NET - ARS syllabus for Animal Reproduction and Gynaecology

Unit 1: Veterinary Gynaecology


Unit 2: Reproductive Endocrinology


Unit 3: Accidents during Gestation


Unit 4: Veterinary Obstetrics


Unit 5: Andrology

Comparative anatomy of male reproductive system. Thermoregulation of testis and blood testis barrier, Growth, puberty and sexual maturity. Spermatogenesis including cycle of somniferous epithelium and spermatogenic wave. Sperm morphology and ultra-structure of spermatozoa, sperm transport, maturation and storage in male genital tract, Secretions of male reproductive tract including accessory glands and their role in reproduction, Sexual / mating behaviour. Semen and its composition, biochemistry of semen and sperm metabolism, sperm
abnormalities and its and its composition, biochemistry of semen and sperm metabolism, sperm abnormalities and its classification, sperm separation and spermatozoa karyotyping.

Unit 6 : Male Infertility


Unit 7 : Frozen Semen Technology and Artificial Insemination


Unit 8 : Reproductive Technology


Unit 9 : Infertility in Cows and Buffaloes


Unit 10 : Reproduction and Infertility in Ovine / Caprine

Puberty, sexual maturity, breeding season, oestrous cycle, Breeding and conception, gestation,
parturition, peri-parturient and obstetrical complications. Synchronization of oestrous cycle.

Embryo transfer. Causes of infertility and their management.

**Unit 11 : Reproduction and Infertility in Swine**


**Unit 12 : Equine Reproduction**


**Unit 13 : Canine and Feline Reproduction**