

### College of Veterinary Science and Animal Husbandry Kamdhenu University, Bhuj (Kutch)



### DEPARTMENT OF VETERINARY GYNAECOLOGY & OBSTETRICS

#### **About Department**

The department was established recently with the vision of developing Veterinary Gynaecology and Obstetrics in accordance with MSVE 2016 guidelines. The initial focus is on creating the minimum standards for undergraduate teaching by strengthening infrastructure and equipping laboratories with essential instruments. At present, the department functions under the Principal's office. Considering the rich biodiversity of the Kutch region and its variety of livestock breeds, the department, as a vital part of veterinary clinical sciences, aims to contribute significantly to improving animal health and productivity. This will be achieved through effective reproductive management and specialized therapeutic care tailored to the region's needs. Furthermore, the department plans to extend its expertise to the farming community by offering advisory services, clinical interventions, and outreach programs. These initiatives are designed to enhance reproductive performance, support livestock farmers, and promote sustainable development in the animal husbandry sector.

#### **Faculty details**



Name:	Dr. G. B. Solanki	
<b>Designation:</b>	Associate Professor & Head	
Qualification:	Ph.D.	
<b>Experience:</b>	13 Years	
PG Students Guided	-	
E Mail:	gbsolanki@ kamdhenuuni.edu.in	
Mobile No:	9909464747	
ORCID	0000-0002-5024-4949	
Scopus ID	-	
G Scholar ID	gbsolanki@ kamdhenuuni.edu.in	



Name:	Dr. Hardipsinh Poonamchandrasinh Vijyeta			
<b>Designation:</b>	Associate Professor (Additional Responsibility)			
Qualification:	Ph. D.			
<b>Experience:</b>	10 Years			
<b>PG Students Guided</b>	01 (MVSc)			
E Mail:	hpvijyeta@kamdhenuuni.edu.in			
	hodvgobhuj@kamdhenuuni.edu.in			
Mobile No:	7874642318			
ORCID	0000-0001-5050-124X			
Scopus ID	https://www.scopus.com/home.uri?zone=header&ori			
G Scholar ID	gin=searchauthorfreelookup 5BxAbiYAAAAJ			

### Postgraduate Students Guided

Sr. No.	Thesis Title	Major Advisor	Year of Submission
1.	Induction of Estrus with Melatonin Prior to Ovsynch Protocol in Pubertal Jaffarabadi Buffalo Heifers During Summer Season	Dr. H. P. Vijyeta	2025-26

#### **Summary of Publications**

Sr. No.	Detail	Numbers
1.	Research Paper (National Journal)	13

2.	Research Paper (International Journal)	03
3.	Short Communications	
4.	Recommendations	01
5.	Book/ Booklets	01
6.	Chapters in Books	
7.	Training Manual / Practical Manual	01
8.	Technical Bulletins	01
9.	Review articles in scientific journals	
10.	Popular articles in vernacular languages	14
11.	Informative leaflets / folders for farmers	02

# Awards

Sr. No.	Details	Number of Awards
1.	National	
2.	International	1
3.	Scientific Society/Body/Agency Awards for best paper presentation	04
4.	Scientific Society Awards for best poster presentation	01
5.	Best article award	
6.	Best Thesis Award	-
7.	Best Teachers award	-
8.	Others	-

# **Details of Awards**

Sr. No.	Name of Award	Name of Awardee	Year	Instituted by
1.	Poster Presentation Award	Dr. H. P. Vijyeta	2024	ISBD
2.	Paper Presentation Award	Dr. H. P. Vijyeta	2024	ISBD
3.	Paper Presentation Award	Dr. H. P. Vijyeta	2024	SARSD

# **UG Academics**

# **UG Course (As per VCI MSVE 2016 course curriculum)**

Sr. No.	Course offered in Third Professional Year	Credits Hours
1.	Veterinary Gynaecology and Obstetrics	2+1

# UG Syllabus – Fourth Professional year Theory

Unit	Contents
Unit 1	VETERINARY GYNAECOLOGY
	Bovine: Applied clinical anatomy and embryology of female reproductive tract - Hereditary and congenital anomalies of female reproductive tract – Puberty and sexual maturity and their endocrine control- Delayed puberty-
	Its causes, clinical approach, treatment and prevention of delayed puberty- Applied reproductive physiology and
	endocrinology of oestrous cycle- Oestrous cycle and factors affecting the length of the oestrous cycle-Aberrations
	of oestrus and their clinical management and problems in oestrus detection and oestrus detection aids – Transportation and survivability of gametes in female reproductive tract-Follicular Dynamics and its clinical
	impact on fertility improvement- ovulation and aberrations of ovulation-Incidence causes, diagnosis treatment and
	prevention of ovulatory failures- Fertilization and aberrations of fertilization- Fertilization failures - embryonic
	mortality-incidence, causes, diagnosis, treatment and prevention – Pathological affections of ovary, uterine tubes,
	uterus, cervix , vagina and external genitalia - Clinical management of specific and non-specific forms of
	infectious infertility- Role of nutrition, climate and stress on reproductive efficiency - Managemental causes of
	infertility- Anoestrus and repeat breeding syndrome – Diagnostic procedures in infertility investigation – Clinical
	uses of hormones and drugs in the management of infertility- Surgical procedures for correction of abnormalities
	of the female reproductive tract. Herd reproductive health management and fertility parameters in individual
	animals and in herds. Assisted reproductive techniques: Synchronization of estrus and ovulation and its principle.
	methodology and implications- Multiple ovulation and Embryo transfer technology-In vitro fertilization. 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. Ovines and caprines: oestrous cycle- Seasonality- Control of oestrous cycle and infertility. Swines: oestrous cycle- breeding management- Techniques of Pregnancy diagnosis and infertility. Canines and Felines: oestrous cycle- breeding management- Phantom pregnancy- 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: Principle, procedure and application of ultrasonography in farm and pet animal reproduction. Unit 2 VETERINARY OBSTETRICS Farm and pet animals - Maternal recognition of pregnancy - Applied Endocrinology of pregnancy - Pregnancy diagnosis- Duration of pregnancy -Factors affecting gestation length- Care and management of pregnant animals-Implantation, Placentation- Classification, functions -Wandering of ovum- Telegony- Superfetation and Superfecundation – Clinical management of specific and non-specific causes of abortion, extra uterine pregnancy, dropsy of fetal membranes and fetus, mummification, maceration, cervicovaginal prolapse, uterine torsion and hysterocele. Parturition- Signs of approaching parturition - Stages of parturition - Initiation and induction of parturition - lactational disorders - Puerparium and factors affecting puerparium - Postpartum care of the dam and neonate in different species of farm and pet animals - Dystocia - Classification - Clinical signs and diagnosis -Handling of Fetal and maternal dystocia – Obstetrical interventions - Mutation – Forced extraction – Fetotomy – Cesarean section in small and large animals – Maternal obstetrical paralysis - Retention of fetal membranes, Total uterine prolapse and common metabolic diseases of puerperal period – Postpartum hemorrhage – Sub involution of placental sites - Injuries incidental to parturition - Post partum uterine infections - Post-partum resumption of ovarian activity. Unit 3 VETERINARY ANDROLOGY AND A.I. Farm and pet animals - Comparative clinical reproductive anatomy and endocrinology of the male reproduction -Common congenital and genetic defects of the male reproductive tract - Puberty and sexual maturity and factors affecting them - Sexual behaviour and libido - Sperm transport, erection and ejaculation - Coital injuries and vices in male animals - Semen and ejaculate - Semen collection techniques- Structure of Spermatozoa - Semen evaluation - Semen extenders, dilution, preservation and post thaw evaluation - Artificial insemination techniques in farm and pet animals - Forms of male infertility - Impotentia coeundi and impotentia generandi -

#### **Practical**

Unit	Contents
Unit 1	VETERINARY GYNAECOLOGY Study of female genital organs using slaughter house specimens- Oestrus detection aids - Techniques of rectal palpation of female reproductive tract - Gynaecological equipment and instruments -Vaginal exfoliative cytology and vaginoscopy- Ultrasonography of female reproductive tract - Surgical procedures on the vulva, vagina and uterus-Study of pathological specimens of female genital tract- Demonstration and practice of ovario- hysterectomy
Unit 2	and panhysterectomy- Diagnostic procedures in investigation of infertility in female animals.  VETERINARY OBSTETRICS  Study of pelvis and pelvimetry- Pregnancy diagnosis-Study of foetal membranes of domestic and pet animals - and identification of normal and abnormal foetal membranes-Approaching signs of parturition- Stages of parturition- Approach to an obstetrical case- Obstetrical anaesthesia - obstetrical instrument and equipment - Manipulation of foetal malpresentation in phantom boxes - Maternal causes of dystocia and its management-
II	Fetotomy in cadavers. Demonstration of forceps delivery and Caesarean section in small and large animal clinical cases. Handling of prolapse of genitalia.
Unit 3	VETERINARY ANDROLOGY, AI AND ASSISTED REPRODUCTIVE TECHNIQUES Study of male genital organs using slaughter house specimens- Techniques of rectal palpation of the male reproductive tract- Andrological and AI equipment -Vasectomy and castration -Surgical procedures on penis, prepuce and scrotum- Planning and organization of AI centre-Preparation of teaser animals -Selection, care, training and maintenance of male animal used for breeding purpose-Techniques of semen collection-Semen evaluation techniques -Sterilization, storage of equipment used for semen collection and Artificial insemination-Preparation of extenders and extension of semen-Preservation of semen-Thawing of semen and technique of AI-Handling and maintenance of LN2 containers. Diagnostic procedures in investigation of infertility in male animals-Breeding soundness evaluation of bulls- Oestrus synchronization procedures- Multiple Ovulation and Embryo Transfer- In Vitro Fertilization.

#### **Syllabus Distribution for Annual Board Examination:**

Examination	PAPERS	UNITS	MAXIMUM MARKS	WEIGHTAGE

Internal	First	Unit 1	40	10
Assessment	Second	Unit 2	40	10
	Third	Unit 3	40	10
Annual Board	THEORY			
	Paper-I	Unit 1	100	20
	Paper-II	Unit 2 and 3	100	20
	PRACTICAL			
	Paper-I	Unit 1	60	20
	Paper – II	Unit 2 and 3	60	20

# PG Academic Summary of PG student:

Sr. No.	Details	No. of Students passed out	No. of Students presently enrolled
1.	Master*	-	-
2.	Doctorate*	-	-
3.	Total	-	-

<sup>\*</sup>To be started in next academic year (2026-27)

# **PG Courses**

Sr. No.	<b>Course Code</b>	Title of Course	Credit Hours
1.	VGO-501	General Gynaecology	2+1
2.	VGO-502	Female Infertility in Farm Animal	2+1
3.	VGO-503	Veterinary Obstetrics	2+1
4.	VGO-504	Andrology & Male Infertility	2+1
5.	VGO-505	Semen Preservation and Artificial Insemination	2+1
6.	VGO-506	Basics of Reproductive Biotechnology	2+1
7.	VGO-507	Clinical Practice-I	0+3
8.	VGO-508	Clinical Practice-II	0+3
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	2+1
17.	VGO-590	Special Problem	0+1
18.	VGO-591	Master's Seminar	1+0
19.	VGO-599	Master's Research	30

# Ph. D. Courses

Sr. No.	<b>Course Code</b>	Title of Course	Credit Hours
1.	VGO-601	Advances in Gynaecology and Infertility Management	2+1
2.	VGO-602	Advances in Veterinary Obstetrics	1+1
3.	VGO-603	Advances in Andrology and Male Infertility	2+1
4.	VGO-604	Reproductive Biotechnology	1+1
5.	VGO-605	Semenology	1+1
6.	VGO-606	Clinical Practice- I	0+3

7.	VGO-607	Clinical Practice- II	0+3
8.	VGO-690	Special Problem	0+2
9.	VGO-691	Doctoral Seminar-I	1+0
10.	VGO-692	Doctoral Seminar-II	1+0
11.	VGO-699	Doctoral Research	75

## **PG Examination Patterns**

Sr. No.	Examination	Theory	Practical
1.	Self-study (Assignment/ Presentation)	20	-
2.	Internal tests: -		
	First Test	10	-
	Mid Term Test	20	50
3.	Semester End Examination	50	50
	Total Marks	100	100

# Research Area of the Department

Large and Small animal obstetrics	
Large and Small animal Infertility	
Semen cryo-biology	
Reproductive Biotechnology	

### **Advanced Instrumentation Facilities**

Sr. No.	Name of Instruments
1.	Nil

#### **Contact details**

### Dr. G. B. Solanki

Associate Professor & Head

Department of Veterinary Gynaecology and Obstetrics

College of Veterinary Science and Animal Husbandry, Kamdhenu University, Opposite 36 Quarters, Khavda road,

Bhuj (Dist: Kutch), Gujarat, India

E mail: <a href="mailto:hodvgobhuj@kamdhenuuni.edu.in">hodvgobhuj@kamdhenuuni.edu.in</a>,

hpvijyeta@kamdhenuuni.edu.in

Mobile: 7874642318