1.) Course offered: UG, PG , PhD - Semester / Year wise

- List of UG Courses (B.V.Sc & AH) As per latest MSVE Guidelines) , B.Tech. (D.T.) and B.F.Sc as per ICAR – V Deans Committee – 2016.

Sr No	Course No.	Title of Courses	Credit	Course offered in the Year
1	VGO Unit-I, II, III	Vet. Gynaecology Unit-I	2 +1=3	IV Professional year of BVSc & AH Degree course
		Vet. Obstetrics Unit-II,		
		Vet. Andrology &A.I. Unit-III		

List of PG Courses (MVSc) and M.Tech. (Dairy Technology)

P.G. Courses.:

1) Field of Specialization: :M.V.Sc. (Animal Reproduction, Gynaecology, Obstetrics)
2) Duration :2 Years (4 semesters)
3) Total credit requirement : 70 credits

Sr No	Course No .	Title	Credit	Semester
1	VGO 501	General Gynaecology*	2+1	I
2	VGO 502	Female Infertility in Farm Animals*	2+1	I
3	VGO 503	Veterinary Obstetrics*	2+1	II
4	VGO 504	Andrology and Male Infertility*	2+1	II
5	VGO 505	Semen Preservation and Artificial Insemination	2+1	-
6	VGO 506	Basics of Reproductive Biotechnology*	2+1	III
7	VGO 507	Clinical Practice-I*	0+3	I
8	VGO 508	Clinical Practice-II*	0+3	II
9	VGO 509	Canine and Feline Reproduction	2+1	-
10	VGO 510	Caprine and Ovine Reproduction	2+1	-
11	VGO 511	Equine Reproduction	2+1	-
12	VGO 512	Camel Reproduction	2+1	-
13	VGO 513	Elephant Reproduction	2+1	-
14	VGO 514	Wild and Zoo Animal Reproduction	2+1	-
15	VGO 515	Porcine Reproduction	2+1	-
16	VGO 516	Ultrasonography In Animal Reproduction	1+2	-
17	VGO 590	Special Problem	0+1	-

18	VGO 591	Master's Seminar	1+0	III
19	VGO 599	Master's Research	30	III & IV

*Core Courses

2.) Lecture schedule according new VCI syllabus:

Chairman, BOS narrated the decision of implementation of new VCI syllabus from current academic year i.e. 2016-17 for veterinary education and informed that the course duration is now of five and half year and instead of semesters it is now annual pattern. Clinical subjects which has to be taught in IV year with duration of one and half year with three units of 2+1 =3 credit hours. They requested to all members to go through the new syllabus of Gynaecology and Obstetrics meticulously and prepare a lecture schedule for theory and practical's.

After through discussion lecture schedule is prepared as follow

Resolution No. 14/2017:

NAME OF DISCIPLINE	**:**	**DEPARTMENT OF VETERINARY GYNAECOLOGY AND OBSTETRICS**
PROFESSIONAL YEAR	**:**	**IV**
CREDIT HOURS	**:**	**2+1=3**
BoS- Approval Resolution No.	**:**	**14/2017 dated 6th& 7th January 2017 Revised in 32ndBoS on 05/02/2020**

Lecture schedule for Theory:

Sr. No	Unit No.	Topic to be covered
1	**1st Unit Veterinary Gyanecology**	**Introduction to ARGO**
2		Bovine : Applied clinical anatomy of female reproductive tract
3		Comparative : Applied clinical anatomy of female reproductive tract
4		Embryology of female reproductive tract
5		Clinical evaluation and abnormalities of ovary, salpinx
6		Clinical evaluation and abnormalities of uterus
7		Clinical evaluation and abnormalities of cervix, vagina and vulva
8		Endocrine control of puberty and sexual maturity
9		Puberty and maturity, factors affecting the same
10		Puberty and maturity in different domestic animals
11		Delayed puberty- Its causes
12		Delayed puberty-clinical approach, treatment and prevention of delayed puberty
13		Applied reproductive physiology and endocrinology of oestrous cycle
14		Oestrous cycle
15		Oestrous cycle in different domestic animals

16		Factors affecting the length of the oestrous cycle-
17		Aberrations of oestrus and oestrus cycle
18		Clinical management of aberrations of oestrus and oestrus cycle
19		Problems in oestrus detection and oestrus detection aids
20		Transportation and survivability of gametes in female reproductive tract
21		Follicular Dynamics
22		Clinical impact of Follicular Dynamics on fertility improvement-
23		Ovulation
24		Aberrations of ovulation-
25		Incidence causes, diagnosis treatment and prevention of ovulatory failures
26		Fertilization
27		Aberrations of fertilization-
28		Fertilization failures
29		Pathological affections of ovary, uterine tubes, uterus, cervix , vagina and external genitalia – and prevention
30		Embryonic mortality incidence, causes, diagnosis, treatment and prevention
31		Clinical management of specific forms of infectious infertility- bacterial (Brucellosis)
32		Clinical management of specific forms of infectious infertility- bacterial
After 30% Course Completion- FIRST INTERNAL ASSESSMENT		
33		Clinical management of specific forms of infectious infertility-viral agents
34		Clinical management of specific forms of infectious infertility-parasitic and fungal agents
35		Clinical management of non-specific forms of infectious infertility-
36		Clinical management of non-specific forms of infectious infertility
37		Role of nutrition, in infertility
38		Role of climate and stress on reproductive efficiency
39		Managemental causes of infertility
40		Anoestrus Diagnostic procedures in infertility investigation
41		Clinical uses of hormones and drugs in the management of Anoestrus
42		Repeat breeding syndrome – Diagnostic procedures in infertility investigation
43		Repeat breeding syndrome –Clinical uses of hormones and drugs in its management
44		Surgical procedures for correction of abnormalities of the female reproductive tract in larg animals
45		Surgical procedures for correction of abnormalities of the female reproductive tract companion animals
46		Herd reproductive health management and fertility parameters in individual animals and in herds
47		Synchronization of estrus and ovulation and its principle. methodology and implications in cow and buffalo

48		Synchronization of estrus and ovulation and its principle. methodology and implications in sheep and goat
49		Multiple ovulation and Embryo transfer technology- surgical
50		Multiple ovulation and Embryo transfer technologynon surgical
51		In vitro fertilization
52		Equines: oestrous cycle- Seasonality- breeding management- Aberrations of oestrous cycle and ovulations- Techniques of Pregnancy diagnosis- Clinical management of specific and non-specific forms of infectious infertility- Diagnostic procedures in infertility investigation
53		Ovines and caprines: oestrous cycle- Seasonality- Control of oestrous cycle and infertility
54		Swines : oestrous cycle- breeding management- Techniques of Pregnancy diagnosis and infertility
55		Canines and Felines : oestrous cycle- breeding management- Phantom pregnancy
56		Canines and Felines:medical termination of pregnancy – Aberrations of oestrous cycle- Medical and surgical management of affections of ovary, uterine tubes, uterus, cervix, vagina and external genitalia –
57		Methods of Population control by medical and surgical techniques in canine. Comparative reproductive events in camel
58		Principle, procedure and application of ultrasonography in farm animal reproduction
59		Principle, procedure and application of ultrasonography in pet animal reproduction
60	**2nd unit Veterinary Obstetrics**	Farm and pet animals - Maternal recognition of pregnancy
61		Endocrinology of pregnancy
62		Farm and pet animals– Pregnancy diagnosis-
63		Farm and pet animals -Pregnancy diagnosis-
64		Duration of pregnancy -Factors affecting gestation length-
After 60% Course Completion- SECOND INTERNAL ASSESSMENT		
65		Care and management of pregnant animals-
66		Implantation, Placentation-–
67		Placenta-Classification, functions
68		Wandering of ovum- Telegony- Superfetation and Superfecundation
69		Clinical management of specific causes of abortion,
70		Clinical management of non specific causes of abortion,
71		Extra uterine pregnancy, , mummification, maceration, cervicovaginal prolapsed, hysterocele
72		Dropsy of fetal membranes and fetus,
73		Uterine torsion

74		Parturition- Signs of approaching parturition - Stages of parturition
75		Initiation and induction of parturition –
76		Lactational disorders - Puerparium and factors affecting puerparium - Postpartum care of the dam and neonate in different species of farm and pet animals -
77		Dystocia – Classification - Clinical signs and diagnosis - Handling of Fetal dystocia
78		Dystocia – Classification - Clinical signs and diagnosis - Handling of maternal dystocia
79		Obstetrical interventions - Mutation – Forced extraction – Fetotomy
80		Cesarean section in small and large animals – Maternal obstetrical paralysis -
81		Retention of fetal membranes,
82		Total uterine prolapse and
83		Common metabolic diseases of puerperal period – Post partum hemorrhage – Sub involution of placental sites - Injuries incidental to parturition -
84		Post partum uterine infections – Post partum resumption of ovarian activity .
85	**3rdUnit Veterinary Andrology and AI**	Farm and pet animals - Comparative clinical reproductive Anatomy and endocrinology of the male reproduction -
86		Farm and pet animals - Comparative clinical reproductive anatomy and endocrinology of the male reproduction -
87		Common congenital and genetic defects of the male reproductive tract –
88		Puberty and sexual maturity and factors affecting them
89		Sexual behaviour and libido
90		Sperm transport, erection and ejaculation -
91		Coital injuries in male animals
92		Vices in male animals
93		Semen and ejaculate
94		Structure of Spermatozoa
95		Semen collection techniques
96		Semen collection techniques
After 90% Course Completion-THIRD INTERNAL ASSESSMENT		
97		Semen evaluation
98		Semen evaluation
99		Semen extenders, dilution,
100		Semen preservation
101		Semen preservation and post thaw evaluation
102		Artificial insemination techniques in farm and pet animals
103		Forms of male infertility - Impotentia

104		Impotentiacoeundi
105		Impotentiagenerandi
106		Affections of the scrotum, testis, accessory sex glands, penis and prepuce -
107		Breeding soundness evaluation
108		*In vitro* tests for evaluation of male fertility -
109		Medical and surgical techniques for population control of the male reproduction
110		Surgical procedure on the male reproductive tract in farm and pet animals.
		ANNUAL EXAMINATION

Lecture schedule for Practical:

Sr. No	Unit No.	Practical No.	Practical to be covered
1	**1st Unit Veterinary Gynaecology**	**1**	Study of female genital organs using slaughter house specimens
2		**2**	Oestrus detection aids
3		**3**	Techniques of rectal palpationof female reproductive tract -
4		**4**	Techniques of rectal palpationof female reproductive tract -
5		**5**	Techniques of rectal palpationof female reproductive tract -
6		**6**	Techniques of rectal palpationof female reproductive tract -
7		**7**	Techniques of rectal palpationof female reproductive tract -
8		**8**	Techniques of rectal palpationof female reproductive tract -
9		**9**	Techniques of rectal palpationof female reproductive tract -
10		**10**	Gynaecological equipment and instruments
11		**11**	Vaginal exfoliative cytology and vaginoscopy
12		**12**	Ultrasonography of female reproductive tract -
13		**13**	Ultrasonography of female reproductive tract -
14		**14**	Surgical procedures on the vulva, vagina and uterus
15		**15**	Study of pathologicalspecimens of female genital tract
16		**16**	Demonstration and practice of ovario-hysterectomy
17		**17**	Demonstration and practice of panhysterectomy
18			Diagnosticprocedures in investigation of infertility in female animals
19		**18**	Diagnosticprocedures in investigation of infertility in female animals
20		**19**	Diagnosticprocedures in investigation of infertility in female animals
21		**20**	Diagnosticprocedures in investigation of infertility in female animals
22		**21**	Attending gynaecoclinical cases
23		**22**	Attending gynaecoclinical cases
24		**23**	Attending gynaecoclinical cases
25		**24**	Attending gynaecoclinical cases
26	**2nd Unit Veterinary Obstetrics**	**26**	Study of pelvis and pelvimetry

27		**27**	Pregnancy diagnosis
28		**28**	Pregnancy diagnosis
29		**29**	Study of foetal membranes of domestic and pet animals –andidentification of normal and abnormal foetal membranes
30		**30**	Approaching signs of parturition- Stages of parturition-
31		**31**	Approach to an obstetrical case
32		**32**	Obstetrical anaesthesia - obstetrical instrument and equipment
33		**33**	Manipulation of foetalmalpresentation in phantom boxes -
34		**34**	Maternal causes of dystocia and its management
35		**35**	Fetotomy in cadavers, Handling of prolapsed of genitalia.
36		**36**	Demonstration of forceps delivery and Caesarean section in small and large animal clinical cases.
37	**3rd Unit Veterinary Andrology& A.I. and Assisted reproductive techniques**	**37**	Study of male genital organs using slaughter house specimens-
38		**38**	Techniques of rectal palpation of the male reproductivetract-
39		**39**	Andrological and AI equipment -Vasectomy and castration. Surgical procedures on penis, prepuce and scrotum-
40		**40**	Planning and organization of AI centre-Preparation of teaser animals -Selection, care, training and maintenance of maleanimal used for breeding purpose-
41		**41**	Techniques of semen collection
42		**42**	Semen evaluation techniques
43		**43**	Semen evaluation techniques
44		**44**	Sterilization, storage ofequipment used for semen collection and Artificial insemination
45		**45**	Preparation of extenders and extension of semen-Preservation of semen-
46		**46**	Thawing of semen and technique of AI-Handling and maintenance of LN2 containers
47		**47**	Diagnosticprocedures in investigation of infertility in male animals-Breeding soundness evaluation of bulls
48		**48**	Oestrussynchronization procedures, Multiple Ovulation and Embryo Transfer- *In Vitro* Fertilization
	Annual Practical Examination		