## (Information to be uploaded in Standard Proforma's)

## **Academic:**

- 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.

Semester/Unit	Course No./	Course Title	Credit
	Year		
		B.V.Sc.&A.H. (MSVE-2016)	
Unit – I		Veterinary Gynaecology	
Unit – II	IV Year	Veterinary Obstetrics	2 + 1 = 3
Unit – III		Veterinary Andrology and AI	

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

		M.V.Sc.		
	VOG – 601	General Gynaecology	3 + 1 = 4	
I	VOG – 602	Female Infertility	3 + 1 = 4	
	VOG – 607	Clinical Practice – I	0 + 3 = 3	
	VOG – 603	Veterinary Obstetrics	2 + 2 = 4	
II	VOG – 604	Andrology and Male Infertility	3 + 1 = 4	
	VOG – 608	Clinical Practice – II	0 + 3 = 3	
	VOG – 605	Semen Preservation and Artificial Insemination	2 + 1 = 3	
III	VOG – 606	Reproductive Biotechnology	2 + 1 = 3	
	VOG – 691	Master Seminar	1 + 0 = 1	
	VOG – 699	Master Research	0 + 5 = 5	
IV	VOG – 699	Master Research	0 + 15 = 15	
Ph.D. (Regular)				
	VOG – 701	Advances in Gynaecology	2 + 1 = 3	
I	VOG – 702	Advances in Obstetrics	2 + 1 = 3	
	VOG – 706	Clinical Practice – I	0 + 3 = 3	
	VOG – 703	Advances in Andrology	2 + 1 = 3	
II	VOG – 705	Advances in Semen Preservation	1 + 1 = 2	
	VOG – 707	Clinical Practice – II	0 + 3 = 3	
	VOG – 704	Advances in Reproductive Biotechnology	1 + 1 = 2	
III	VOG – 790	Special Problem	0 + 2 = 2	
	VOG – 791	Doctoral Seminar – I	1 + 0 = 1	

	VOG – 792	Doctoral Seminar – II	1 + 0 = 1
IV to VI	VOG – 799	Doctoral Research	0 + 45 = 45
		Ph.D. (In-Service)	
I	VOG – 701	Advances in Gynaecology	2 + 1 = 3
1	VOG – 706	Clinical Practice – I	0 + 3 = 3
II	VOG – 702	Advances in Obstetrics	2 + 1 = 3
11	VOG – 707	Clinical Practice – II	0 + 3 = 3
	VOG – 703	Advances in Andrology	2 + 1 = 3
III	VOG – 704	Advances in Reproductive Biotechnology	1 + 1 = 2
	VOG – 705	Advances in Semen Preservation	1 + 1 = 2
	VOG – 790	Special Problem	0 + 2 = 2
IV	VOG – 791	Doctoral Seminar – I	1 + 0 = 1
	VOG – 792	Doctoral Seminar – II	1 + 0 = 1
V to VIII	VOG – 799	Doctoral Research	0 + 45 = 45

2. Lecture Schedule - UG, PG , PhD - Theory / Practical Schedule - Approved by BoS - Subject wise

Sr. No	Unit No	Lecture No	Topic to be covered
	TT 1: T	4	
1	Unit I	1	Bovine: Applied clinical anatomy and embryology of female reproductive tract
	Gynaecolo		reproductive tract
	gy		
2		2	Applied clinical anatomy and embryology of female reproductive
			tract
3		3	Clinical evaluation and abnormalities of ovary, salpinx
4		4	Clinical evaluation and abnormalities of uterus
5		5	Clinical evaluation and abnormalities of cervix, vagina and vulva
6		6	Puberty and sexual maturity and their endocrine control Puberty
			and maturity, factors affecting the same
7		7	Endocrine control of puberty and sexual maturity
8		8	Delayed puberty- Its causes
9		9	Delayed puberty-clinical approach, treatment and prevention of
			delayed puberty

10	10	Applied reproductive physiology and endocrinology of oestrous cycle
11	11	Oestrous cycle
12	12	Factors affecting the length of the oestrous cycle-
13	13	Aberrations of oestrus and oestrus cycle
14	14	Clinical management of aberrations of oestrus and oestrus cycle
15	15	Problems in oestrus detection and oestrus detection aids
16	16	Transportation and survivability of gametes in female reproductive tract
17	17	Follicular Dynamics
18	18	Clinical impact improvement-of Follicular Dynamics on fertility
19	19	Ovulation
20	20	Aberrations of ovulation-
21	21	Incidence causes, diagnosis treatment and prevention of ovulatory failures
22.	22.	Fertilization
23	23	Aberrations of fertilization-
24	24	Fertilization failures
25	25	Pathological affections of ovary, uterine tubes, uterus, cervix, vagina and external genitalia - and prevention
26	26	Embryonic mortality incidence, causes, diagnosis, treatment and prevention
27	27	Clinical management of specific forms of infectious infertility-bacterial
28	28	Clinical management of specific forms of infectious infertility-viral agents
29	29	Clinical management of specific forms of infectious infertility-parasitic and fungal agents

30	30	Clinical management of non-specific forms of infectious infertility-
31	31	Clinical management of non-specific forms of infectious infertility
AFTER 30	0 % COURSE CO	MPLETION - FIRST INTERNAL ASSESSMENT
32	32	Role of nutrition, climate and stress on reproductive efficiency Managemental causes of infertility-
33	33	Anoestrus Diagnostic procedures in infertility investigation - Clinical uses of hormones and drugs in the management of infertility-
34	34	Anoestrus Diagnostic procedures in infertility investigation Clinical uses of hormones and drugs in the management of infertility-
35	35	Repeat breeding syndrome Diagnostic procedures in infertility investigation Clinical uses of hormones and drugs in the management of infertility-
36	36	Repeat breeding syndrome Di Diagnostic procedures in infertility investigation Clinical uses of hormones and drugs in the management of infertility-
37	37	Surgical procedures for correction of abnormalities of the female reproductive tract.
38	38	Herd reproductive health management and fertility parameters in individual animals and in herds
39	39	Synchronization of estrus and ovulation and its principle. methodology and implications-
40	40	Multiple ovulation and Embryo transfer technology-In vitro fertilization
41	41	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
42	42	Ovines and caprines: oestrous cycle- Seasonality- Control of oestrous cycle and infertility

43		43	Swines: oestrous cycle- breeding management-Techniques of Pregnancy diagnosis and infertility
44		44	Canines and Felines : oestrous cycle- breeding management- Phantom pregnancy
45		45	Medical termination of pregnancy Aberrations of oestrous cycle Medical and surgical management of affections of ovary, uterine tubes, uterus, cervix, vagina and external genitalia Methods of Population control by medical and surgical techniques. Comparative reproductive events in camel
46		46	Principle, procedure and application of ultrasonography in farm and pet animal reproduction
47	UNIT II Obstetrics	47	Farm and pet animals Maternal recognition of pregnancy - Applied Endocrinology of pregnancy
48		48	Farm and pet animals- Pregnancy diagnosis-
49		49	Farm and pet animals-Pregnancy diagnosis-
50		50	Duration of pregnancy-Factors affecting gestation length-
51		51	Care and management of pregnant animals-
52		52	Implantation, Placentation-
53		53	Placenta-Classification, functions
54		54	Wandering of ovum Telegony- Superfetation and Superfecundation
55		55	Clinical management of specific causes of abortion,
56		56	Clinical management of non specific causes of abortion,
57		57	Extra uterine pregnancy,, mummification, maceration, cervicovaginal prolapsed, hysterocele
58		58	Dropsy of fetal membranes and fetus,
59		59	Uterine torsion
60		60	Parturition- Signs of approaching parturition - Stages of parturition
61		61	Initiation and induction of parturition -

62		62	Lactational disorders Puerparium and factors affecting puerparium Postpartum care of the dam and neonate in different species of farm and pet animals -
63		63	Dystocia Classification Clinical signs and diagnosis Handling of Fetal dystocia
64		64	Dystocia Classification Clinical signs and diagnosis -Handling of maternal dystocia
65		65	Obstetrical interventions Mutation Forced extraction Fetotomy
66		66	Cesarean section in small and large animals Maternal obstetrical paralysis -
67		67	Retention of fetal membranes,
68		68	Total uterine prolapse
69		69	Common metabolic diseases of puerperal period Post partum hemorrhage Sub involution of placental sites Injuries incidental to parturition -
70		70	Post partum uterine infections - Post partum resumption of ovarian activity.
71	UNIT III  ANDROL OGY AND AI	71	Farm and pet animals Comparative clinical reproductive Anatomy and endocrinology of the male reproduction -
72		72	Farm and pet animals Comparative clinical reproductive anatomy and endocrinology of the male reproduction -
73		73	Common congenital and genetic defects of the male reproductive tract -
74		74	Puberty and sexual maturity and factors affecting them
75		75	Sexual behaviour and libido
76		76	Sperm transport, erection and ejaculation -
77		77	Coital injuries in male animals
78		78	Vices in male animals
79		79	Semen and ejaculate

80		80	Structure of Spermatozoa
81		81	Semen collection techniques
82		82	Semen collection techniques
83		83	Semen evaluation
84		84	Semen evaluation
85		85	Semen extenders, dilution,
86		86	Semen preservation
87		87	Semen preservation and post thaw evaluation
88		88	Artificial insemination techniques in farm and pet animals
89		89	Forms of male infertility Impotentia
90		90	Impotentia coeundi
91		91	Impotentia generandi
92		92	Affections of the scrotum, testis, accessory sex glands, penis and prepuce
93		93	Breeding soundness evaluation
94		94	In vitro tests for evaluation of male fertility -
95		95	Medical and surgical techniques for population control of the male reproduction
96		96	Surgical procedure on the male reproductive tract in farm and pet animals.
1	UNIT I GYNAEC OLOGY	1	Study of female genital organs using slaughter house specimens
2		2	Oestrus detection aids
3		3	Techniques of rectal palpation of female reproductive tract
4		4	Techniques of rectal palpation of female reproductive tract
5		5	Techniques of rectal palpation of female reproductive tract
6		6	Techniques of rectal palpation of female reproductive tract

7		7	Techniques of rectal palpation of female reproductive tract
8		8	Techniques of rectal palpation of female reproductive tract
9		9	Techniques of rectal palpation of 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 pathological specimens of female genital tract
16		16	Demonstration and practice of ovario-hysterectomy
17		17	Demonstration and practice of panhysterectomy
18		18	Diagnostic procedures in investigation of infertility in female animals
19		19	Diagnostic procedures in investigation of infertility in female animals
20		20	Diagnostic procedures in investigation of infertility in female animals
21		21	Diagnostic procedures in investigation of infertility in female animals
22		22	Attending gynaecoclinical cases
23		23	Attending gynaecoclinical cases
24		24	Attending gynaecoclinical cases
25		25	Attending gynaecoclinical cases
26	UNIT II	26	Study of pelvis and pelvimetry
	OBSTETR ICS		
27		27	Pregnancy diagnosis
28		28	Pregnancy diagnosis

29		29	Study of foetal membranes of domestic and pet animals -and identification 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 equipment obstetrical instrument and equipment
33		33	Manipulation of foetal malpresentation 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	UNIT III  ANDROL  OGY AND  AI	37	Study of male genital organs using slaughter house specimens-
38		38	Techniques of rectal palpation of the male reproductive tract-
39		39	Andrological and Al equipment -Vasectomy and castration. Surgical procedures on penis, prepuce and scrotum-
40		40	Planning and organization of Al centre-Preparation of teaser animals -Selection, care, training and maintenance of male animal used for breeding purpose-
41		41	Techniques of semen collection
42		42	Semen evaluation techniques
43		43	Semen evaluation techniques
44		44	Sterilization, storage of equipment 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 Al-Handling and maintenance of LN2 containers

47		47	Diagnostic procedures in investigation of infertility in male animals-Breeding soundness evaluation of bulls
48		48	Oestrus synchronization procedures, Multiple Ovulation and Embryo Transfer- In Vitro Fertilization
ANN	ANNUAL PRACTICAL EXAMINATION		

3. Teaching Schedule :UG, PG , PhD - Prepared by – Course Teacher – Year wise / Course Wise

Sr.	Unit No	Lectu	Topic to be covered
No		re No	
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84		84	Semen evaluation
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86		86	Semen preservation
87		87	Semen preservation and post thaw evaluation

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92		92	Affections of the scrotum, testis, accessory sex glands, penis and prepuce
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7		7	Techniques of rectal palpation of female reproductive tract
8		8	Techniques of rectal palpation of female reproductive tract
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11		11	Vaginal exfoliative cytology and vaginoscopy
12		12	Ultrasonography of female reproductive tract -
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	ANDROL OGY AND		
	AI		
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43		43	Semen evaluation techniques
44		44	Sterilization, storage of equipment 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 Al-Handling and maintenance of LN2 containers
47		47	Diagnostic procedures in investigation of infertility in male animals-Breeding soundness evaluation of bulls
48		48	Oestrus synchronization procedures, Multiple Ovulation and Embryo Transfer- In Vitro Fertilization
ANNUAL PRACTICAL EXAMINATION			