

PART II

Statutory Notifications containing Rules and Orders issued by all Ministries and Division of the Government of Pakistan and their Attached and Subordinate Offices and the Supreme Court of Pakistan

GOVERNMENT OF PAKISTAN

MINISTRY OF INTER PROVINCIAL COORDINATION

Notification

Islamabad, the 23rd July, 2015

S.R.O.(687)/2015

In exercise of the powers conferred by section 23 of the Pakistan Veterinary Medical Council Act, 1996 (III of 1996), the Pakistan Veterinary Medical Council, with the previous sanction of the Federal Government, is pleased to make the following regulations, namely: -

CHAPTER-I

PRELIMINARY

1. Short title and commencement. - (1) These regulations may be called the Pakistan Veterinary Medical Council (Accreditation and Equivalence) Regulations, 2015.

(2) They shall come into force at once.

2. Definitions.- (1) In these regulations, unless there is anything repugnant in the subject or context,

- (a) "Act" means the Pakistan Veterinary Medical Council Act, 1996 (III of 1996);
- (b) "Committee" means the Accreditation and Equivalence Committee;
- (c) "Appendix" means an appendix to these regulations;
- (d) "institution" means any college or institution within Pakistan which is engaged or intends to engage in imparting veterinary education or which trains for or grants or both trains for and grants, degrees or diplomas in veterinary medicine and animal sciences;

- (e) “doctor of veterinary medicine” or “DVM” means a person having, under the Act and regulations made thereunder, basic composite veterinary qualification including animal husbandry subjects and registered as such under the Act;
- (f) "veterinary student” means a student enrolled in DVM or postgraduate or doctorate or post doctorate programmes of veterinary disciplines and registered by the Council under the Act and regulations made thereunder; and
- (g) “competent authority” means President of the Council.
- (2) The words and expressions used but not defined in these regulations shall have the same meaning as assigned to them in the Act.

CHAPTER-II RECOGNITION

3. Constitution of the Committee.- (1) There shall be an Accreditation and Equivalence Committee consisting of the following members, namely:-

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| (a) The ex-President Pakistan Veterinary Medical Council of immediately preceding tenure, if not re-elected for the next tenure; | Chairperson |
| (b) Not exceeding three members of known integrity and professional academicians to be nominated by the competent authority; | Members |
| (c) One member from each Provincial Livestock and Dairy Development Department to be nominated by the competent authority; | Members |
| (d) Not exceeding two members from private sector having basic degree in veterinary sciences to be nominated by the competent authority; | Members |
| (e) Registrar PVMC; | Member-cum-Secretary |

(2) The competent authority shall appoint any of the members as Convener of the Committee.

4. Evaluation report.- (1) Subject to these regulations, the faculty or institution shall provide to the Committee self evaluation report as set out in **Appendix-I** on various laid down essentials that are to be evaluated for accreditation.

(2) The essentials under sub-regulation (1) in respect of the faculty or institution shall be with regard, but not limited, to its;

- (a) organization;
- (b) finances;
- (c) physical facilities and equipment;
- (d) clinical resources;
- (e) library and learning resources;
- (f) students;
- (g) admissions;
- (h) faculty;
- (i) curriculum; and
- (j) research and continued veterinary education facilities.

(3) For the purpose of examining veracity of self evaluation report submitted under sub-regulation (1), the competent authority shall, for site visit, appoint a team comprising not less than three members from members of the Committee, nominating one member from the appointed team as its chairperson.

(4) During site visit under sub-regulation (3), the team shall make detailed evaluation of each required essential and also meet and interview all the persons involved in operation and implementation of various undergraduate and postgraduate degrees' programmes.

(5) On conclusion of site visit under sub-regulation (4), chairperson of the site visit team, in close consultation with other members, shall prepare its draft report on findings and recommendations and discuss it with the concerned Vice Chancellor, Dean or, as the case may be, Principal.

(6) In light of the discussions under sub-regulation (5), a final report shall be submitted by chairperson of the site team to the Council's Secretariat for consideration of Executive Committee.

(7) Where the Executive Committee makes a decision on the report under sub-regulation (6), Secretariat of the Council shall issue letter of accreditation, or rejection, as the case may be.

(8) The decision of the Executive Committee under sub-regulations (7) shall be placed in next meeting of the Council for information.

5. Committee to review equivalence of basic and postgraduate degree etc.-

The Committee as and when required shall review and make recommendations concerning equivalence of basic and postgraduate degrees offered by a foreign university, faculty or college in comparison to Doctor of Veterinary Medicine composite degree and postgraduate degrees and diplomas that stand recognized by the Council.

6. Initial recognition of an institution.- (1) An institution, desirous of embarking on imparting veterinary and animal sciences education shall seek permission in the form of a no objection certificate (NOC) from the Council for the site's approval in compliance to sub-regulation (2) of regulation 16, whereafter the institution shall complete essential requirements as set out in **Appendix-I** and make application for initial recognition under the Act and regulations made thereunder.

(2) On receipt of application under sub-regulation (1) from a new institution for recognition and permission for admission of students, the Council shall proceed in the manner as set out in **Appendix-II**.

(3) No student shall be admitted before recognition of the institution, and the institution shall, at the time of making application for recognition, certify that it has not admitted students in the proposed institution.

(4) After completion of due process of accreditation, the Council shall grant recognition to the institution under the Act and regulations made thereunder.

(5) Subject wise number of teaching faculty in an institution for recognition or continuation of its recognition shall be as set out in **Appendix-I**. An institution desirous of running additional classes in the evening shall be required to have not less than thirty percent additional faculty for all pre-clinical and clinical subjects.

7. Sub-campus or branch.- (1) A recognition granted shall be restricted to a specified place and campus and for DVM programme only. No sub-campus or branch shall be established, unless separately recognized under the Act and the regulations made thereunder. Similarly, separate permission shall be required for running postgraduate and doctorate programmes.

(2) No institution shall open any sub-campus or branch etc, unless first batch of its students has successfully passed out after accreditation.

8. Renewal of initial recognition.- A new institution shall initially be accredited for the first two years of DVM program. The renewal of recognition shall depend upon availability of requisite facilities for the next three years of DVM degree program. It shall be responsibility of the institute to apply to the Council six months prior to next scheduled visit for the purpose of maintaining continuation of recognition. The institution shall submit fresh self evaluation report and the requisite fee to the Council as set out in **Appendix-III** for visit of the Committee. After three years of successful running of concerned programme the Committee will visit the institution again and submit recommendations to the Council for award of permanent accreditation or otherwise.

9. Periodic visits.- (1) A comprehensive inspection of all accredited institutions shall be carried out after every five years. However, the competent authority may order a surprise comprehensive inspection of any institution at anytime.

(2) The Committee on its visit to a university, college or institution may evaluate the students, through any suitable means and recommend extra coaching for the concerned students under intimation to the Council. Once such recommendations are approved by the Executive Committee their implementation shall be binding on the concerned university, college or institution.

10. Accreditation of postgraduate and doctorate programs.- Initial accreditation to an institution shall be considered to be for DVM degree program only, unless permission is categorically accorded to run postgraduate or doctorate programmes in any specific subject. An accredited institution desirous of starting postgraduate or doctorate program shall make application to the Council for each subject and discipline separately by submitting a self evaluation report and specified fee as set out in **Appendix-III**.

11. Limitation on annual admissions.- Number of annual admissions in an institution shall be determined and decided by the Committee after inspecting the facilities available in accordance with these regulations. Maximum number of students allowed in morning session may not exceed one hundred and twenty five and in the evening session may not exceed seventy five. The Council may, however, increase the upper limit commensurate with available resources on recommendations

of the Committee. The decision of the Committee shall be binding on the institution. Disregard of the committee's decision will render the institution liable to action under the Act and regulations made thereunder.

12. Enhancement of annual admissions.- A veterinary institution in public and private sector initially shall not have more than forty students annually irrespective of the facilities available. However, after successful completion of two years, an institution may make application to Council for increase in annual admission on payment of fee as set out in **Appendix-III**. The Committee shall visit and verify availability of resources for enhanced number of students and submit its recommendation through a report to the Council's Secretariat for decision by the Executive Committee. On recommendations of the Committee the Executive Committee shall decide about the increase in annual admissions of that institution.

13. Change of name of institution.- An institution desirous of changing its name shall forward the proposed name along with a fee, as set out in **Appendix-III**, to the Council which shall be considered by the Executive Committee. Approved name and abbreviation shall be communicated by the Council to the institution for adoption and to the Federal Government for notification under section 9 of the Act.

CHAPTER-III LEGAL REQUIREMENTS

14. Legal status of veterinary institution.- A veterinary institution shall be legal entity registered under the relevant laws.

15. Financial stability.- It has to be demonstrated that the institution is financially stable and has the ability to sustain a regular functioning and efficient working.

CHAPTER-IV SITE AND INFRASTRUCTURE

16. College and faculty building. (1) An institution and faculty shall have the infrastructure as set out in **Appendix-I** and shall, among other requirements, include offices for faculty, administrators and supporting staff, laboratories, clinics, students' classrooms and laboratories, lecture halls sufficiently large to accommodate

a full year's class, an auditorium sufficiently large to accommodate the entire students and faculty body and other space appropriate for conduct of research.

(2) Site selected for an institution shall be in peri-urban or rural areas where a large number of livestock is easily available for practical and clinical activities and not in those areas where there is a restriction on keeping livestock by respective district administration. It has to be suitable and sustainable from an academic point of view and has to be easily accessible to students and general public. Site characteristics and availability of external linkages, topography, plot size, permissible floor space index, ground coverage, building height, road access, availability of public transport, electric supply, water supply, sewage connection and communication facilities shall be adequate and appropriate and details thereof shall be supplied to the Council at the time of submission of application for recognition.

(3) The applicant institution shall own not less than sixteen kanals for campus and not less than ten acres for farms. The land for farm could be hired on long term lease.

(4) The institution shall have a fully functional well-stocked library, well-equipped laboratories, museums, dissection halls, lecture and tutorial halls, well-equipped medicine, surgery and reproduction clinics with sufficient requirements and hostel facility for boarding students, if any.

17. Number, qualifications and functions of faculty.- The recruitment and development of an institution's faculty shall take into account its mission, the diversity of its student body and the population that it serves. The number of faculty members in the subjects of basic sciences and in the clinical disciplines, to meet the needs of the educational program and the other missions of the veterinary institution, shall be as set out in **Appendix-I**.

18. Suspension and withdrawal of recognition.- Any failure to comply with these regulations shall result in issue of show cause notice, suspension of recognition or de-recognition of the institution as per provisions of the Act and regulations made thereunder.

19. Recognition of new institutions.- Only those institutions shall be recognized which fulfill the criteria as provided under these regulations on the basis of evaluation report of the Committee.

20. Repeal.- Pakistan Veterinary Medical Council (Accreditation and Equivalence Policy and Procedure) Regulations, 2001 are hereby repealed.

Appendix-I

[See regulations 4,6,16,17]

SELF EVALUATION REPORT

(a)

1. ORGANIZATION

The faculty or college requesting for accreditation, must be part of a recognized institution of higher learning (university). The Chief Administrative Officer or Dean/Principal and officer responsible for various affairs of faculty/college must be a veterinarian. There must be sufficient administrative staff to adequately manage the affairs of the institution. Associate or assistant Dean, Director, Heads of departments etc. must be identified and duties of each of them must be specified. The departmental arrangements need to operate on either of the two internationally accepted patterns, i.e. a department of each required discipline or departments pooled on various related sections.

Please provide the following required information:

A. UNIVERSITY AUTHORITIES

NAME OF UNIVERSITY _____

CHANCELLOR/RECTOR
(NAME AND DESIGNATION) _____

SENATE
(NAME AND DESIGNATION OF CHAIRPERSON) _____

SYNDICATE
(NAME AND DESIGNATION OF CHAIRPERSON) _____

ACADEMIC COUNCIL
(NAME AND DESIGNATION OF CHAIRPERSON) _____

BOARD OF FACULTY
NAME OF FACULTY/COLLEGE
CHAIRPERSON - PRINCIPAL/DEAN
(NAME OF CHAIRPERSON) _____

BOARD OF STUDIES
NAME OF DEPARTMENT
(NAME AND DESIGNATION OF CHAIRPERSON) _____

GIVE FULL DETAILS ON ALL OTHER
DEPARTMENTS _____

(USE SPACE ON REVERSE OR EXTRA SHEETS) _____

**B. REQUIRED DEPARTMENTS OF THE
FACULTY/COLLEGE**

1. **DEAN/PRINCIPAL' OFFICE**
 - (a) Administrative Section
 - (b) Academic

2. Department of Basic Sciences: comprising of the following Sections/Departments
 - a) Veterinary Anatomy and Histology
 - b) Veterinary Physiology
 - c) Veterinary Bio Chemistry

3. **Department of Pre-Clinical Studies: Comprising of the following Sections/ Departments:**
 - (a) Veterinary Pharmacology
 - (b) Veterinary Microbiology
 - (c) Veterinary Parasitology
 - (d) Veterinary Pathology

4. **Department of Clinical Studies : Comprising of the following Sections/ Department**
 - (a) Veterinary Medicine
 - (b) Surgery and Radiology
 - (c) Animal Reproduction/Theriogenology
 - (d) Preventive Veterinary Medicine and Public Health

5. **Department of Livestock Production and Management : Comprising of the following Sections/ Department:**
 - a) Animal Nutrition
 - b) Animal Breeding and Genetics
 - c) Poultry Science
 - d) Livestock management
 - e) Livestock Products Technology

6. **Department of continued Veterinary Education (CVE) and Extension: Comprising of the following Sections/ Departments**
 - a) Continued Veterinary Education (CVE)
 - b) Livestock Extension
 - c) Livestock Economics and marketing

These services may be taken from other Faculties of the University/nearby recognized college if available.

(c)

3. PHYSICAL FACILITIES AND EQUIPMENT

All aspects of the physical facilities must provide an appropriate learning environment. Classrooms, teaching laboratories, seminar rooms and other facilities should be clean, maintained in good condition and must be adequate in number, size and equipment for the intended instructional purposes and the number of students enrolled. Administrative and faculty offices, library facilities, research laboratories and storage space must be sufficient for the needs of the faculty and staff. An accredited faculty or college must obtain or be formally affiliated with an acceptable hospital for appropriate care and treatment of animals. Intensive care units, pharmacy, radiology, diagnostic support service and necropsy facilities must be provided to support the teaching hospital. Facilities for housing of animals used for teaching and research and appropriate isolation facilities must be provided. These facilities must be of acceptable standard as appropriate to the species and the infectious agent being studied or contained.

REQUIRED ACVCOMMODATION/PHYSICAL FACILITIES

(For offering a Basic DVM Degree)

1. **Common Use Buildings**

- (i) Dean/Principal's Office and Attached Facilities
- (ii) Conference Room
- (iii) Library
- (iv) College Hall to accommodate upto 400 persons (preferable but not essential)
- (v) 4-6 Lectures Rooms for 60 students
- (vi) Hostels for Boys and Girls (preferable but not essential)
- (vii) Sports Facilities for Indoor and Outdoor Games
- (viii) Cafeteria accommodating 100 persons (preferable but not essential)

2. **DEPARTMENTAL BUILDINGS**

OFFICE FOR STAFF

The accommodations for offices of staff in individual Departments must be provided depending staff strength as shown under Essential No.8 Faculty.

DEPARTMENT'S REQUIREMENTS:

The number of laboratories be according to the needs of each Department/ Section. The guidelines are as given below:

1. DEPARTMENT OF BASIC SCIENCES

a) Veterinary Anatomy and Histology

- | | | |
|-------|----------------------------------------|------------|
| (i) | Dissection hall with embalming room | 30 x 50 Ft |
| (ii) | Skeleton Lab. with store for bone sets | 20 x 40 Ft |
| (iii) | Histology and Embryology Lab. | 30 x 50 Ft |
| (iv) | Stores | 20 x 10 Ft |

b) Veterinary Physiology

- | | | |
|-------|---------------------------------------|------------|
| (i) | General Physiology Demonstration Lab. | 30 x 50 Ft |
| (iii) | Experimental Room | 20 x 10 Ft |
| (iv) | Research Lab. (preferable) | 30 x 10 Ft |
| (iv) | Stores | 20 x 10 Ft |

c) Veterinary Biochemistry

From available facilities in other Colleges/Faculties of the University or share space with Veterinary Physiology.

3. DEPARTMENT OF PRE- CLINICAL SUBJECTS

a) Veterinary Pharmacology

Lab. Facilities may be shared with Labs in Veterinary Physiology Section/Department.

b) Veterinary Microbiology

- | | | |
|--------|------------------------------------------------------------------------------|----------|
| (i) | Bacteriology and Microbiology Lab. | 30 x 40' |
| (ii) | Virology Lab (air conditioned preferable) | 30 x 10' |
| (iii) | Vet. Immunology Lab. | 30 x 20' |
| (iv) | Attached rooms for sterilization, cleaning and washing and media preparation | 10 x 10' |
| (v) | Walk-in cold room cultural room (preferable) | 30 x 10' |
| (vi) | Small/Lab. Animal room | 30 x 10' |
| (vii) | Research Lab. tissue culture room (preferable) | 30 x 10' |
| (viii) | Store | 15 x 10' |

c)	<u>Veterinary Parasitology</u>	
(i)	Demonstration Lab.	30 x 50'
(ii)	Research Lab. (preferable)	30 x 10'
(iii)	Store	15 x 10'
d)	Veterinary Pathology	
(i)	Histo-pathology Lab.	30 x 20'
(ii)	Clinical Pathology Lab.	30 x 20'
(iii)	Necropsy	
	a) Poultry postmortem room	30 x 10'
(iv)	Store	15 x 10'
(v)	Suitable sized incinerator to meet the needs of Faculty and the Veterinary Clinics	
3.	DEPARTMENT OF CLINICAL STUDIES	
a)	Veterinary Medicine	
(i)	Diagnostic room for small and large animals.	25 x 35'
(ii)	Clinical Diagnostic Lab.	30 x 10'
(iii)	Store	
b)	Veterinary Surgery and Radiology	
(i)	Practice hall for training in anesthesia and operation theatre	30 x 40'
(ii)	Small animal operation theatre	30 x 40'
(iii)	Preparation room	20 x 20'
(iv)	Stores	10 x 15'
(v)	X-Ray room with processing facilities.	20 x 20'
c)	Animal reproduction	
(i)	Semen laboratory	30 x 20'
(ii)	Phantom Hall	30 x 40'
(iii)	A.I. Section for training	30 x 40'
(iv)	Bull sheds 4-6 & cattle/buffalo sheds for 20	
(v)	Demonstration Lab. (preferable)	20 x 40'
(vi)	Store	15 x 10'
d)	Preventive Veterinary Medicine and Public Health	
(i)	Epidemiology laboratory	30 x 20'
(ii)	Store	15 x 10'

(Other required Labs. In Microbiology and Medicine can be shared)

4. DEPARTMENT OF LIVESTOCK PRODUCTION AND MANAGEMENT

a) Animal Nutrition

- | | | |
|------|----------------|----------------|
| (i) | Nutrition Lab. | 30 x 20' |
| (ii) | Store (two) | 15 x 10'(each) |

b) Animal Breeding and Genetics

- | | | |
|------|----------------------------------------|----------|
| (i) | Computer and Statistical Analysis Room | 30 x 20' |
| (ii) | Store. | 15 x 10' |

c) Poultry Husbandry Science

- | | | |
|-------|-------------------------------------------------------------------------|----------|
| (i) | Teaching Lab. | 30 x 20' |
| (ii) | Poultry Farm 1000 birds (layers & broiler)
with required facilities. | |
| (iii) | Store. | 15 x 10' |

d) Livestock Management

- | | | |
|-------|----------------------------------------|----------|
| (i) | Undergraduate Lab. | 30 x 20' |
| (ii) | Cattle and buffalo Farm 50-100 animals | |
| (iii) | Sheep & Goat Farm 50-100 each | |
| (iv) | Camel/Equine facility | |

e) Livestock Products Technology

- | | | |
|-------|--------------------------------------|---------------|
| (i) | Poultry Unit 50 -100 birds. | |
| (ii) | Meat Processing and Examination Room | 30 x 20' |
| (iii) | Other animal products Lab. | 30 x 20' |
| (iv) | Store | 15 x 10' each |

5. DEPARTMENT OF CONTINUED VETERINARY EDUCATION AND EXTENSION/ ECONOMICS/ MARKETING

- | | | |
|-----|-------------------------------------|----------|
| (i) | Audio-visual Aids room (preferable) | 30 x 10' |
|-----|-------------------------------------|----------|

6. HOSPITAL FACILITIES

As per details given under Essential No. 4 Clinical Resources for Teaching buildings and Hospitals.

A: Out door services

B: Indoor services

- For Large Animals
Small animals
Surgery
Obstetrics Gynecology
Medical treatment

NOTE:

1. As a thumb rule a class room must provide 10-15 sft. space per student.
2. Each lab must have 20-25 sft. space available per student.
3. There must be minimum 1 large animal available per 6 students to perform rectal palpation, passing of AI rod etc. Minimum strength of Cattle/Buffalo at an institution must be 10.
4. Preferably the herd of large animals and flock of sheep / goat should have representation of all Pakistani breeds for familiarization of students.
5. The local breeds of the area must be included in the herd.
6. Number of sheep & goats should not be less than 20 at any given time.

B: EQUIPMENT REQUIRED FOR EACH DEPARTMENT/SECTION

(For offering of basic DVM degree)

1 (a) Department/Section of Veterinary Anatomy and Histology

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Work-top/wooden tables fitted with 5 amp plug points for 20 pairs of students	1
2.	Lab-stools	40
3.	Black board (sliding)	2
4.	Wooden almirah for bone-sets	4
5.	Steel almirah for microscopes	1
6.	Wooden racks for bone-store	5
7.	Steel racks	5
8.	Glass almirah	5
9.	Show cases (glass paneled)	2
10.	Marble-top/S.S. Top Tables (with drainage)	7
11.	Tissue disposal buckets	5
12.	Steel racks for wet specimens	5
13.	Lab stools for dissection hall	30
14.	Large tubs with over flows for washing specimens/limbs	15
15.	Articulated skeleton one for ox, horse sheep, goat, buffalo, pig, dog, cat, camel, fowl, rabbit, duck (as per need)	1 each specie
16.	Embalmed specimen for surface anatomy	2
17.	Embalmed hollow organs one set	-
18.	Binocular microscopes	10
19.	Dissection microscopes	5
20.	Projection microscopes (one projector attachment be procured)	1
21.	Automatic slide projector	1
22.	Micro slide Projector	1
23.	Projection screen	1
24.	Overhead projector/Fpidiascope	-
25.	Specimen slides of histology and embryology (2 of each orgn	25 pairs
26.	Specimen of some major zoo animals skeleton, etc)	One for each species
27.	Postmortem sets (kits)	2
28.	Scissors-straight – 10”	5
29.	Scissors-straight curved	5
30.	Hand saw	2
31.	Rib cutter	3
32.	Rib shear	2
33.	Forceps large	6

34.	Forceps small	6
35.	Artery forceps	6
36.	B.P. handle	3
37.	Vacuum pump for embalming	1
38.	Bucket fitted with taps, etc. for embalming	2
39.	Meat saw	2
40.	Plastic drums with cover	10
41.	Plastic buckets with cover	15
42.	Enameled iron buckets	10
43.	Enameled iron trays	5
44.	Enameled iron basins	5
45.	Enameled iron mugs	5
46.	Autoclave	1
47.	Triple distillation Apparatus	1
48.	Side warmers (hot plates)	2
49.	Rotary Micro tome (Manual and Automatic) one each	1
50.	Tissue floatation bath	1
51.	Hot air oven	1
52.	Refrigerator (double door)	1
53.	Automatic tissue processor	1
54.	Automatic knife processor	1
55.	Automatic knife sharpener	1
56.	Microtome knives	5
57.	Hone with surfaces	2
58.	Stropping leather	4
59.	Slide box 100	10
60.	Slide cabinet 5000 slides	1
61.	Analytical balance	1
62.	Monopam balance	1
63.	Ice box	1
64.	Staining jars	2
65.	Coupling jars	10
66.	S.S staining trays	10
67.	Animal Cages	As per need
68.	Glassware's different types	As per need
69.	Electric pointers	As per need
70.	Paraffin dispensers	2
71.	The embedding system	1
72.	Tissue tek	1 set
73.	Cryostat	1
74.	Automated multiple routine stainer	1

75.	Microscope fitted with camera	1
76.	Staining stoppered bottles	10
77.	Deep Freezer	1

1 (b) Department/Section of Veterinary Physiology

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Compound microscopes (with eye pieces and objectives, etc. complete)	10
2.	Haemocytometers sets	15
3.	Haemoglobinometer- (Sahlis)	15
4.	Micro-hematocrit	2
5.	Centrifuge machines upto 6000 RPM	1
6.	Wintrobes sets.	10
7.	Colorimeter	1
8.	Haemagglutination plate	5
9.	Kymograph with accessories and plotter (Machine)	5
10.	Spiro meter- (Vital meter)	2
11.	Stimulators	3
12.	Isolated organ bath.	2
13.	Dissecting sets.	5
14.	Mono meters (mercury) Sphygmomanometer (BP apparatus)	5
15.	Stethoscope.	5
16.	Catheters (solstice)	5
17.	Physiograph (complete set).	2
18.	Electrocardiogram (portable)	1
19.	Flame photometers	1
20.	Spectrophotometer	1
21.	Common Balance (electronic)	3
22.	Mono pan digital balance	1
23.	Glassware of different types	As per need
24.	Microscope projection (CCV attachment to TV to be preferred).	1
25.	Roth Benedict respirometer.	1
26.	Nerve muscle preparation apparatus	1
27.	Distillation apparatus	1
28.	Demonstration table/lab. table for demonstrating experiments (amphitheatres) will having a removable trevis and a removable demonstration table sufficient to accommodate 30 students	As per need
29.	Work tables with electric points and other controls for animal	As per need

	experiments for 15 pairs of students.	
30.	Work table/lab, table with sink, water source, chemical racks, etc. for analytical experiments, for 15 pairs students.	

1 (c) Department/Section of Biochemistry (attached with Physiology)

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Burette's	
2.	Pipets of different volume	
3.	Volumetric flasks	
4.	Measuring cylinders	
5.	Test tubes	
6.	Volumetric flasks slides, etc.	As per need
7.	Incubator	1
8.	Overhead Projector	1
9.	Slides Projector	1
10.	Refrigerator	1
11.	Double distillation set	1
12.	Photoelectric colorimeter (spectronic-20)	1
13.	Automatic blood Gas analyzer	1
14.	Refracto meter	1
15.	Column chromatography set	1
16.	T.L.C.	1
17.	Paper chromatography	5
18.	Hot air oven	1
19.	Centrifuge (controlled Temp.)	1
20.	*pH meter	1
21.	*Electrophoresis apparatus	1
22.	Polarimeter	2

2 (a) Department/Section of Veterinary Pharmacology

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Weighing machine	1
2.	Monopan balance upto 4 digits	3
3.	Binocular microscopes	5
4.	Colorimeter/photometer	5
5.	Centrifuge machine upto 5000 RPM	1

6.	Incubator (Bact.)	1
7.	Refrigerator (Double door)	1
8.	Marble slabs	15
9.	Spatula (iron, plastic and ebonite)	15 each
10.	Mortar and Pestle (porcelain and glass)	15 each
11.	Measuring glasses, cylinders of various sizes	As per need
12.	Funnels, sieves and other miscellaneous items.	25 each
13.	Tissue grinder	1
14.	Electric grinder machine	1
15.	Colter counter	1
16.	Anaesthetic Monitor	1
17.	pH meter	1
18.	Manometers, catheters, etc.	3 sets
19.	Physiograph with recorder	1
20.	Electronic stimulator.	2
21.	Surgical instruments for a pack.	2
22.	Automatic pipettes of various volumes	3
23.	Volumetric flasks 10, 25, 50 ml.	15 each
24.	Isolated heart perfusion apparatus.	1
25.	Anesthesia machine.	1
26.	Tracheal cannula.	6 No.
27.	Arterial cannula.	6 No.
28.	Vertex mixture.	1
29.	Autoclave.	1
30.	Automatic dispenser.	3
31.	Electronic balance.	1
32.	Spectrophotometer (21) with accessories.	1
33.	Cage for dogs	6
34.	Soxhlets apparatus	1
35.	Percolators (glass)	As needed
36.	Demonstration table with electrical points drainage, steriotaxio control etc.	2
37.	Kymography chart recorder with complete accessories	2
38.	Respiratioin pump, endotracheal tubes, mouth, gag, spirometer, etc.	2
39.	Isolated tissues bath with accessories	10
40.	Observation cages for rats and mice	15
41.	Audio visual aids, projector, V.C.P etc.	1 set each
42.	Magnetic stirrer with hot plate and magnetic bars of various sizes	2
43.	Glass Dessicator with Pump	2
44.	Hot Air Oven	1

2. (b) Department/Section of Veterinary Microbiology

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Work-table/lab. table with power points, water source etc. for pair of students	10
2.	Lab. Stools (revolving)	40
3.	Autoclave (horizontal)	1
4.	Autoclave vertical (gas heated)	1
5.	Hot air Oven	1
6.	Instrument sterilizer	1
7.	Sites filter (assemble including sites filters etc.	1
8.	Vacuum pump with all its accessories, etc.	1
9.	Filtering assembly – large (0.45) & small (0.20)	50 each
10.	Student's Microscopes (including 1000 x lens, light supply, moving stage, etc.)	10
11.	Binocular research microscope (100 x lens, light supply, moving stage, etc.)	1
12.	Projector/COTV for attachment to binocular microscope	1
13.	Flour-cent microscope with U.V. assembly filters etc.	1
14.	Dark field microscope with light source, etc.	1
15.	Phase contrast microscope (built in light, etc.)	1
16.	Stage and ocular micrometers (for measurement of bacteria, etc.)	15 sets
17.	Hanging drop preparation slides with cover slips	15 sets
18.	Platinum loops with extra platinum wire)	25
19.	Bunsen burners	15
20.	pH meter (electrodes method)	1
21.	Mcintosh and fields anaerobic jar	2
22.	Nitrogen gas cylinder	1
23.	CO2 gas cylinder	1
24.	Incubator (ambient type)	2
25.	CO2 Incubator (complete)	1
26.	B.O.D incubator (complete)	1
27.	Water bath	2
28.	Refrigerator (double door) 18 cubic ft.	2
29.	Ordinary refrigerator 12 cubic ft.	1
30.	Deep-freezer 20° C	1
31.	Deep-freezer 70° C	1
32.	Petroff-Hauser Counter	5
33.	Ultra-violet lamp	1
34.	Laminar flow cabinet (one biohazard and one vertical type)	1

35.	Triple-distillator Apparatus	1
36.	Water-distillatory apparatus	1
37.	Colony counter	2
38.	ELISA test Reader	2
39.	Boards/inoculation boxes (for restraining mice, G. pig. etc)	7
40.	Cage syringes, etc.	As per need
41.	Surgical instrument	As per need
42.	McFarlands Nephelometer (for vaccine prep.)	1
43.	Gel chromatography apparatus (complete)	2
44.	Immuno-electrophoresis gel apparatus (Complete vertical type)	1
45.	Mini-gel Electrophoresis apparatus (complete with power supply, etc.)	1
46.	Centrifuge (Lab. Scale)	2
47.	Centrifuge (bucket type with all accessories)	1
48.	High-speed centrifuge (16,000 to 26,000 rpm) with all accessories.	1
49.	Refrigerated centrifuge with all accessories.	1
50.	Replica plates	2
51.	Freeze Dryer Machines (with oxyflame sealer, complete set for small vials)	1
52.	Cold storage (for common facility)	1
53.	Inoculation cabin (room)	1
54.	Cubicles for virological work (1.5 meters)	2
55.	Postmortem tables (trays) for small animals	2
56.	Automatic pipette washer	-
57.	Air-conditioners	As per need
58.	Glassware, cotton wool syringe, media sugars, etc.	As per need
59.	Low temperature incubator (complete)	1
60.	Water purifier with U.V lamp	2 set
61.	Air filter	6
62.	Egg incubator	1
63.	Egg Candles (2 ordinary +3 U.V type)	2
64.	Tissue Homogenizer	1
65.	Vortex Machine	1
66.	Balance (table top)	1
67.	Balance analytical)	1
68.	Sonicator	1
69.	Weighing balance (for weighing birds and small animals).	2
70.	Magnetic stirrer with hot plate	2
71.	Camera close contact with stand and all accessories	1
72.	Spectrophotometer (UV) with all accessories, etc.	1

73.	Slide Projector (2x2) with all accessories	1
74.	Over head projector with all accessories	1
75.	Book projector with all accessories	1
76.	Computers (latest version) multimedia	2
77.	Printer (Laser) with extra toner	2
78.	Color Printers with extra toner	1
79.	Inverted Microscope with screen, etc.	1
80.	Un-interrupted Power (electric) Supply Units (UPS) 1000 wattas	2
81.	Ultraviolet light tube set	6
82.	Flask/tube shaker	3
83.	Fermenters with all accessories, etc.	2
84.	Multimedia system (data show, etc.)	2
85.	Micro dispenser Channels (1,8,12) 10 each	15
86.	Tripod stand for Bunsen Burner	15
87.	Wire Gauze for Tripod stand	50
88.	Peristaltic pump 3 way	2
89.	Air pump (small) Aquaria type	5
90.	Filter (ultra cascade hollow fiber assembly)	2
91.	Gas filtration assemblies (autocalavable) (3 size)	2 each
92.	UV lamp hood for sterilizing plastiware	1
93.	Microwave oven (for staining and destining, electrophoreses gels)	2
94.	Pulse sealer (for sealing plastic envelopes with gels)	1
95.	Paper trimmer for membrane cutting	1
96.	Polaroid camera with slides	1
97.	Punch for AGPT	5
98.	Container and flask for liquid Nitrogen	1 set
99.	Video Camera (for making films of clinical cases to be shown to students)	1
100.	Dissicators	2

2. (c) Veterinary Parasitology

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Autoclave	1
2.	Hot Air Oven	1
3.	Incubator	1
4.	Refrigerator	1
5.	Microscope with HP 1 Oil immersion	6
6.	Binocular microscope (attachment be procured) (one projection/CCV)	2

7.	Microscope phase contrast	1
8.	Microtome Rotary and Blade sharpener	1
9.	Centrifuge (Clinical type)	1
10.	Micrometers (stage and eyepiece)	1
11.	Warring blender	1
12.	Steriliser unit	1
13.	Distillation set	1
14.	Eyepiece double demonstration	2
15.	Eyepiece comparison	2
16.	Hair Hygrometer	1
17.	Vernier calipers	3
18.	Slide cabinet	3
19.	Slide boxes for demonstration slides	10
20.	Electronic Balance (1-100grms)	5
21.	High speed centrifuge machine refrigerated (Beckman)	1
22.	Descicator	1
23.	Research Microscope (trinocular with Photographic arrangements)	1
24.	Water bath	2
25.	Overhead Projector	1
26.	Slide projector	1
27.	Camera Luceda	1
28.	Tally Counter	2
29.	Pestle and Mortar	5 sets
30.	Hand Centrifuge	2
31.	Dissection set	5
32.	Dissection Microscope	5
33.	Different grades of sieves	5 set each
34.	CO2 incubator	1
35.	Inverted Microscope	1
36.	Trichnoscopy	1
37.	McMasti counting chamber	2
38.	Stereomicroscope	1
39.	pH meter	1
40.	Magnetic striver with hot plate	1

2. (d) Veterinary Pathology

S.No	Name of equipment	Quantity
(1)	(2)	(3)
1.	Lab. table/work table complete with racks, sinks, taps etc.	20 pairs
2.	Laboratory stools (revolving)	40
3.	Students microscopes (complete with eye pieces and objectives)	15
4.	Monoculars with projecting units (one projection/CCV attachment be procured)	One set
5.	Binocular microscopes	2
6.	Dark field illumination with projecting units	1
7.	Phase contrast microscope	1
8.	Immuno-fluorescent microscope	1
9.	Black board cum display board	2
10.	Slide projector (automatic)	1
11.	Overhead Projector	1
12.	Display boards chart board etc.	5
13.	Specimen slides of various histopathological lesions.	As per need
14.	Set of transparencies of various H.P. & gross lesions	As per need
15.	Rotary microtomes, AO Speneer type with thin sectioning facility.	1
16.	Paraffin floatation bath (temp, control 55-65 C)	1
17.	Spectrophotometer	1
18.	Research Microscope with attached screen for group demonstration	1
19.	Refrigerator (double door)	2
20.	Automatic tissue processor (Autotechnicon)	1
21.	Slide cabinet 1000 capacity	2
22.	Slide boxes 100 capacity	50
23.	Staining jars/coupling jars etc.	As per need
24.	Tissue cutting boards	3
25.	Racks for specimen jars, bottles etc.	5
26.	Scalpels (Assorted) Scissors and Forceps	5 each
27.	Containers, specimen jars wide mouthed bottle	As per need
28.	Cryostat (microtome)	1
29.	Hot Air Oven (Temp 250° C)	2
30.	Imoulds & blocks (for embedding)	10
31.	Auto staining unit	1
32.	Macroknife sharpener to and for with side shifting arrangements	1
33.	Autopsy table for birds (S.S top with drain)	1

34.	Autopsy table for small animals	1
35.	Specimen cutting table	1
36.	Autopsy knives	15
37.	Postmortem sets (with chisels saw rib cutter, shears, one cutter, saw sharpener etc.)	5 sets
38.	Bone cutting saw electric	1
39.	Heavy duty rotary saw for large animal P.M	1
40.	Protective wear (gloves, rubber, apron goggles gum boots, masks & cap etc.)	5
41.	Carcass trolley/carcass van (fully covered)	1
42.	Hoist with over head railings	1
43.	Captive bolt pistols for euthanasia	1
44.	Platform balance (large and small)	1 each
45.	Skinning Equipments	2
46.	Pan balance (digital) for weighing organs	2
47.	Washing and disinfecting facility, aerosols etc.	
48.	Specimen washing sinks (with hot 7 cold water)	3
49.	Knife sharpen (mechanical or power)	2
50.	Plastic tubs & buckets with lid for specimen collection and transport	5
51.	Specimen bottles, jars etc.	As per need
52.	Large EL Trays & dissection boards for bird Postmortem	As per need
53.	Incinerator unit Double combustion, smokeless oil burned/electric (pollution free)	One
54.	Cold room unit	One
55.	Freezer unit for small animals and specimens	One
56.	Rabies P.M unit	1
57.	Sterilization unit	1
58.	High-pressure hydrant	1
59.	Centrifuge 3000 RPM	1
60.	Reagent balance	1
61.	Monoplane balance	
62.	Colorimeter	1
63.	Winthrope pipettes	5
64.	Haemocytometer	5
65.	Hemoglobinometer	5
66.	Photographic camera with assorted lenses and filters	One set
67.	Magnetic stirrer with hot plate.	2
68.	pH meter	2

3 (a) Department/Section of Veterinary Medicine

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Small animal examination table (Hydraulic or pinion type)	2
2.	Instrument Trolleys	3
3.	Black boards cum display boards	4
4.	Trevis with noise protection.	2
5.	Work tables (with chemical racks etc.) for 20 pairs.	
6.	Lab stools.	40
7.	Microscopes binocular complete (Mechanical)	5
8.	Oxygen Gas Cylinders (13" radius)	3
9.	Centrifuges (Clinical)	2
10.	Centrifuges high speed (Back man)	1
11.	Common balances.	1
12.	Electronic monoplane balance.	1
13.	Distillation units	1
14.	Deionisers.	2
15.	Digital pH meters	1
16.	Spectrophotometers (digital preferred)	1
17.	Microchematocrits	2
18.	Incubators	1
19.	Hot air ovens	1
20.	Spectrophotometer	1
21.	Electro phoresis unit	1
22.	Chromatography unit T.L.C paper gas.	1 each
23.	Water baths	2
24.	Dark field microscope	1
25.	Autoclave (horizontal)	1
26.	Autoclaves (vertical)	1
27.	B.O.D. incubator	1
28.	Microscope fitted with Camera with assorted lens and filters.	One
29.	Stethoscopes with multiple ear-pieces	3
30.	Phonandoscopes	3
31.	Pleximeters and percussion hammers	5 sets
32.	"Hood" for culture and sensitivity	1
33.	Electronic stethoscope	1
34.	Ophthalmoscopes	2 sets
35.	Electrocardiograms	1 (portable & 1 table models)

36.	Blood-pressure monitors	3 sets
37.	Otosopes	3 sets
38.	Laryngoscopes	3 sets
39.	Oesohagoscopes	3 sets
40.	Tracheo-scopes	3 sets
41.	Fibroptic endoscope	1(desirable)
42.	Haemocytometers	5 sets
43.	Hemoglobino meters	5 sets
44.	Glassware of different types	As per need
45.	Slings	5 sets
46.	Slide Projector (Kidak)	1
47.	Wood' slight	1 set
48.	Weigh bridge for weighing large animals	1
49.	Ultra sound with probes for large & small animals	1 set each
50.	Computers for recording hospital data (computer set) (with laser printer)	2
51.	Refrigerators for storage of perishable drugs	1
52.	Deep Freezers	1
53.	Weighing Machine (one for small and one for large animals)	1

3 (b) Department/Section of Veterinary Surgery

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Ceiling surgical lights	3
2.	Pedestal Surgical lights	3
3.	Surgical stools	10
4.	Operation table for small animals (stainless steel top) (Hydraulic)	4
5.	Preparation table small animal	2
6.	Dressing drum small	4
7.	Dressing drum large	4
8.	Instrument/syringe sterilizer	4
9.	Stainless steel Tray 12x15	5
10.	Stainless steel Tray 12x18	5
11.	Clipping Scissors 10"	6
12.	Dressing Scissors 8"	6
13.	Intravenous drip stands	6
14.	Mouth Gag for dogs	2
15.	Mouth Gag for Bovine	4
16.	Mouth Gag for Equine	4
17.	Endotracheal tubes cuffed, large animals	4

18.	Endotracheal tubes cuffed, small animals	4
19.	Electrocardiogram battery operated	1
20.	Catheter for dog	6
21.	Catheter for dog	6
22.	Sand bag for positioning small animals	10
23.	Surgical pack for small animals	10
24.	Surgical pack for large animals	10
25.	Gloves and other rubber wears	As per need
26.	Large animal trolley cum operation table	2
27.	Rope, buckets, irrigator	As per need
28.	Autoclave, vertical with stainless steel jacket	1
29.	Instrument cabinet glass paneled	10
30.	Orthopedic Instruments, small animal	1 set
31.	Orthopedic Instruments, large animal	1
32.	Orthopedic Instruments/scopes etc.	1
33.	Dental Instruments, small animal	1
34.	Dental Instruments, large animal	1
35.	Teat and udder Instruments	2
36.	Endoscope, small animal	1
37.	Endoscope, large animal	1
38.	Weighing Instrument/scale	2
39.	Biopsy Instruments	1set
40.	Diathermy	1 set
41.	Electric cautery set	2
42.	X-ray unit 500 mAs	1
43.	U.V. lamp.	2
44.	Infra Red lamp.	2
45.	Ultrasonic diagnostic unit with video recorder	1
46.	X-ray accessories cassettes and different	10
	film carries	3
	Intensifying screens	3
47.	X-ray protection accessories (lead gloves, lead aprons, googols, lead screen)	2 each
48.	Animal transport trolley, large animal	1
49.	Stretcher small animal	2
50.	Illuminator	2
51.	X-ray film Museum with film record racks	1
52.	Sling for large animal	1
53.	Electric generator	1
54.	Emasculator for equines	3
55.	Baby castrator (Burdizo's) small animal	3

56.	Baby castrator (Burdizo's) large animal	3
57.	Laryngeoscope (small animal)	3
58.	Laryngeoscope (large animal)	2
59.	Temporary and permanent tracheal tubes	6 each
60.	Laparotomy retractors	5
61.	Tissue Retractors	5
62.	Drape Forceps	5
63.	Bowls medium size 6"	10
64.	Electric clipping machine	4
65.	Trephine	5
66.	Stomach tube for equine	3
67.	Proabang	2
68.	Trocar and cannula for small animals	4
69.	Trocar and cannula for Equines	4
70.	Trocar and cannula for Bovines	4
71.	Torch, large size	2
72.	Otoscope	2

3 (c) Department/Section of Animal Reproduction

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Large animals hydraulic operation table	1
2.	Small animals hydraulic operation table	1
3.	Small animals examination table stainless steel with drainage.	2
4.	Mini-Bus for students travel to slaughter house & farms (40 students capacity).	1
5.	Ambulatory vehicles to carry six persons.	2
6.	Large animals transport ambulance.	1
7.	Close circuit television system.	1
8.	Binocular research microscope with CC TV attachment.	1
9.	Ultrasound machine for clinical use.	1
10.	Linear-array ultrasound transducer for intra-rectal use in large animals.	
	(i) 7-5 MHZ frequency.	1
	(ii) 5-0 MHZ frequency.	1
11.	Overhead projector	1
12.	Slide Projector	1
13.	pH Meter (Electronic).	1
14.	Semen analyzer with monitor.	1
15.	Deep-freezer for sample storage (Calves/organs).	2

16.	ELISA unit.	1
17.	Computer with all accessories.	Oz
18.	Work table/lab.table (with sinks water source light points etc) for 40 pairs of students.	
19.	Lab stools (revolving).	25
20.	Compound microscopes (complete with objectives eye pieces and other accessories) (one Projection/CCV attachment be procured)	5
21.	Binocular microscopes.	5
22.	Haemocytometers.	2 sets
23.	Trevis (services)	1
24.	Trevis (examination)	1
25.	Phantom boxes.	3
26.	Palpation tables.	5
27.	Embryotomy sets.	5
28.	Kelver training cow for I.U. therapy, A.I. etc	1
29.	Electroejaculator.	2
30.	Artificial Vaginas (assort)	2 Each.
31.	Autoclave Horizontal.	1
32.	Autoclave Vertical (electrical, stove heater)	1 Each
33.	Mono pan balance.	1
34.	Refrigerator (double door)	1
35.	Instrument cabinets.	5
36.	Obstetrical sets.	4
37.	Whelping sets.	2
38.	Surgical instruments.	4 Sets.
39.	Holmes needles.	5
40.	Vaginal clamps	5
41.	Vaginal clamps small	5
42.	Vaginal speculum (cow, goat, dog, cat)	3 Sets Each
43.	Automatic pipette washer.	1
44.	Oven for paraffin embedding	1
45.	Incubator.	1
46.	Camera (with accessories)	1
47.	Semen shippers.	4
48.	Thermos flasks.	2
49.	Insemination catheters	As per need
50.	Storage cylinders for liquid Nitrogen (of different capacities)	6
51.	Stand for storage cylinders	2
52.	Swab. Holders	5
53.	Instrument sterilizers.	4
54.	Record syringes.	3

55.	Injection cannulas.	2
56.	Rinsing cans 1-2 lit.	1
57.	Nose tongs.	2
58.	Protective clothes.	5 sets
59.	Latex lining for assorted A.V.	5 each
60.	Latex funnel	5 each
61.	Insulating bags	2
62.	Metal funnels	2
63.	Measures	2
64.	Drop pipettes with rubber nipples	10
65.	Filter papers	As per need
66.	Water suction pump	2 sets
67.	Cold room for foetus storing	1
68.	Autoclaves (vertical & horizontal)	1 each
69.	Glass-ware and chemicals	As per need
70.	Straws for semen freezing	As per need

3 (d) Department/Section of Preventive Veterinary Medicine & Public Health

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	A running table (work table) with cupboard, racks, wash basins, water source and shelves for 25 pairs of students	1
2.	Stools	30
3.	Blackboard cum display board	1
4.	Steel Almirah	4
5.	Almirahs/cupboards	2
6.	Monocular student microscope complete eye piece and objective (one projection/CCV attachment be procured.	5
7.	Florescent microscope	1
8.	Binocular microscope (Olympus or similar good quality)	3
9.	Serologic water bath	2
10.	ph-meter (Digital)	2
11.	Colorimeter	1
12.	High speed Centrifuge	1
13.	Gerber's Centrifuge	1
14.	Colony counter	1
15.	Burners	10
16.	Test tube racks	10
17.	Balance chainomatic	1

18.	Balance monopan (electric)	2
19.	Micrometer	2
20.	Staining racks, coupling jars, staining trays etc.	10 sets
21.	Autoclaves (horizontal	1
22.	Autoclaves (vertical	1
23.	Hot air oven	1
24.	B.O.D. incubators	1
25.	Incubators	1
26.	Cages for Lab. Animals	2
27.	Micro dilutors	1
28.	Micropipettes (and tips as required)	5
29.	Slide projector	1
30.	Slide Cabinet	1
31.	Slide boxes	10
32.	Deep-freezer	1
33.	Refrigerators (double door)	2
34.	Inoculation hoods	2
35.	Laminar flow	1
36.	Computer sets for data storage, data processing and programming for epidemiological studies and practicals	2
37.	Complete package of soft-ware for analysis of epidemiological data	1
38.	Computer tables for data storage/processing laboratory	4
39.	Epidiascope and screen/overhead projector	1
40.	Mobile van for collection of data from the field	1
41.	Mobile van with refrigeration facility for transportation of biological materials including laboratory samples/vaccines/sera/ antigens etc. for disease diagnosis and control.	1
42.	Elisa kits reagents and Elisa reader	1 set
43.	Arrangements for conducting Live Animal Swab Test (LAST) for detection of antibiotic residues in animals	

The field activity has to be carried out in close collaboration with the veterinary clinics, allied departments and field veterinarians, administration of slaughterhouse, dairy industry and milk inspection authority.

4 (a) Department/Section of Animal Nutrition

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Hot Air Oven	2
2.	Single Pan Balance	1
3.	Muffle Furnace	1
4.	Desecrator	2
5.	Kjeldahl apparatus	2
6.	Micro Kjeldahl set	1
7.	Soxhelt apparatus set	2
8.	Water bath	1
9.	Supertonic 20 photometer	1
10.	Bomb calorimeter	1
11.	Stereomicroscope with wide-field eye pieces & objectives (Magnification range 10x. to 45x and zoom objective) illuminator (duel light fiber type)	1
12.	Sieves (a set of 3 inch/76mm diameter sieves including US alternative number 10,20, and 40 with pan and cover)	
13.	Crude fiber, ADF and NDF analyzer	
14.	Analytical balance	2
15.	Computer with feed formulation software	2
16.	Chemicals and glass wares for geed analysis lab.	
17.	Charts:	
18.	(i) Deficiency system of poultry (ii) Deficiency system of ruminants (iii) Fodder Corp with pictures (iv) Models of silo pits	As per need

4 (b) Department/Section of Animal Breeding and Genetics

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Illustration of cell division (Mitosis and Meiosis) DNA and RNA	2
2.	Cytogenetics apparatus (i) regents (ii) Slides (iii) Microscopes	As per need 10 2
3.	Illustration of gametogenesis	1

4.	Illustration of germete formation and genotype formation	1
5.	Computer for production data recording and evaluation + Laser+UPS	2
6.	Storage boxes for charts, diagrams etc.	2
7.	Work table for 30 units	10
8.	Stools	30
9.	Projection screen	1
10.	Slide projector	1
11.	Slide Boxes	As per need
12.	Transparencies boxes	As per need
13.	Specimen racks, almirahs	As per need

4 (c) Department/Section of Poultry Husbandry/Science

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Incubator (hatchery) (50 eggs capacity of each)	2
2.	Egg grader machine	1
3.	Chick sexing machine	1
4.	Trap nest	2
5.	De-beaking equipment	1
6.	Egg Chandler	2
7.	Generator for UPS	1
8.	Shell thickness measuring equipment (Hauge Unit), Micrometer/Vernier Caliper/screw Gauge)	1 each
9.	Audio, Visual Aid Equipment Over Projector, slide Projector, pointer and screen etc.	1
10.	Spray pump (large)	1
11.	Model of Hen to explain Reproductive system	1
12.	Bird shifting boxes	2
13.	Battery brooder	1

4 (d) Department/Section of Livestock Management

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Livestock Housing Models (Sheds Parlours, Pens)	As per need
2.	Wool diameter measuring gauge	2
3.	Saddles	2

4.	Bridle	2
5.	Head Caller	2
6.	Creep	4
7.	Drinking bottles pails	5
8.	Body measurement taps	5
9.	Marks of identification Machine (Brands, Tags, tottering, notching)	1
10.	Docking equipment	1
11.	Water troughs	5
12.	Fences and fencing equipment	2
13.	Hay and grain racks	5
14.	Dipping vats (Portable and permanent)	2
15.	Weighing Scale	2
16.	Analytical balance	1
17.	Weigh bridge	1
18.	Sprayer	2
19.	Hair clipper	2
20.	Lamb/kid brooder	2
21.	Ewe stanchion	2
22.	Portable foot bath	2
23.	Loading chutes	2
24.	Spray race equipment	2
25.	Max. and minimum thermometer	2
26.	Milk Buckets and Cans	5
27.	Refrigerator	1
28.	UHT model	2
29.	Hoof Trimmer	2
30.	Handling and Restraining tool	2
31.	Grooming tools (body brush, Dandy brush, Curry Comb, Manil tail comb)	2
32.	Harness	3

4 (e) Department/Section of Livestock Products Technology

A: DAIRY TECHNOLOGY

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Milkoscan 400 (200 samples/hr.)	1
2.	Fossomatic 420 (200 samples/hr.)	1
3.	Bactoscan 8000 (40 samples/hr.)	1

4.	Milko-tester minor type 18400 (Denmark)	1
5.	Model of a dairy cow to explain milk secretion circulatory system etc.	1
6.	Butter Churns	1
7.	Milking machine unit portable	1
8.	Lactometer	2
9.	Butyro refractometer	1
10.	Butter moisture balance	1
11.	Gerbers centrifuge	1
12.	Gerbers tubes	5
13.	Vacuum pump	1
14.	Melting point apparatus	1
15.	Warring blunder	1
16.	Homogenizer	1
17.	pH meter	1
18.	Microscope binocular	1
19.	Flame photometer	1
20.	Freeze drying unit	1
21.	Rotary film evaporator	1
22.	De-freeze drying unit	1
23.	Cream separator	1
24.	Butter workers	2
25.	Butter churners	2
26.	Butter Print	1
27.	Steel utensils for ghee, curd, khoa	2 each
28.	Richmonds scale	1
29.	Hand sealing machine for bottle cans plastic bags	1 each
30.	Cheese making equipment (small)	1 set

B: MEAT TECHNOLOGY

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Refrigerator	1
2.	Deep-freeze	1
3.	Slide projector	1
4.	Overhead projector	1
5.	Chemical balance	1
6.	Micro pan balance	1
7.	Balance for weighing birds	1

8.	Large animals balance (weigh bridge type)	1
9.	Bone cutting machine	1
10.	Incubator	1
11.	Hot air oven	1
12.	Spring balance	1
13.	Stunning machine (for different species)	1
14.	Automatic scalar	1
15.	Feather plucking machine	1
16.	Students microscope	5
17.	L.T.C set	1
18.	Meat mincing machine	1
19.	Sausage maker	1
20.	Smoking unit	1
21.	Salting instruments	1
22.	Meat slicer	1
23.	Butchering sets (knives etc)	2
24.	Packing unit	1

C: WOOL/HAIR/LEATHER TECHNOLOGY

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Wool shearing machine	1
2.	Fibre length measuring machine	1
3.	Fibre length diagram analyzer	1
4.	Micronair	1
5.	Anglia macrodome with two knives (England)	1
6.	Binocular microscope (with accessories for measurement)	1
7.	Digital electronic balance (Max. cap. 200 gm) sartorius balance) (Germany)	1
8.	Projection microscope (Japan)	1
9.	Matrimpepe (Hungarian trading Co.)	1
10.	Electric Yarn Fibre Strength Tester	1
11.	Auto sampler Digital Fibre Analyser	1
12.	Oven with thermostat Control "Mettler" with digital temperature	1
13.	Hygrometer	2
14.	Soxtec Sys. (Hydrolyzing unit)	1
15.	Furnace (1200° C) Gallenkemp, England)	1
16.	Screw Gauge (China)	2
17.	Distiller (China)	1
18.	Candabalsum (England)	1

19.	Fine Scissors	4
20.	Velvet Board	1 dozen
21.	Foot Rulers	3
22.	Flask (pyrex) 1 liter capacity	3
23.	Beakers (50 ml & 100 ml) (Pyrex)	1 dozen
24.	Hot plate (Germany)	1
25.	Slide (China)	1 dozen packets
26.	Slide Cover (China)	1 dozen packets
27.	Scouring unit	1

5 Department of Continued Vety. Education/Extension/Economic/ Marketing

S.No.	Name of equipment	Quantity
(1)	(2)	(3)
1.	Bus of 50 capacity	One
2.	Mini bus 15 seats	One
3.	Overhead projector	1
4.	Slide projectors (automatic & manual)	1
5.	Amplifiers (2 models)	1
6.	Stage mikes A.S.M 7	5
7.	Generators (a) 2.5 kv (b) 0.5 kv	1
8.	Television coloured	1
9.	V.C.R	1
10.	V.C.P with recording facility	1
11.	Video camera (complete set)	1
12.	Camera 35mm (with assorted lenses, filters etc.) complete set.	1
13.	Enlarger	1
14.	Dark room set (safe light, process unit, film store, film dryer, cutter etc.)	1 set
15.	Conference/discussion table (preferably round tables of 10-15 seats capacity)	6
16.	Chairs	40
17.	Drawing boards, T-scales drawing sets etc.	10 set
18.	Work table to accommodate 40 students	1 set
19.	Black boards display boards chart stands etc.	2 set
20.	Projection screens (fixed & portable)	2
21.	Display boards (assorted models, with accessories)	
22.	Panel boards	10

23.	Tents, campers ropes, pegs, theads etc.	
24.	Wood cutting machine	1 set
25.	Stencils, felt pens, drawing etc	10 set
26.	Film Cutter, scissors in cutter etc.	
27.	Work tools	2 set
28.	Dark Room set (safe light, process unit, film store, film dryer, cutter, etc.)	1set
29.	Printing Grade Photocopier	1

(d)

4. CLINICAL RESOURCES

Clinically normal and diseased animals of various domestic and exotic species must be available for instructional purposes, either as clinical patients or provided by the institution. In-hospital patients, a field service/ambulatory clinic, herd health/reproductive management and outpatients are required to provide the necessary quantity and quality, of clinical instructions. During an on-campus clinical activity for the student's clinical education experience a diverse and sufficient number of surgical and medical patients should be available. Clinical experience should occur in a setting that provides access to subject matter experts, clinical laboratories and diagnostic facilities. Such example could include a contractual arrangement with nearby practitioners or public and privately operating livestock and poultry farms, etc. Medical records must be, maintained in an effective retrieval system.

Please provide detailed information on the availability of the following facilities to cover needs for out-door and in door clinical services related to Medical, Surgical and reproductive units by denotations given below:

1. Teaching Building		A/NA	2. Teaching Hospital (list separately for large and small animal hospitals/clinics)		A/NA
(1)		(2)	(3)		(4)
i)	Administrative Unit		i)	Reception/Waiting Area	
ii)	Conference rooms		ii)	Animal Holding	
iii)	Teaching/Diagnostic Labs.		iii)	Examination/Treatment area/facilities	
iv)	Lockers/Lounges		iv)	Intensive care unit	
v)	Animal Facilities		v)	Isolation Unit	
vi)	Seminar room		vi)	Necropsy	
vii)	Storage		vii)	Patient exercise	
viii)	Ambulatory wing with garages		viii)	Pharmacy	
<u>Denotation to be used</u> ✓ = Available (A) x = Not available (NA)			ix)	Radiology	
			x)	Operation Theatre (large animals)	
			xi)	Operation Theatre (small animals)	
			xii)	Satellite Veterinary clinic	
			xiii)	Infectious waste disposal unit	

Please provide a table showing by species, the number of patients examined/treated in the teaching hospital, ambulatory/field services and herd/flock health programmes during last five years as under:

A: TEACHING HOSPITAL

Species	Number of patients Examined/Treated at outdoor Services			Number of patients treated at Indoor services		
	Medical	Surgical	Obst & Gynae	Medical	Surgical	Obst. & Gynae
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Buffalo						
Cattle						
Equine						
Goat/Sheep						
Dog/cat						
Birds/poultry						
Wildlife						
Other						

B: AMBULATORY/FIELD SERVICES PROGRAMME

Species	Number of patients Examined/treated		
	Medical	Surgical	Obst & Gynae
(1)	(2)	(3)	(4)
Buffalo			
Cattle			
Equine			
Goat/Sheep			
Dog/Cat			
Birds/Poultry			
Wildlife			
Other			

C: Herd/Flock Health/Reproductive Management

Species	# Herds/Flocks/Lots		No. of animal per herd		Total animals	
	Health	Reproductive	Health	Reproductive	Health	Reproductive
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Buffalo						
Cattle						
Goat/Sheep						
Birds/Poultry						

(e)

5. LIBRARY AND LEARNING RESOURCES

Library must be operated by a qualified librarian and adequately budgeted for both operation and the purchase of learning resources. There should be adequate collection of instructional material for each subject and access to instructional material developing capability.

Please provide information on the availability of the following parameters:

1. Name of Librarian with qualification

2. Details of Available Physical Facilities (with sitting capacity in different arrangements).

3. Total number of professional books
number of other related books
number of Scientific/Research journal
list of incoming Scientific/Research periodicals
Number of Microfisch, microfilms, Discs.

4. Other available instructional materials

5. Internet/CDs facilities

(h)

8. FACULTY

The faculty must provide competence in all subject matter areas of the curriculum as well as effective teaching skills. Contribution to original knowledge is an important additional criterion in evaluating the faculty and the institution. The institution should give evidence that it utilizes a well-defined comprehensive programme for the professional growth and development of faculty. Academic positions must offer the security and benefits necessary to maintain stability, continuity and competence of the faculty. Part time faculty, residents and graduates students may supplement the teaching efforts of full time faculty, which must meet the minimum member required to teach each subject effectively, particularly its practical and field oriented aspects.

A: FACULTY-REQUIRED STAFF STRENGTH

The number of teachers in each Department/Section should be according to the teaching workload of that Department/Section. Student Teacher ratio to be worked out in various courses will be as under:

<u>Course</u>	<u>Ratio</u>
DVM	1 : 15

The guidelines for each Department/Section are as given below:

a. <u>Basic Sciences Department</u>	To be headed by Professor/Associate Professor	
(i) Veterinary Anatomy	Assistant Professor/Lecturer	1
(ii) Veterinary Histology	Assistant Professor/Lecturer	1
(iii) Veterinary Physiology	Assistant Professor/Lecturer	1
(iv) Veterinary Pharmacology	Assistant Professor/Lecturer	1
<u>Patho-Bio Department</u>	To be headed by Professor/Associate professor	
(i) Veterinary Microbiology	Professor/Associate Professor	1
	Assistant Professor/Lecturer	1
	Lecturer	1
(ii) Veterinary Pathology	Professor/Associate professor	1
	Assistant Professor	1
	Lecturer	1
(iii) Veterinary Parasitology	Assistant Professor/Lecturer	1
b. <u>Department of Clinical Studies</u>	To be headed by Professor/Associate Professor	
(i) Veterinary Medicine	Professor/Associate Professor	1
	Assistant Professor	1
	Lecturer	1
(ii) Veterinary Surgery	Professor/Associate Professor	1
	Assistant Professor	1
	Lecturer	1

(iii)	Theriogenology	Professor/Associate Professor	1
		Assistant Professor	1
		Lecturer	1
(iv)	Veterinary Epidemiology and Public Health	Assistant Professor/Lecturer	1
c. <u>Deptt. of Livestock Production and Management</u>		To be headed by Professor/Associate	
(i)	Animal Nutrition	Professor/Associate Professor	1
		Assistant Professor/Lecturer	1
(ii)	Animal Production/LM	Assistant Professor/Lecturer	02
(iii)	Dairy Technology	Assistant Professor/Lecturer	1
(iv)	Meat Technology	Assistant Professor/Lecturer	1
(v)	Fisheries & Aquaculture	Assistant Professor/Lecturer	1
(vi)	Livestock Economics	Assistant Professor/Lecturer	1
(vii)	Poultry	Assistant Professor/Lecturer	1

General Note:

- 1) Each major department will be headed by a Professor/Associate Professor. Upto 1 year from the date of issue of this regulation an Associate Professor may head a department. Thereafter it will be mandatory for all institutions to appoint Professors as head of departments.
- 2) Under the Head of the Department there must be an Associate Professor each in the major departments.
- 3) The above mentioned faculty strength is the minimum requirement. An institution may have additional faculty in any subject.
- 4) There must essentially be a Diagnostic Lab with minimum 1 lecturer from Micro-Biology and 1 from Pathology
- 5) The Clinics must have minimum one Lecturer each from Medicine Surgery and Reproduction.
- 6) Unless all existing institutions are accredited no NOC should be issued to open a new institution.
- 7) For Masters programmes institutions must have minimum 1 PhD and 2 M.Phils in the relevant subjects and for PhD program there must be 3 PhDs in the concerned department (2 in major subject and 1 in minor subject). If the strength of qualified faculty falls below the specified number, the concerned program will be suspended till the time the qualified faculty is completed again.
- 8) For subjects like English, Islamiat, Pakistan Studies, Bio Chemistry, Livestock Economics etc visiting faculty or resources of parent university can be availed.

B: REQUIREMENTS FOR APPOINTMENT

OF TEACHERS FOR UNDERGRADUATE AND POSTGRADUATE TEACHING IN VETERINARY AND ANIMAL HUSBANDRY FACULTIES/COLLEGES OF PAKISTAN

All degrees/diplomas mentioned in Column 2 and 3 of these Regulations are subject to the Recognition/Registration by the Council (candidate must produce valid Registration certificate with all qualifications he/she claims).

Post	Basic Qualification	Additional Postgraduate Qualification	Experience	Research	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
Lecturer	1 st class DVM or equivalent qualifications recognized/registered by the Council	Postgraduate qualification in the subject preferable	-	-	Computer literate will be preferred
Assistant Professor	i) 1 st class DVM or equivalent qualification recognized/registered by the Council.	-	i) 6 years Research or teaching experience in a recognized University in the subject Or 6 years professional experience in the relevant field in a national or international organization.	Research experience preferable	-do-
	ii) 1 st class DVM or equivalent qualifications recognized/registered by the Council.	M.SC (Hons)/M.Phil from a recognized Pakistani University in the subject.	ii) 4 years teaching experience in a recognized university in the subject Or 4 years professional experience in the relevant field in a national or international organization.	-do-	-do-
	iii) 1 st class DVM or equivalent qualifications recognized/registered by the Council.	M.Sc from a recognized foreign university in the subject	3 years teaching experience in a recognized university in the subject Or 3 years professional experience in the relevant field in a national or international organization	-do-	-do-
	iv) 1 st Class DVM or equivalent qualifications recognized/registered by the Council.	Ph.D in the subject recognized by the Council	2 years teaching experience in a recognized university in the subject Or 2 years professional experience in the relevant field in a national or international organization	-do-	
Associate Professor	1 st Class DVM or equivalent qualifications recognized/registered by the Council.	Ph.D in the relevant subject.	Ten years experience in a recognized university in the subject with at least 5 research publication experience.	At least 5 year Research Publications in journals of international repute	-do-
Professor	1 st Class DVM or equivalent qualifications recognized/registered by the Council.	Ph.D in the relevant subject.	15 years teaching experience in a recognized university with at least 3 years teaching experience as Associate Professor in the subject.	At least 8 Research publications in journals of international repute.	-do-

(i)

9. CURRICULA

Veterinary and animal husbandry education is unique in that through comparison of species it bridges medicine, agriculture and biology. The professional degree curriculum should emphasize the acquisition and development of skills, values, and attitude at least as the acquisition of core veterinary/animal husbandry knowledge. Development of institutional individuality is encouraged to achieve excellence without uniformity. Sufficient flexibility should permit incorporation of new techniques, knowledge and educational philosophies as they emerge and deletion of material no longer deemed essential. An understanding of professional ethics, communication skills, the delivery of professional services to the public, personal finance, business finance and management skills necessary to prepare the graduate to enter career in profession should be integrated throughout the curriculum. The students should be informed of the breadth of the profession and diverse career opportunities in public and private sectors.

The postgraduate education must provide basic ingredients for scholastic leadership for solving the problems encountered during rehabilitation of the sector. This can be achieved through resolutely strengthening academic position, funds and academic freedom. Existing cumbersome procedures of purchases in academic units need extensive modification based on trust in the academicians. The presently generated post-graduate manpower in this sector has so far failed to show much impact in changing conditions to the benefit of the common man. These degrees have been more used for career improvement rather than bringing the required revolutionary changes which are solely dependent on this trained and qualified manpower at all level of this sector (Extension, research and Education/Training).

The universities must, therefore, reorient its post-graduate programmes to give more emphasis on character building to that this generated manpower is competent to lead from the front. The curricula/syllabi of all faculties be based on problem solving needs of the farmers through continuous curriculum revisions, its updating and development of practical skills as required in changing environments of public and private sectors. The PVMC committee on Curricula/Syllabi is required to play the much wanted role to achieve these objectives in close liaison with all the involved faculties/colleges.

An accredited institution must follow the approved curricula / scheme of study.

The requirements for appointment of External Examiners of Undergraduate and post-graduate classes are fixed as given below:

1. UNDERGRADUATE EXAMINATIONS

2.

(i) For basic and non-professional courses

- at least M.A/M.Sc. degree in the subject of examination and
- minimum of ten years of teaching experience in the subject in a Govt./non-Govt. organization

(ii) For Professional courses

- holding basic veterinary degree with at least M. Sc. Degree in the subject of examination and
- minimum of ten years teaching/professional experience in a University or professional institution.

2. POSTGRADUATE EXAMINATIONS

(a) **For M.Sc/M. Phil. Degree Examinations**

- ✓ Holding Ph.D. degree in the subject of examination relaxable to M.Sc/M. Phil degree in subjects where Ph.D's are rarely available
- ✓ At least Associate Professor or holding equivalent position as eminent expert in research/ development from other Institute/faculty /college, with 10 years of teaching/research/ development experience

(b) **For Ph. D Degree Examinations**

- Holding Ph. D degree in the subject of examination;
- one eminent professor in the subject from other Institute/faculty/college and one outstanding expert in research/development in the subject with 15 years of teaching/professional experience in the subject. One of the 2 examiners may be from outside Pakistan, if someone is not available locally;
- must have published his own research work and
- in case of a retired person, should be in touch with new developments in his field

FOLLOWED BY INTERNSHIP PROGRAMME FOR SIX CALENDAR MONTHS

NO CREDIT HOURS BUT COMPULSORY ATTENDANCE REQUIRED

The objective of internship shall be to provide the D.V.M students pre-service field training in the areas of Veterinary Medicine, Animal Husbandry and allied fields. The students shall spend a total of six months at approved teaching hospitals, livestock and poultry farms (Govt. and Private), disease diagnostic laboratories and other relevant installations (milk plants, feed mills, abattoirs, farmers cooperatives etc. (Govt. and Private) where they shall undertake skills and management developments training. After the completion of the term of internship, the student shall be required to submit a report and present it as a seminar.

The students shall be graded "S" (Satisfactory) or 'NS" (Not satisfactory) based on report/ seminar presentation and viva voce.

The detailed contents of each course of study of this scheme shall be developed by the PVMC Committee on Curricula/Syllabi in consultation with subject specialists available in the country within and outside the concerned Faculties/Colleges of the Universities. The same committee shall periodically review this curriculum and syllabus for its continuous updation and improvement.

(j)

10. RESEARCH PROGRAMME AND CONTINUED VETERINARY EDUCATION (CVE)

Each faculty/college needs to develop a programme of research both for faculty members and postgraduate students based on priorities fixed for research in livestock sector in close liaison with other provincial and federal research organizations. Funds needed should be made available to each involved department/faculty member to follow such programmes in befitting manners.

The need for Continued Veterinary/AH Education for field and other professional staff hardly requires any emphasis. This programme includes repeated short and refresher training courses to overcome various deficiencies of the staff to serve the public and private segments of livestock sector in an efficient manner. To meet this continuous demand of Human Resource Development for this sector, each faculty/college shall establish an independent department of Continued Veterinary Education. In close liaison with the livestock extension department, research institutes and the private sector, this department shall develop an annual programme of CVE for each province/area falling under its domain. Appropriate resources be placed at the disposal of this department to achieve continuous progress of this activity.

A. Please provide following informations on your institution:

1. List of various research and evaluation exercises undertaken by the Faculty (during last five years – year-wise);
2. List of various research and evaluation projects in progress;
3. Titles of postgraduate thesis research (Degree-wise, M.Sc/M.Phil/Ph.D) (during last five years – year-wise) (with name of student and supervisory committee, Department-wise);
4. Titles of various special problems undertaken (during last five years – year-wise) (with name of involved workers – Department-wise) and
5. List of faculty's scientific publications (during last 5 years).

B. Please provide following information on CVE (giving name of course, number of participants and education level of participants)

1. No. of short specialized professional/technical courses organized (during last five years – year-wise)
2. No. of professional/technical refresher courses organized (during last five years – year-wise) and
3. No. of training courses organized for livestock farmers (during last five years – year-wise).

This information is required to know the status of these activities in a faculty/college and has no bearing to the award of DVM degree. The minimum requirements for each faculty/college imparting postgraduate education in terms of additional staff, equipment and physical facilities required for this purpose depending on its size shall be fixed by PVMC Committee on Curricula/Syllabi. The evaluation for accreditation of all such faculties/colleges for award of postgraduate degrees shall be made by the Accreditation and Equivalence Committee on the basis of their approved Curricula/Syllabi and the minimum requirements of “Essentials” fixed by the committee for this purpose.

Appendix-II

[See regulations 6 (2)]

- (a) **Zero Visit.** This initial visit shall be carried out on request of an institution by a team nominated by the competent authority. This team shall physically visit the site of proposed institution and guide the relevant authorities regarding minimum requirement laid down in these regulations. NOC regarding approval of the site will be decided after zero visit.
- (b) **Visit One.** It will be the first comprehensive visit for recognition of a new faculty/college, prior to any admission of students. The A&E Committee shall carry out the visit and submit their report to the Executive Committee for recognition or otherwise under PVMC Act 1996. In this visit the institution may be expected to have the relevant facilities under the Act and these regulations.

The inspectors are required to comment on:-

- (i) Suitability of the venue for educational purposes;
 - (ii) Availability of all necessary infrastructure as set out Appendix-I;
 - (iii) Presence of needed educational resources;
 - (iv) Recruitment and registration of appropriate and adequate teaching faculty;
 - (v) Availability of written curriculum;
 - (vi) Adequacy and source of funds;
 - (vii) Procedure for financial accountability;
- (c) **Visit Two.** Second comprehensive inspection, to be carried out on the request of institution any time before expiry of two years from the Visit One, is for the next three years facilities. The inspection team may look into: -
- (i) Availability of all necessary facilities as set out in Appendix-I;
 - (ii) Adequacy of clinical training opportunities/facilities;
 - (iii) Availability of full required strength of clinical teaching faculty;
 - (iv) Presence of needed educational resources;
 - (v) Availability of written training program with objectives, syllabus, teaching methods and assessment program;
- (d) **Subsequent Visits.** Subsequent comprehensive inspection of all accredited institutions will be carried out after every five years. Any or all examinations may also be inspected. Visits to verify rectification of deficiencies may be held, but not before two weeks of the last inspection and preferably by the same team which visited earlier.

Appendix-III
[See regulation 8,10,12,13]

S.No..	Activity	Amount of fee
(1)	(2)	(3)
1.	Zero visit for DVM program	Rs. 100,000/-
2.	Visit one, visit two, subsequent or periodic visits for DVM programme.	Rs.300,000/-
3.	Visit for initial recognition of post-graduate or doctorate program	Rs.100,000/- per visit/per department
4.	Subsequent or periodic visit for post-graduate or doctorate program only	Rs.100,000/- per visit/per department
5.	Subsequent or periodic visit jointly for DVM and postgraduate program	Rs. 3,00000/-
6.	Request for increase in annual admission	Rs. 100,000/-
7.	Change of name of institution	Rs. 25,000/-

Col (R) Muhammad Ali Asghar Raza
Secretary/Registrar

[No. F-1(7)/2015(T&R)]