW-Field Work/ IA=Internal Assessment

2. Minimum marks for passing will be 40% of the total marks allotted to that paper/practical.

3. Credit \ Calculations

One credit would mean equivalent of 15 periods of 60 minutes each, for Theory & Practical.

For internship / field work, the Credit Weight age for equivalent hours shall be 50% of that for lectures.

The Strength of Batch of Practical/Workshop/internship/Field visit/Production for Under Graduates classes shall be 16 with an additional; of 10% with the permission of Hon'ble Vice-Chancellor.

SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI

Farm Equipment & Machinery (Semester IV)

General Education Component Credits : 12

Skill Development Component Credits : 18

APPENDIX - D

Sr. No.	Sub. Code	Subjects	Teaching Scheme (Hrs/Week)			Credits	Examination Scheme					
			Th.	Pr.	Total		Duration (Hrs)	Max. Marks		Total Marks	Min. Passing Marks	
								External Marks (Th)	Internal Marks (IA)		Th.	Pr.
01	4BVCGEC1	Communication Skills - IV	3	-	3	3	3	40	10	50	20	-
02	4BVCGEC2	Soft Skill Development - I	3	-	3	3	3	40	10	50	20	-
03	4BVCFEM3	Farm Machinery & Testing - II	3	-	3	3	3	40	10	50	20	-
04	4BVCFEM4	Farm Equipment & Machinery - II	2	-	2	2	3	40	10	50	20	-
05	4BVCFEM5	Farm Machinery Electronics System	3		3	3	3	40	10	50	20	
06	4BVCGEC6	Communication Skills - IV- Lab.	-	3	3	3	2	25	25	50	-	20
07	4BVCGEC7	Soft Skill Development-I- Lab.	-	3	3	3	2	25	25	50	-	20
08	4BVCFEM8	Farm Machinery & Testing-II- Lab.	-	3	3	3	3	25	25	50	-	20
09	4BVCFEM9	Farm Equipment & Machinery - II-Lab.	-	3	3	3	3	25	25	50	-	20
10	4BVCFEM10	Farm Machinery Electronics System - Lab.		3	3	3	3	25	25	50	-	20
11	4BVCFEM11	Field work/ industrial visit	-	2	2	1			50	50	-	20
		Total	14	17	31	30		325	225	550	100	120

Notes:

1. Th = Theory; Practical; WS-Workshop/LB=Labs/FW-Field Work/ IA=Internal Assessment

2. Minimum marks for passing will be 40% of the total marks allotted to that paper/practical.

3. Credit \ Calculations

One credit would mean equivalent of 15 periods of 60 minutes each, for Theory & Practical.

For internship / field work, the Credit Weight age for equivalent hours shall be 50% of that for lectures.

The Strength of Batch of Practical/Workshop/internship/Field visit/Production for Under Graduates classes shall be 16 with an additional; of 10% with the permission of Hon'ble Vice-Chancellor.

SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI

Farm Equipment & Machinery (Semester V)

General Education Component Credits : 12

Skill Development Component Credits : 18

APPENDIX - E

Sr. No.	Sub. Code	Subjects	Teaching Scheme (Hrs/Week)			Credits	Examination Scheme					
			Th.	Pr.	Total		Duration (Hrs)	Max. Marks		Total Marks	Min. Passing Marks	
								External Marks	Internal Marks (IA)		Th.	Pr.
01	5BVCGEC1	Communication Skills - V	3	-	3	3	3	40	10	50	20	-
02	5BVCGEC2	Soft Skill Development - II	3	-	3	3	3	40	10	50	20	-
03	5BVCFEM3	Automation in Farm Machinery	3	-	3	3	3	40	10	50	20	-
04	5BVCFEM4	Machine Element	3		3	3	3	40	10	50	20	
05	5BVCGEC5	Communication Skills - V- Lab.	-	3	3	3	2	25	25	50	-	20
06	5BVCGEC6	Soft Skill Development - II- Lab.	-	3	3	3	2	25	25	50	-	20
07	5BVCFEM7	Automation in Farm Machinery- Lab.	-	4	4	4	3	25	25	50	-	20
08	5BVCFEM8	Machine Element- Lab.		4	4	4	3	25	25	50		20
09	5BVCFEM9	Seminar & Project Phase - I	-	4	4	4	3	75	75	150	-	60
		Total	12	18	30	30		335	215	550	80	140

Notes:

1. Th = Theory; Practical; WS-Workshop/LB=Labs/FW-Field Work/ IA=Internal Assessment

2. Minimum marks for passing will be 40% of the total marks allotted to that paper/practical.

3. Credit \Calculations.

One credit would mean equivalent of 15 periods of 60 minutes each, for Theory & Practical.

For internship / field work, the Credit Weight age for equivalent hours shall be 50% of that for lectures.

The Strength of Batch of Practical/Workshop/internship/Field visit/Production for Under Graduates

classes shall be 16 with an additional; of 10% with the permission of Hon'ble Vice-Chancellor.

SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI

Farm Equipment & Machinery (Semester VI)

General Education Component Credits : 12

Skill Development Component Credits : 18

APPENDIX - F

Sr. No.	Sub. Code	Subjects	Teaching Scheme (Hrs/Week)			Credits	Examination Scheme					
			Th.	Pr.	Total		Duration (Hrs)	Max. Marks		Total Marks	Min. Passing Marks	
								External Marks	Internal Marks (IA)		Th.	Pr.
01	6BVCGEC1	Industrial Organization & Management	3	-	3	3	3	40	10	50	20	-
02	6BVCGEC2	Soft Skill Development - III	3	-	3	3	3	40	10	50	20	-
03	6BVCFEM3	CAD -CAM	3	-	3	3	3	40	10	50	20	-
04	6BVCFEM4	Mechatronics Engineering	3		3	3	3	40	10	50	20	
05	6BVCGEC5	Industrial Organization & Management-Lab.	-	3	3	3	2	25	25	50	-	20
06	6BVCGEC6	Soft Skill Development - III-Lab.	-	3	3	3	2	25	25	50	-	20
07	6BVCFEM7	CAD-CAM- Lab.	-	4	4	4	3	25	25	50	-	20
08	6BVCFEM8	Mechatronics Engineering- Lab.		4	4	4	3	25	25	50		20
09	6BVCFEM9	Project Phase - II	-	4	4	4	3	75	75	150	-	60
		Total	12	18	30	30		335	215	550	80	140

Notes:

1. Th = Theory; Practical; WS-Workshop/LB=Labs/FW-Field Work/ IA=Internal Assessment

2. Minimum marks for passing will be 40% of the total marks allotted to that paper/practical.

3. Credit \ Calculations

One credit would mean equivalent of 15 periods of 60 minutes each, for Theory & Practical.

For internship / field work, the Credit Weight age for equivalent hours shall be 50% of that for lectures.

The Strength of Batch of Practical/Workshop/internship/Field visit/Production for Under Graduates

classes shall be 16 with an additional; of 10% with the permission of Hon'ble Vice-Chancellor.

SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI
TEACHING & EXAMINATION SCHEME
DIPLOMA (ONE YEAR), ADVANCE DIPLOMA (TWO YEARS), BACHELOR OF VOCATION (B.VOC)
(THREE YEARS DEGREE COURSE - SEMESTER PATTERN)

Vehicle Testing (Semester I)

General Education Component Credits : 12
Skill Development Component Credits : 18

APPENDIX - A

Sr. No.	Sub. Code	Subjects	Teaching Scheme (Hrs/Week)			Credits	Examination Scheme					
			Th.	Pr.	Total		Duration (Hrs)	Max. Marks		Total Marks	Min. Passing Marks	
								External Marks	Internal Marks (IA)		Th.	Pr.
01	1BVCGEC1	Communication Skill - I	3	-	3	3	3	40	10	50	20	-
02	1BVCGEC2	Applied Computer Skill - I	3	-	3	3	3	40	10	50	20	-
03	1BVCVT3	Basic of Automobile-I	3	-	3	3	3	40	10	50	20	-
04	1BVCVT4	Workshop Technology-1	2	-	2	2	3	40	10	50	20	-
05	1BVCVT5	Basic of Vehicle Testing -1	3		3	3	3	40	10	50	20	
06	1BVCGEC6	Communication Skills - 1- Lab.	-	3	3	3	2	25	25	50	-	20
07	1BVCGEC7	Applied Computer Skills - 1- Lab.	-	3	3	3	2	25	25	50	-	20
08	1BVCVT8	Basic Automobile-I- Lab.	-	3	3	3	3	25	25	50	-	20
09	1BVCVT9	Workshop Technology -1-Lab.	-	3	3	3	3	25	25	50	-	20
10	1BVCVT10	Basic of Vehicle Testing-1- Lab.		3	3	3	3	25	25	50	-	20
11	1BVCVT11	Field work/ Industrial visit	-	2	2	1			50	50	-	20
		Total	14	17	31	30		325	225	550	100	120

Notes:

1. Th = Theory; Practical; WS-Workshop/LB=Labs/FW-Field Work/ IA=Internal Assessment
2. Minimum marks for passing will be 40% of the total marks allotted to that paper/practical.
3. Credit \ Calculations
 One credit would mean equivalent of 15 periods of 60 minutes each, for Theory & Practical.
 For internship / field work, the Credit Weight age for equivalent hours shall be 50% of that for lectures.
 The Strength of Batch of Practical/Workshop/internship/Field visit/Production for Under Graduates classes shall be 16 with an additional; of 10% with the permission of Hon'ble Vice-Chancellor.

SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI
TEACHING & EXAMINATION SCHEME
DIPLOMA (ONE YEAR), ADVANCE DIPLOMA (TWO YEARS), BACHELOR OF VOCATION (B.VOC)
(THREE YEARS DEGREE COURSE – SEMESTER PATTERN)

Vehicle Testing (Semester II)

General Education Component Credits : 12
Skill Development Component Credits : 18

APPENDIX – B

Sr. No.	Sub. Code	Subjects	Teaching Scheme (Hrs/Week)			Credits	Examination Scheme					
			Th.	Pr.	Total		Duration (Hrs)	Max. Marks		Total Marks	Min. Passing Marks	
								External Marks	Internal Marks (IA)		Th.	Pr.
01	2BVCGEC1	Communication Skill – II	3	-	3	3	3	40	10	50	20	-
02	2BVCGEC2	Applied Computer Skill – II	3	-	3	3	3	40	10	50	20	-
03	2BVCVT3	Basic of Automobile-II	3	-	3	3	3	40	10	50	20	-
04	2BVCVT4	Workshop Technology-II	2	-	2	2	3	40	10	50	20	-
05	2BVCVT5	Basic of Vehicle Testing –II	3		3	3	3	40	10	50	20	
06	2BVCGEC6	Communication Skills – II- Lab.	-	3	3	3	2	25	25	50	-	20
07	2BVCGEC7	Applied Computer Skills – II- Lab.	-	3	3	3	2	25	25	50	-	20
08	2BVCVT8	Basics of Automobile-II- Lab.	-	3	3	3	3	25	25	50	-	20
09	2BVCVT9	Workshop Technology –II-Lab.	-	3	3	3	3	25	25	50	-	20
10	2BVCVT10	Basic of Vehicle Testing-II- Lab.		3	3	3	3	25	25	50	-	20
11	2BVCVT11	Field work/ Industrial visit	-	2	2	1			50	50	-	20
		Total	14	17	31	30		325	225	550	100	120

Notes:

1. Th = Theory; Practical; WS-Workshop/LB=Labs/FW-Field Work/ IA=Internal Assessment
2. Minimum marks for passing will be 40% of the total marks allotted to that paper/practical.
3. Credit \ Calculations
 One credit would mean equivalent of 15 periods of 60 minutes each, for Theory & Practical.
 For internship / field work, the Credit Weight age for equivalent hours shall be 50% of that for lectures.
 The Strength of Batch of Practical/Workshop/internship/Field visit/Production for Under Graduates classes shall be 16 with an additional; of 10% with the permission of Hon'ble Vice-Chancellor.

SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI
TEACHING & EXAMINATION SCHEME
DIPLOMA (ONE YEAR), ADVANCE DIPLOMA (TWO YEARS), BACHELOR OF VOCATION (B.VOC)
(THREE YEARS DEGREE COURSE – SEMESTER PATTERN)

Vehicle Testing (Semester III)

General Education Component Credits : 12

Skill Development Component Credits : 18

APPENDIX – C

Sr. No.	Sub. Code	Subjects	Teaching Scheme (Hrs/Week)			Credits	Examination Scheme					
			Th.	Pr.	Total		Duration (Hrs)	Max. Marks		Total Marks	Min. Passing Marks	
								External Marks	Internal Marks (IA)		Th.	Pr.
01	3BVCGEC1	Communication Skill – III	3	-	3	3	3	40	10	50	20	-
02	3BVCGEC2	Applied Computer Skill – III	3	-	3	3	3	40	10	50	20	-
03	3BVCVT3	Engine system – I	3	-	3	3	3	40	10	50	20	-
04	3BVCVT4	Testing of Engine System – I	2	-	2	2	3	40	10	50	20	-
05	3BVCVT5	Mechatronics Engineering - I	3		3	3	3	40	10	50	20	
06	3BVCGEC6	Communication Skills – III- Lab.	-	3	3	3	2	25	25	50	-	20
07	3BVCGEC	Applied Computer Skills – III- Lab.	-	3	3	3	2	25	25	50	-	20
08	3BVCVT8	Engine System – I- Lab.	-	3	3	3	3	25	25	50	-	20
09	3BVCVT9	Testing of Engine System – I- Lab.	-	3	3	3	3	25	25	50	-	20
10	3BVCVT10	Mechatronics Engineering – I-Lab.		3	3	3	3	25	25	50	-	20
11	3BVCVT11	Field work/ Industrial visit	-	2	2	1			50	50	-	20
		Total	14	17	31	30		325	225	550	100	120

Notes:

1. Th = Theory; Pr=Practical; WS-Workshop/LB=Labs/FW-Field Work/ IA=Internal Assessment
2. Minimum marks for passing will be 40% of the total marks allotted to that paper/practical.
3. Credit \ Calculations

One credit would mean equivalent of 15 periods of 60 minutes each, for Theory & Practical.

For internship / field work, the Credit Weight age for equivalent hours shall be 50% of that for lectures.

The Strength of Batch of Practical/Workshop/internship/Field visit/Production for Under Graduates classes shall be 16 with an additional; of 10% with the permission of Hon'ble Vice-Chancellor.

SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI
TEACHING & EXAMINATION SCHEME
DIPLOMA (ONE YEAR), ADVANCE DIPLOMA (TWO YEARS), BACHELOR OF VOCATION (B.VOC)
(THREE YEARS DEGREE COURSE – SEMESTER PATTERN)

Vehicle Testing (Semester IV)

General Education Component Credits : 12
Skill Development Component Credits : 18

APPENDIX – D

Sr. No.	Sub. Code	Subjects	Teaching Scheme (Hrs/Week)			Credits	Examination Scheme					
			Th.	Pr.	Total		Duration (Hrs)	Max. Marks		Total Marks	Min. Passing Marks	
								External Marks	Internal Marks (IA)		Th.	Pr.
01	4BVCGEC1	Communication Skill – IV	3	-	3	3	3	40	10	50	20	-
02	4BVCGEC2	Soft Skill Development - I	3	-	3	3	3	40	10	50	20	-
03	4BVCVT3	Engine system – II	3	-	3	3	3	40	10	50	20	-
04	4BVCVT4	Testing of Engine System – II	2	-	2	2	3	40	10	50	20	-
05	4BVCVT5	Mechatronics Engineering - II	3		3	3	3	40	10	50	20	
06	4BVCGEC6	Communication Skills – IV-Lab.	-	3	3	3	2	25	25	50	-	20
07	4BVCGEC7	Soft Skill Development –I-Lab.	-	3	3	3	2	25	25	50	-	20
08	4BVCVT8	Engine System – II-Lab.	-	3	3	3	3	25	25	50	-	20
09	4BVCVT9	Testing of Engine System – II- Lab.	-	3	3	3	3	25	25	50	-	20
10	4BVCVT10	of Mechatronics Engineering – II-Lab.		3	3	3	3	25	25	50	-	20
11	4BVCVT11	Field work/ Industrial visit	-	2	2	1			50	50	-	20
		Total	14	17	31	30		325	225	550	100	120

Notes:

1. Th = Theory; Practical; WS-Workshop/LB=Labs/FW-Field Work/ IA=Internal Assessment
2. Minimum marks for passing will be 40% of the total marks allotted to that paper/practical.
3. Credit \ Calculations

One credit would mean equivalent of 15 periods of 60 minutes each, for Theory & Practical.

For internship / field work, the Credit Weight age for equivalent hours shall be 50% of that for lectures.

The Strength of Batch of Practical/Workshop/internship/Field visit/Production for Under Graduates classes shall be 16 with an additional; of 10% with the permission of Hon'ble Vice-Chancellor.

SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI
TEACHING & EXAMINATION SCHEME
DIPLOMA (ONE YEAR), ADVANCE DIPLOMA (TWO YEARS), BACHELOR OF VOCATION (B.VOC)
(THREE YEARS DEGREE COURSE – SEMESTER PATTERN)

Vehicle Testing (Semester V)

General Education Component Credits : 12
Skill Development Component Credits : 18

APPENDIX – E

Sr. No.	Sub. Code	Subjects	Teaching Scheme (Hrs/Week)			Credits	Examination Scheme					
			Th.	Pr.	Total		Duration (Hrs)	Max. Marks		Total Marks	Min. Passing Marks	
								External Marks	Internal Marks (IA)		Th.	Pr.
01	5BVCGEC1	Communication Skills – V	3	-	3	3	3	40	10	50	20	-
02	5BVCGEC2	Soft Skill Development – II	3	-	3	3	3	40	10	50	20	-
03	5BVCVT3	Vehicle System	3	-	3	3	3	40	10	50	20	-
04	5BVCVT4	Testing Vehicle System – I	3		3	3	3	40	10	50	20	
05	5BVCGEC5	Communication Skills – V- Lab.	-	3	3	3	2	25	25	50	-	20
06	5BVCGEC6	Soft Skill Development –II- Lab.	-	3	3	3	2	25	25	50	-	20
07	5BVCVT7	Vehicle System-Lab.	-	4	4	4	3	25	25	50	-	20
08	5BVCVT8	Testing Vehicle System – I- Lab.		4	4	4	3	25	25	50		20
09	5BVCVT9	Seminar & Project Phase - I	-	4	4	4	3	75	75	150	-	60
		Total	12	18	30	30		335	215	550	80	140

Notes:

1. Th = Theory; Practical; WS-Workshop/LB=Labs/FW-Field Work/ IA=Internal Assessment
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SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI
TEACHING & EXAMINATION SCHEME
DIPLOMA (ONE YEAR), ADVANCE DIPLOMA (TWO YEARS), BACHELOR OF VOCATION (B.VOC)
(THREE YEARS DEGREE COURSE - SEMESTER PATTERN)

Vehicle Testing (Semester VI)

General Education Component Credits : 12

Skill Development Component Credits : 18

APPENDIX - F

Sr. No.	Sub. Code	Subjects	Teaching Scheme (Hrs/Week)			Credits	Examination Scheme					
			Th.	Pr.	Total		Duration (Hrs)	Max. Marks		Total Marks	Min. Passing Marks	
								External Marks	Internal Marks (IA)		Th.	Pr.
01	6BVCGEC1	Industrial Organization & Management	3	-	3	3	3	40	10	50	20	-
02	6BVCGEC2	Soft Skill Development - III	3	-	3	3	3	40	10	50	20	-
03	6BVCVT3	Motor Vehicle Rule	3	-	3	3	3	40	10	50	20	-
04	6BVCVT4	Testing of Vehicle System - II	3		3	3	3	40	10	50	20	
05	6BVCGEC5	Industrial Organization & Management-Lab.	-	3	3	3	2	25	25	50	-	20
06	6BVCGEC6	Soft Skill Development - III-Lab.	-	3	3	3	2	25	25	50	-	20
07	6BVCVT7	Motor Vehicle Rule-Lab.	-	4	4	4	3	25	25	50	-	20
08	6BVCVT8	Testing of Vehicle System - II - Lab.		4	4	4	3	25	25	50		20
09	6BVCVT9	Project Phase - II	-	4	4	4	3	75	75	150	-	60
		Total	12	18	30	30		335	215	550	80	140

Notes:

1. Th = Theory; Practical; WS-Workshop/LB=Labs/FW-Field Work/ IA=Internal Assessment

2. Minimum marks for passing will be 40% of the total marks allotted to that paper/practical.

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The Strength of Batch of Practical/Workshop/internship/Field visit/Production for Under Graduates classes shall be 16 with an additional; of 10% with the permission of Hon'ble Vice-Chancellor.