Deptt. Veterinary Gynae. & Obst. Bihar Veterinary College, Patna-14

Synopsis of lecture(Theory)

Course No: VOG 601

Credit Hr:3+1=4

Course Title: General Gynaecology

Semester: I

Name of Instructors: Dr.D.Sengupta, Dr. Ankesh Kumar and Dr.C.S.Azad

| Lecture no. | Topic name | Instructor |
|--------------|--|------------------|
| Lec.1,2,3 | Puberty and sexual maturity, role of hypothalamic-pituitary-gonadal axis in attainment of puberty and sexual maturity, onset of postpartum ovarian activity, | Dr. C. S. Azad |
| Lec.4 | Endocrine regulation of estrous cycle. | Dr. D. Sengupta |
| Lec.5,6,7,8 | Folliculogenesis, oogenesis and ovulation and associated endocrine pattern, manipulation of follicular waves, synchronization of estrus and ovulation and induction of ovarian activity. | Dr. Ankesh Kumar |
| Lec.9,10 | Gamete transport, fertilization, implantation and maternal recognition of pregnancy. | Dr. D. Sengupta |
| Lec.11,12 | Embryonic and fetal development, placentation, fetal circulation and gestation, position of fetus in the uterus, age characteristics of fetus. | Dr. C. S. Azad |
| Lec.13,14,15 | Pregnancy diagnosis: clinical, ultrasonographic, endocrinological and other diagnostic laboratory tests. | Dr. D. Sengupta |
| Lec.16 | Pseudo-pregnancy and its treatment. | Dr. Ankesh Kumar |
| Lec.17,18 | Factors affecting reproduction – seasonality, nutrition, stress, environment, management, suckling and diseases. | Dr.C.S.Azad |
| Lec.19,20 | Lactation and artificial induction of lactation. | Dr.D.Sengupta |

Synopsis of lecture(Practical)

| Lecture no. | Topic name | Instructor |
|-------------|--|------------------|
| Lec.1 | Clinical examination of female genitalia. | Dr.D.Sengupta |
| Lec.2 | Biometry of female genital Organs. | Dr. C. S. Azad |
| Lec.3 | Rectal and vaginal examination to diagnose cyclic phases of estrous cycle. | Dr. C. S. Azad |
| Lec.4 | Fern pattern of cervical mucus and exfoliated vaginal cytology. | Dr. Ankesh Kumar |
| Lec.5,6,7 | Pregnancy diagnosis in large and small animals by various methods. Estimation of age of the fetus. Use of ultrasound / RIA / ELISA in Gynaecology. | Dr. Ankesh Kumar |
| Lec.8,9 | Synchronization of estrus and ovulation in farm animals | Dr.D.Sengupta |

Suggested Book for reading:

- 1. Cupps PT. 1991. Reproduction in Domestic Animals. Academic Press. Hafez ESE. 2000. Reproduction in Farm Animals. Lippincott, Williams & Wilkins.
- 2. Pubedam MH & Pubedam MH. 2003. *McDonald's Veterinary Endocrinology and Reproduction*. Iowa State Press.
- 3. Noakes DE, Parkinson DJ & England GCW. 2001. Arthurs Veterinary Reproduction and Obstetrics. Saunders Harcourt India.
- 4. Roberts SJ. 1976. Veterinary Obstetrics and Genital Diseases. Scientific Book Agency.

Course Instructor

Copy forwarded to

- 1. Concerned Teachers/Students for information & needful.
- 2. DRI-Cum-Dean PGS/ Registrar, BASU /Dean/All chairman/ Academic In charge PG, B.V.C. Patna/Notice board for information.

Deptt. Veterinary Gynae. & Obst.

Bihar Veterinary College, Patna-14

Synopsis of lecture(Theory)

Course No: VOG 605

Credit Hr: 2+1=3

Course Title: Semen preservation and Artificial Insemination Semester: I

Name of Instructors: Dr.C.S.Azad, Dr. Ankesh Kumar and Dr.D.Sengupta

| Lecture no. | Topic name | Instructor |
|-------------|---|------------------|
| Lec.1,2 | History of artificial insemination. | Dr. C. S. Azad |
| Lec.3 | Methods of semen collection. | Dr. D. Sengupta |
| Lec.4,5,6 | Semen evaluation: macroscopic, microscopic, biochemical and microbiological tests, | Dr. Ankesh Kumar |
| Lec.7,8 | Computer assisted semen analysis (CASA). | Dr. C. S. Azad |
| Lec.9,10,11 | Semen preservation. Extenders for preservation of semen at different temperatures. | Dr. D. Sengupta |
| Lec.11 | Semen additives for enhancement of motility and fertilizing capacity of spermatozoa | Dr. Ankesh Kumar |
| Lec.12,13 | Cryopreservation of semen. Effects of cryopreservation on spermatozoa, semen quality and fertility. | Dr. C. S. Azad |
| Lec.14,15 | Thawing protocols of frozen semen. Factors affecting post-thaw semen quality. | Dr. D. Sengupta |
| Lec.16,17 | Ideal protocol for AI in different species of animals. Factors affecting success of AI | Dr. Ankesh Kumar |

Synopsis of lecture(Practical)

| Lecture no. | Topic name | Instructor |
|-------------|---|------------------|
| Lec.1 | Computer assisted semen analysis (CASA), | Dr.D.Sengupta |
| Lec.2 | Collection and evaluation of semen. | Dr. C. S. Azad |
| Lec.3,4,5 | Preparation of extenders. Preservation of semen: room temperature, refrigeration and cryopreservation | Dr. C. S. Azad |
| Lec.6,7 | Handling and evaluation of processed semen. | Dr. Ankesh Kumar |
| Lec.8 | Practice of AI techniques | Dr.D.Sengupta |

Suggested Book for reading:

- 1. Hafez ESE. 2000. Reproduction in Farm Animals. Lippincott, Williams & Wilkins.
- 2. Perry J. 1970. Artificial Insemination of Farm Animals. Oxford & IBH. Salisbury GW, VanDemark NL & Lodge JR. 1978. Physiology of Reproduction and Artificial Insemination of Cattle. WH Freeman

Course Instructor

Copy forwarded to

- 1. Concerned Teachers/Students for information & needful.
- 2. DRI-Cum-Dean PGS/ Registrar, BASU / Dean/All chairman/ Academic Incharge PG, B.V.C. Patna/Notice board for information..

Deptt. Veterinary Gynae. & Obst. Bihar Veterinary College, Patna-14

Synopsis of lecture(Practical)

Course No: VOG 607

Credit Hr:0+3=3

Course Title: Clinical Practice - I

Semester: III

Name of Instructors: Dr. Ankesh Kumar, Dr.D.Sengupta, and Dr. C. S. Azad

| Lecture no. | Topic name | Instructor |
|-------------|--|------------------|
| Lec.1-4 | Clinical examination of animals affected with reproductive disorders | Dr.D.Sengupta |
| Lec.5-9 | Use of diagnostic techniques for diagnosis and institution of required therapy | Dr. C. S. Azad |
| Lec.10-15 | Maintenance of case records | Dr. C. S. Azad |
| Lec.16-19 | Presentation on selected /assigned cases | Dr. Ankesh Kumar |

Suggested Book for reading:

1. Morrow DA. 1986. Current Therapy in Theriogenology. WB Saunders

Course Instructor

Copy forwarded to

- 1. Concerned Teachers/Students for information & needful.
- 2. DRI-Cum-Dean PGS/ Registrar, BASU /Dean/All chairman/ Academic In charge PG, B.V.C. Patna/Notice board for information.

Deptt. Veterinary Gynae. & Obst. Bihar Veterinary College, Patna-14

Synopsis of lecture(Practical)

Course No: VOG 608

Credit Hr:0+3=3

Course Title: Clinical Practice - II

Semester: III

Name of Instructors: Dr.C.S.Azad, Dr. Ankesh Kumar and Dr.D.Sengupta,

| Lecture no. | Topic name | Instructor |
|-------------|--|------------------|
| Lec.1-4 | Clinical examination of animals affected with reproductive disorders | Dr.D.Sengupta |
| Lec.5-9 | Use of diagnostic techniques for diagnosis and institution of required therapy | Dr. C. S. Azad |
| Lec.10-15 | Maintenance of case records | Dr. C. S. Azad |
| Lec.16-19 | Presentation on selected /assigned cases | Dr. Ankesh Kumar |

Suggested Book for reading:

1. Morrow DA. 1986. Current Therapy in Theriogenology. WB Saunders

Copy forwarded to

1. Concerned Teachers/Students for information & needful.

2. DRI-Cum-Dean PGS/ Registrar, BASU /Dean/All chairman/ Academic In charge PG, B.V.C. Patna/Notice board for information