**Y E A R : F I R S T**

S U B J E C T : A N A T O M Yعلم التشريح

**Theoretical hours: 2**

**Practical hours: 2**

**Units: 6**

**FIRST & SECOND SEMESTERS**

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| **ANATOMY: THEORETICAL SUBJECTS** | **HOURS** |
| INTRODUCTION  Anatomy and methods of study, topographic terms and  nomenclatures. | **2** |
| GENERAL OSTEOLOGY  Skeleton, structure of bones, development and growth of chemical and physical properties of bone, the vertebral column, ribs, sternum, bones of thoracic limb, bones of pelvic limb. | **5** |
| MYOLOGY  Types of muscles with structure, shape of skeletal muscles, action of skeletal muscle, accessory structures associated with skeletal muscles, vessels and nerves supply the muscles. | **5** |
| GENERAL SYNDESMOLOGY (ARTHROLOGY)  Fibrous joint, cartilaginous joints, synovial joint, joints of thoracic limb, joints of pelvic limb. | **6** |
| Common integument, foot of the horse, hoof, stay apparatus of  the thoracic limb. | **6** |
| CARDIO VASCULAR SYSTEM(HEART AND ARTERIES)  Introduction, heart and pericardium, pericardium, heart, the size  and position and shape and location of heart ,grooves of the  heart, left and right atrium, left and right ventricle, blood supply of heart, nerve supply of heart, arteries; aorta, ascending aorta, brachiocephalic trunk, descending aorta, thorax aorta (branches), abdominal aorta (branches),blood supply of the thoracic limb, blood supply of the hind limb | **8** |
| MAMMARY GLAND  Embryonic development of the mammary gland, types of  mammary glands with it's location in domestic animals, glandular | **3** |

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| **ANATOMY: THEORETICAL SUBJECTS** | **HOURS** |
| structure and ducts of mammary gland, suspensory ligament of  udder, blood and nerves supply of the udder. |  |
| URINARY SYSTEM  Introduction, parts of the urinary system and it's connections with genital system, shape of kidney in domestic animals  (comparison), classification of kidneys in domestic animals, location of kidneys with it's fixation ( ligaments) in domestic animals, blood supply and venous drainage and nerve supply of kidneys, ureter, urinary bladder with it's ligaments, urethra, peritoneal reflections in pelvic cavity of males and females. | **5** |
| MALE GENITAL SYSTEM  Development, testis, testis structure, comparison of the testis in domestic animals, blood and nerve supply, epididymis, ductus deferens, the spermatic cord, tunica vaginalis, mesorchium, the scrotum, structure of the penis, muscle of penis, blood and nerve of the penis, comparative features of the penis, the prepuce, accessory genital glands, the vesicular gland, the prostate gland, bulbourethral gland. | **8** |
| FEMALE GENITAL SYSTEM  Introduction, development of female genital system, ovary: types, position in domestic animals, uterine tube, uterus (comparison), vagina, vestibule, female urethra, sub urethral diverticulum, broad ligament, anatomical relationship between rectum and female genital system, vulva, clitoris. | **7** |
| ENDOCRINE GLAND  Pituitary gland (hypophysis), thyroid gland, parathyroid gland, adrenal gland, pineal body. | **5** |
| **Total** | **60** |

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| **ANATOMY: PRACTICAL SUBJECTS** | **HOURS** |
| Bones of thoracic limb and joints, scapula of horse and  comparative anatomy | **2** |
| Humerus and comparative anatomy | **2** |
| Radius and ulna with comparison | **2** |
| Carpal bones in horse and metacarpal and phalanges bones | **2** |
| Circulatory system: pericardium and the heart ,chambers of the  heart and the major vessels of the heart. | **2** |
| Muscles of the shoulder gridle of the sheep | **2** |
| The lateral surface of shoulder muscles and arm in sheep | **2** |
| Dissection of intrinsic muscles of shoulder and arm | **2** |
| Muscles of the forearm and manus (extensor and flexor ) | **2** |
| Review | **2** |
| Practical examination | **2** |
| Arteries and nerves of the thoracic limb in sheep | **2** |
| Thoracic, lumber vertebrae and sacrum in horse | **2** |
| Ribs and sternum in horse | **2** |
| The hoof in horse and foot of the ox | **2** |
| Comparative anatomy of the pelvic bone | **2** |
| Comparative anatomy of the femur | **2** |
| Comparative anatomy of the tibia and fibula | **2** |
| Tarsus and metatarsal bone in horse | **2** |
| Muscles of the lion, hip and thigh in sheep | **2** |
| Flexor and extensor muscles of the pelvic limb in sheep | **2** |
| Review | **2** |
| Practical examination | **2** |
| Arteries and sacrolumbar plexuses and nerves of pelvic limb | **2** |
| Inguinal region and mammary gland in sheep | **2** |
| Urinary system (kidneys, ureter and urinary bladder) | **2** |
| Female reproductive system in sheep ( ovaries, uterine tube and  uterus) | **2** |
| Male reproductive system in sheep ( testis and scrotum) | **2** |
| Penis and accessory sex glands | **2** |
| Muscles of the lion, hip and thigh in sheep | **2** |
| **Total** | **60** |