

## GRADING AND GRADE POINT AVERAGE

- 17.(1) Grade Point (GP) in a course will be the total marks obtained by a student out of 100 divided by 10.
- (2) Credit Point (CP) in a course will be GP multiplied by the credit hours.
- (3) Total Credit Points = Sum of the credit points secured.
- (4) The Credit Points earned will be zero if the GP in a paper is less than 5.00
- (5) Grade Point Average (GPA)= Sum of the Total credit Points earned divided by the sum of Credit Hours.
- (6) The corresponding ranking of OGPA with respect to traditional scoring system of Division Ranking shall be as follows:
- |                 |                                   |
|-----------------|-----------------------------------|
| 8.000 and above | - First Division with Distinction |
| 7.000 - 7.999   | - First Division                  |
| 6.000 - 6.999   | - Second Division                 |
| 5.000 - 5.999   | - Pass                            |

Formats of Detailed Marks Certificate (DMC) and Degree Transcript are at Annexure II and III.

## PART VI

## SYLLABUS AND COURSES

## SEMESTERWISE DISTRIBUTION OF COURSES

## FIRST PROFESSIONAL

## SEMESTER-I

VAN-111	Veterinary Gross Anatomy-I (Osteology, Arthrology & Biomechanics)	1+2=3
VPB-111	Veterinary Physiology-I ( Blood, Cardiovascular & Excretory Systems, Body Fluids)	2+1=3
VPB-112	General Veterinary Biochemistry	1+1=2
LPM-111	Livestock Production Management-I ( General Principles and Ruminants)	3+1=4
AGB-111	Biostatistics and Computer Application	2+1=3
ANN-111	Principles of Animal Nutrition & Feed Technology	2+1=3
<b>Total Credits</b>		<b>11+7=18</b>

## SEMESTER- II

VAN-121	Veterinary Gross Anatomy-II (Myology, Neurology, Angiology & Aesthesiology)	2+2=4
VPB-121	Veterinary Physiology-II (Neuromuscular, Digestive & Respiratory Systems)	2+1=3
VPB-122	Veterinary Intermediary Metabolism	2+1=3
LPM-121	Fodder Production & Grassland Management	1+1=2

LPM-122	Livestock Production Management-II (Monogastric and Laboratory Animals)	1+1=2
AGB-121	Principles of Animal Genetics and Population Genetics	2+1=3
ANN-121	Applied Animal Nutrition-I (Ruminants)	2+1=3
<b>Total Credits</b>		<b>12+8=20</b>

**SECOND PROFESSIONAL  
SEMESTER- III**

VAN-211	Veterinary Histology & Embryology	2+2=4
VPA-211	General Veterinary Parasitology & Helminthology	3+1=4
VPP-211	General Veterinary Pathology	1+1=2
VMC-211	General Veterinary Microbiology	1+1=2
LPM-211	Avian Production Management	1+1=2
ANN-211	Applied Animal Nutrition-II (Non-ruminants, Poultry & Laboratory Animals)	2+1=3
AGB-211	Livestock and Poultry Breeding	2+1=3
LFP-211	Livestock Farm Practice (Non-Credit)	0+1=1
<b>Total Credits</b>		<b>12+9=21</b>

**SEMESTER IV**

VAN-221	Veterinary Splanchnology & Applied Anatomy	1+1=2
VPB-221	Veterinary Physiology-III (Endocrinology, Reproduction, Growth & Environmental Physiology)	3+1=4
VPA-221	Veterinary Entomology & Acarology	1+1=2
VPA-222	Veterinary Protozoology	2+1=3
VMC-221	Veterinary Immunology and Serology	1+1=2
VPP-221	Systemic Veterinary Pathology	2+1=3
LPM-221	Commercial Poultry Production and Hatchery Management	1+1=2
LPM-222	Livestock Production Management-III (Regional interest)	1+1=2
LFP-221	Livestock Farm Practice (Non-Credit)	0+1=1
<b>Total Credits</b>		<b>12+9=21</b>

**THIRD PROFESSIONAL  
SEMESTER -V**

VPT-311	General and Systemic Veterinary Pharmacology	2+1=3
VMC-311	Systematic Veterinary Bacteriology & Mycology	2+1=3
VPP-311	Special Veterinary Pathology	2+1=3
VPE-311	Milk and Meat Hygiene, Food Safety and Public Health	2+1=3
LPT-311	Milk and Milk Products Technology	1+1=2
LPT-312	Abattoir Practice and Animal Product Technology	1+1=2
VAE-311	Principles and Techniques of Veterinary and A.H. Extension	2+1=3
<b>Total Credits</b>		<b>12+7=19</b>

**SEMESTER- VI**

VPT-321	Veterinary Neuropharmacology	2+1=3
VMC-321	Systematic Veterinary Virology	2+1=3
VPP-321	Avian Pathology	1+1=2
VPP-322	Aquatic Animal Diseases, Health Care and Management	1+1=2
VPE-321	Veterinary Epidemiology and Zoonosis	2+1=3
LPT-321	Meat Science	1+1=2
VPB- 321	Animal Biotechnology	2+1=3
VAE-321	Livestock Economics, Marketing and Business Management	2+1=3
<b>Total Credits</b>		<b>13+8=21</b>

**FOURTH PROFESSIONAL**

**SEMESTER- VII**

VPT-411	Veterinary Chemotherapy	2+0=2
VSR-411	General Veterinary Surgery, Anaesthesiology and Diagnostic Imaging	2+2=4
VGO-411	Veterinary Gynecology	2+1=3
VMD-411	Veterinary Clinical Medicine-I (General & Systemic)	2+1=3
VMD-412	Veterinary Preventive Medicine-I (Bacterial, Fungal & Rickettsial Diseases)	2+0=2
VLD- 411	Veterinary Clinical Biochemistry and Laboratory	

	Diagnosis-I	0+1=1
VCP-411	Veterinary Clinical Practice	0+5=5
<b>Total Credits</b>		<b>10+10=20</b>

**SEMESTER- VIII**

VPT-421	Veterinary Toxicology	2+0=2
VSR-421	Regional Veterinary Surgery	2+1=3
VGO-421	Veterinary Obstetrics	1+1=2
VMD-421	Veterinary Clinical Medicine-II (Metabolic & Deficiency Diseases)	2+0=2
VMD-422	Veterinary Preventive Medicine -II (Viral & Parasitic Diseases)	2+0=2
VLD- 421	Veterinary Clinical Biochemistry and Laboratory Diagnosis-II	0+1=1
VCP-421	Veterinary Clinical Practice	0+5=5
TVC-421	Veterinarian in Society (Non Credit)	1+0=1
<b>Total: Credits</b>		<b>10+8=18</b>

**FIFTH PROFESSIONAL  
SEMESTER- IX**

VSR-511	Veterinary Orthopedics and Lameness	1+1=2
VMD-511	Animal Welfare, Ethics & Jurisprudence	2+0=2
VMD-512	Zoo/Wild Animal Breeding, Management, Nutrition and Health Care	1+1=2
VMD-513	Pet Animal Breeding Management, Nutrition and Health Care	1+1=2
VGO-511	Veterinary Andrology and Reproductive Techniques	1+1=2
VPE-511	Environment and Environmental Hygiene	2+1=3
VAE-511	Livestock Entrepreneurship	1+0=1
VCP-511	Veterinary Clinical Practice	0+5=5
<b>Total Credits</b>		<b>9+10=19</b>

## SEMESTER-WISE DISTRIBUTION OF THEORY AND PRACTICAL

Professional Year	Semester	Theory	Practical	Total
First	I	11	7	18
	II	12	8	20
Second	III	12	9	21*
	IV	12	9	21*
Third	V	12	7	19
	VI	13	8	21
Fourth	VII	10	10	20
	VIII	10	8	18**
Fifth	IX	9	10	19
		101	76	177

\* 1 credit (0+1) each for two courses on Livestock Farm Practice (non credit) included

\*\* 1 credit (1+0) for Veterinarian in Society (non credit) included.

Other Non-Credit Course (4 Credits)

Tracking Programmes – Two programmes of 2 Credits each = 4 Credits

## SUBJECT-WISE COURSES AND CREDIT HOURS

COURSE NO.	COURSE TITLE	CREDIT HOURS	SEMESTER
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**1. Veterinary Anatomy**

VAN-111	Veterinary Gross Anatomy-I (Osteology, Arthrology & Biomechanics)	1+2	I
VAN-121	Veterinary Gross Anatomy-II (Myology, Neurology, Angiology & Aesthesiology)	2+2	II
VAN-211	Veterinary Histology & Embryology	2+2	III
VAN-221	Veterinary Splanchnology & Applied Anatomy	1+1	IV
<b>Total Credits</b>		<b>6+7=13</b>	

**2. Veterinary Physiology and Biochemistry**

VPB-111	Veterinary physiology-I ( Blood, Cardiovascular & Excretory Systems and Body Fluids)	2+1	I
VPB-112	General Veterinary Biochemistry	1+1	I

VPB -121	Veterinary Physiology-II (Neuromuscular Digestive & Respiratory Systems)	2+1	II
VPB-122	Veterinary Intermediary Metabolism	2+1	II
VPB-221	Veterinary Physiology-III (Endocrinology, Reproduction Growth & Environmental Physiology)	3+1	IV
VPB- 321	Animal Biotechnology (To be taught jointly with VMC & VGO)	2+1	VI
<b>Total Credits</b>		<b>12+6</b>	<b>=18</b>

### 3. Veterinary Pharmacology & Toxicology

VPT-311	General and Systemic Veterinary Pharmacology	2+1	V
VPT-321	Veterinary Neuropharmacology	2+1	VI
VPT-411	Veterinary Chemotherapy	2+0	VII
VPT-421	Veterinary Toxicology	2+0	VIII
<b>Total Credits</b>		<b>8+2=</b>	<b>10</b>

### 4. Veterinary Parasitology

VPA-211	General Veterinary Parasitology & Helminthology	3+1	III
VPA-221	Veterinary Entomology and Acarology	1+1	IV
VPA-222	Veterinary Protozoology	2+1	IV
<b>Total Credits</b>		<b>6+3=9</b>	

### 5. Veterinary Microbiology

VMC-211	General Veterinary Microbiology	1+1	III
VMC-221	Veterinary Immunology and Serology	1+1	IV
VMC-311	Systematic Veterinary Bacteriology and Mycology	2+1	V
VMC-321	Systematic Veterinary Virology	2+1	VI
<b>Total Credits</b>		<b>6+4=10</b>	

### 6. Veterinary Pathology

VPP-211	General Veterinary Pathology	1+1	III
VPP-221	Systemic Veterinary Pathology	2+1	IV
VPP-311	Special Veterinary Pathology	2+1	V
VPP-321	Avian Pathology	1+1	VI
VPP-322	Aquatic Animal Diseases, Health Care and Management (To be taught jointly with VMD and LPM)	1+1	VI

Associated with the teaching of VLD-411, VLD-421, VMD-512 & VMD-513

<b>Total Credits</b>		<b>7+5</b>	<b>=12</b>
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**7. Veterinary Public Health & Epidemiology**

VPE-311	Milk & Meat Hygiene, food safety and Public health	2+1	V
VPE-321	Veterinary Epidemiology and Zoonosis	2+1	VI
VPE-511	Environment and Environmental Hygiene	2+1	IX
<b>Total Credits</b>		<b>6+3=9</b>	

**8. Animal Nutrition**

ANN-111	Principles of Animal Nutrition & Feed Technology	2+1	I
ANN-121	Applied Animal Nutrition-I(Ruminants)	2+1	II
ANN-211	Applied Animal Nutrition-II (Non-ruminants, Poultry & Laboratory Animals)	2+1	III

Associated with the teaching of VMD-512 & VMD-513

**Total Credits** **6+3 =9**

**9. Animal Genetics & Breeding**

AGB-111	Biostatistics and Computer Application	2+1	I
AGB-121	Principles of Animal Genetics and Population Genetics	2+1	II
AGB-211	Livestock and Poultry Breeding	2+1	III

Associated with the teaching of VMD-512 & VMD-513

**Total Credits** **6+3= 9**

**10. Livestock Production Management**

LPM-111	Livestock Production Management-I (General Principles and Ruminants)	3+1	I
LPM-121	Fodder Production & Grassland Management	1+1	II
LPM-122	Livestock Production Management-II( Monogastric and Laboratory Animals)	1+1	II
LPM-211	Avian Production Management	1+1	III
LPM-221	Commercial Poultry Production and Hatchery Management	1+1	IV
LPM-222	Livestock Production Management (Regional interest) (Optional: to be developed on the basis of regional interest)	1+1	IV

Associated with the teaching of VPP-322. VMD-512 & VMD-513

**Total Credits** **8+6 =14**

**11. Livestock Products Technology**

LPT-311	Milk and Milk Products Technology	1+1	V
LPT-312	Abattoir Practice and Animal Product Technology	1+1	V
LPT-321	Meat Science	1+1	VI
<b>Total Credits</b>		<b>3+3=6</b>	

**12. Veterinary Gynaecology & Obstetrics**

VGO-411	Veterinary Gynaecology	2+1	VII
VGO-421	Veterinary Obstetrics	1+1	VIII
VGO-511	Veterinary Andrology & Reproductive Techniques	1+1	IX
<b>Total Credits</b>		<b>4+3= 7</b>	

**13. Veterinary Surgery & Radiology**

VSR-411	General Veterinary Surgery, Anaesthesiology and Diagnostic Imaging	2+2	VII
VSR-421	Regional Veterinary Surgery	2+1	VIII
VSR-511	Veterinary Orthopedics and Lameness	1+1	IX
Associated with the teaching of VMD-512 & VMD-513)			
<b>Total Credits</b>		<b>5+4= 9</b>	

**14. Veterinary Medicine**

VMD-411	Veterinary Clinical Medicine-I (General & Systemic)	2+1	VII
VMD-412	Veterinary Preventive Medicine -I (Bacterial, Fungal & Rickettsial Diseases)	2+0	VII
VMD-421	Veterinary Clinical Medicine -II (Metabolic & Deficiency Diseases)	2+0	VIII
VMD-422	Veterinary Preventive Medicine -II (Viral & Parasitic Diseases)	2+0	VIII
VMD-511	Animal Welfare, Ethics & Jurisprudence	2+0	IX
VMD-512	Zoo / Wild Animal Breeding, Management, Nutrition and Health Care	1+1	IX
VMD-513	Pet Animal Breeding, Management, Nutrition and Health Care	1+1	IX
(To be taught jointly with AGB, LPM, ANN, VPP and VSR)			
(To be taught jointly with AGB, LPM, ANN, VPP and VSR)			
Associated with the teaching of VPP-312			
<b>Total Credits</b>		<b>12+3= 15</b>	

**15. Veterinary & Animal Husbandry Extension Education**

VAE-311	Principles & Techniques of Veterinary and A. H. Extension	2+1	V
VAE -321	Livestock Economics, Marketing and Business Management	2+1	VI
VAE -511	Livestock Entrepreneurship	1+0	IX



## Annexure IV

## LIST OF PAPERS &amp; CONSTITUENT COURSES FOR ANNUAL EXAMINATION

<b>FIRST PROFESSIONAL</b>	<b>CONSTITUENT COURSES</b>
Vety. Anatomy Paper-I	VAN-111 & VAN-121
Vety. Physiology Paper- I	VPB-111 & VPB -121
Vety. Biochemistry Paper-I	VPB-112 & VPB-122
Animal Genetics & Breeding Paper-I	AGB-111 & AGB-121
Livestock Production Management Paper-I	LPM-111 LPM-121& LPM-122
Animal Nutrition Paper-I	ANN-111 & ANN-121
<b>SECOND PROFESSIONAL</b>	<b>CONSTITUENT COURSES</b>
Vety. Anatomy Paper- II	VAN-211 & VAN-221
Vety. Physiology Paper-II	VPB- 221
Vety. Parasitology Paper-I	VPA-211, VPA-221 & VPA-222
Vety. Microbiology Paper-I	VMC-211 & VMC-221
Vety. Pathology Paper-I	VPP-211 & VPP-221
Livestock Production Management Paper-II	LPM-211, LPM-221& LPM-222
Animal Genetics & Breeding Paper-II	AGB-211
Animal Nutrition Paper-II	ANN-211
<b>THIRD PROFESSIONAL</b>	<b>CONSTITUENT COURSES</b>
Vety. Pharmacology Paper-I	VPT-311 & VPT-321
Vety. Microbiology Paper-II	VMC-311 & VMC-321
Vety Pathology Paper-II .	VPP-311, VPP-321 & VPP-322
Vety. Public Health & Epidemiology Paper-I	VPE-311 & VPE-321
Vety. Biochemistry Paper-II	VPB-321
Livestock Products Technology Paper-I	LPT-311, LPT-312 & LPT-321
Vety. & A.H. Extension Paper-I	VAE-311 & VAE-321

<b>FOURTH PROFESSIONAL</b>	<b>CONSTITUENT COURSES</b>
Vety. Pharmacology Paper-II	VPT-411 & VPT-421
Vety. Surgery & Radiology Paper-I	VSR-411 & VSR-421
Vety. Gynaecology & Obstetrics Paper-I	VGO-411 & VGO-421
Vety. Clinical Medicine Paper-I	VMD-411 & VMD-421
Vety. Preventive Medicine Paper-I	VMD-412 & VMD-422
Vety. Laboratory Diagnosis Paper-I	VLD-411 & VLD-421
Veterinary Clinical Practice Paper-I	VCP-411 & VCP-421
<b>FIFTH PROFESSIONAL</b>	<b>CONSTITUENT COURSES</b>
Vety. Surgery & Radiology Paper-II	VSR-511
Vety. Gynaecology & Obstetrics Paper-II	VGO-511
Vety. Clinical Medicine Paper-II	VMD -511, VMD -512 & VMD-513
Vety. Public Health & Epidemiology Paper-II	VPE-511
Vety. & A.H. Extension Paper-II	VAE-511
Veterinary Clinical Practice Paper-II	VCP-511

**Total External Papers: 34**

**Total Courses: 65**

## Annexure V

## List of courses of Bachelor of Veterinary Science and Animal Husbandry (B.V.Sc. &amp; A.H.)

VAN-111	Veterinary Gross Anatomy-I (Osteology, Arthrology & Biomechanics))	VPT-311	General and Systemic Veterinary Pharmacology
VAN-121	Veterinary Gross Anatomy-II (Myology, Neurology, Angiology & Aesthesiology)	VPT-321	Veterinary Neuropharmacology
VAN-211	Veterinary Histology and Embryology	VPT-411	Veterinary Chemotherapy
VAN-221	Veterinary Splanchnology & Applied Anatomy	VPT-421	Veterinary Toxicology
VPB-111	Veterinary Physiology-I (Blood, Cardiovascular & Excretory Systems and Body Fluids)	VPE-311	Milk and Meat Hygiene, Food Safety and Public Health
VPB-112	General Veterinary Biochemistry	VPE-321	Veterinary Epidemiology and Zoonosis
VPB-121	Veterinary Physiology-II (Neuromuscular, Digestive, and Respiratory Systems)	VPE-511	Environment and Environmental Hygiene
VPB-122	Veterinary Intermediary Metabolism	VAE-311	Principles and Techniques Veterinary & A. H. Extension
VPB-221	Veterinary Physiology-III (Endocrinology, Reproduction, Growth and Environmental Physiology)	VAE-321	Livestock Economics, Marketing and Business Management
VPB-321	Animal Biotechnology	VAE-511	Livestock Entrepreneurship
LPM-111	Livestock Production Management-I (General Principles & Ruminants)	LPT-311	Milk and Milk Products Technology
LPM-121	Fodder Production and Grassland Management	LPT-312	Abattoir Practices and Animal Product Technology
LPM-122	Livestock Production Management-II (Monogastric & Laboratory Animals)	LPT-321	Meat Science
LPM-211	Avian Production Management	VSR-411	General Veterinary Surgery, Anaesthesiology and Diagnostic Imaging
LPM-221	Commercial Poultry Production & Hatchery Management	VSR-421	Regional Veterinary Surgery
LPM-222	Livestock Production Management (Regional Interest)	VSR-511	Veterinary Orthopedics and Lameness
AGB-111	Biostatistics and computer Application	VGO-411	Veterinary Gynaecology
AGB-121	Principles of Animal Genetics and Population Genetics	VGO-421	Veterinary obstetrics
AGB-211	Livestock and Poultry Breeding	VGO-511	Veterinary Andrology and Reproductive Techniques
ANN-111	Principles of Animal Nutrition and Feed Technology	VMD-411	Veterinary Clinical Medicine-I (General and Systemic)
ANN-121	Applied Nutrition-I (Ruminants)	VMD-412	Veterinary Preventive Medicine-I (Bacterial, Fungal & Rickettsial Diseases)
ANN-211	Applied Nutrition-II (Non-ruminants, Poultry & Laboratory Animals)	VMD-421	Veterinary Clinical Medicine-II (Metabolic & Deficiency Diseases)
VPA-211	General Veterinary Parasitology & Helminthology	VMD-422	Veterinary Preventive Medicine-I (Viral & Parasitic Diseases)
VPA-221	Veterinary Entomology and Acarology	VMD-511	Animal Welfare, Ethics and Jurisprudence
VPA-222	Veterinary Protozoology	VMD-512	Zoo/Wild Animal Breeding, Management, Nutrition & Health Care
VMC-211	General Veterinary Microbiology	VMD-513	Pet Animal Breeding, Management, Nutrition Care and Health Care
VMC-221	Veterinary Immunology and serology	VLD-411	Veterinary Clinical Biochemistry and Laboratory Diagnosis-I
VMC-311	Systematic Veterinary Bacteriology and Mycology	VLD-421	Veterinary Clinical Biochemistry and Laboratory Diagnosis-II
VMC-321	Systematic Veterinary Virology	VCP-411	Veterinary Clinical Practice
VPP-211	General Veterinary Pathology	VCP-421	Veterinary Clinical Practice
VPP-221	Systemic Veterinary Pathology	VCP-511	Veterinary Clinical Practice
VPP-311	Special Veterinary Pathology	TVC-421	Veterinarian in Society
VPP-321	Avian Pathology		Internship Programme in X <sup>th</sup> Semester for six calendar months
VPP-322	Aquatic Animal Diseases, Health Care and Management		

## Calculation of Overall Grade Point Average (OGPA)

OGPA = Total Points earned divided by sum of Paper credits

- The points awarded in paper will be the total marks obtained by a student out of 100 divided by 10.
- Points secured in a paper will be Points in a paper multiplied by credits of the paper.
- Total Points earned = sum of the points secured.
- The points earned will be zero if the points in a paper are less than 5.000.
- Percentage of Marks = OGPA multiplied by 100 then divided by 10

**NOTE:****1. Evaluation**

Overall performance of the student in various examinations including the internal and annual/ board examination by procuring 50% in theory and practical separately shall be the criterion of passing or failing in a paper and not in the internal examination conducted in each semester. A student is required to secure an aggregate of 50% marks in theory and an aggregate of 50% marks in practical to be declared to have passed in a paper. If a student fails in one paper only, he/she is eligible to appear in the compartment examination of that paper which includes external theory and practical examination.

**2. Division**

Pass	OGPA 5.000 and above
Second Division	OGPA 6.000 – 6.999
First Division	OGPA 7.000 – 7.999
First Division with Distinction	OGPA 8.000 and above.

3. In case a student has passed a course through Compartment Examination, the same be mentioned against the particular course in the Transcript.

Dr. ANUP BHAUMIK, Secy.  
[ADVT III/4/Exty./141/08]