SUBJECT: CELL BIOLOGY

Theoretical hours: 2

Practical hours: 2

Units: 3

CODE: **CEBI122**

SECOND SEMESTER

|  |  |
| --- | --- |
|  | Cell biology / theoretical subjects |
| Hours | **THEORETICAL SUBJECT** |
| 2 | Living organisms |
| 2 | Comparison between prokaryotic and eukaryotic cells  |
| 2 | Mitosis : replication of eukaryotic cells |
| 2 | Mitosis : Reduction division and gametogenesis |
| 2 | Types of living tissues |
| 2 | Stem cells |
| 4 | Blood composition and function |
| 2 | General characteristics of bacteria |
| 2 | Introduction to molecular biology |
| 4 | Nucleic acid types and functions |
| 2 | Genes and chromosomes |
| 2 | Genetic engineering  |
| 2 | final Exam |

|  |  |
| --- | --- |
|  | Cell biology / practical subjects |
| Hours | **PRACTICAL SUBJECT** |
| 2 | Prokaryotic and Eukaryotic cells |
| 2 | Mitosis |
| 4 | Bacterial staining |
| 8 | Types of tissues |
| 4 | Blood film |
| 10 | How to use laboratory equipment's (Balance, Water bath, PH meter, Centrifuge, Incubator, etc...) |
| 30 | **total** |

SUBJECT: BASIC BIOCHEMISTRY

Theoretical hours: 2

Practical hours: 2

Units: 3

CODE:**BACH122**

SECOND SEMESTER

|  |  |
| --- | --- |
|  | BASIC BIOCHEMISTRY / theoretical subjects |
| Hours | **THEORETICAL SUBJECT** |
| 2h | Aldehydes and ketones |
| 2h | Aldehydes and ketones |
| 2h | Carboxylic acid  |
| 2h | Carboxylic acid derivatives  |
| 2h | Anhydrides |
| 2h | Ester and ethers |
| 2h | Amines |
| 2h | Amides |
| 2h | Alcohols  |
| 2h | Principles Of Biochemistry  |
| 2h | Water –chemical properties  |
| 2h | Carbohydrates mono-Saccharides |
| 2h | Di- And oligo-and poly saccharides  |
| 2h | Peptides-Amino acids  |
| 2h | Nucleic acids |

|  |  |
| --- | --- |
|  | BASIC BIOCHEMISTRY / practical subjects |
| Hours | **PRACTICAL SUBJECT** |
| 2h | Preparation of solutions. Percent concentration |
| 2h | Preparation of molar solutions: molar concentration |
| 2h | Volumetric analysis. Acid-base titration |
| 2h | Buffer solutions |
| 2h | Colloidal solutions |
| 2h | High molecular mass compounds and their properties.Swelling and gelatinization of high-molecular mass compounds |
| 2h | Coordination compound based determination of water hardness |
| 2h | Chemical kinetics |
| 2h | Calculation of Michaelis-Menten constant and maximal reaction rate |
| 2h |  Chemical properties of carbonyl compounds, Esters and lipids  |
| 2h | Chemical properties of alcohols, phenols and amines |
| 2h | Chemical properties of mono- and polysaccharides |
| 2h | Determination of Fe in FeSo4 |
| 2h | Specific reactions for components of acidic hydrolysis of ribonucleoproteins |
| 2h |  Reactions of amino acids and proteins |

SUBJECT: Head & neck anatomy

Theoretical hours: 2

Practical hours: 2

Units: 3

CODE: **HENE122**

SECOND SEMESTER

|  |  |
| --- | --- |
|  | Head & neck anatomy/ theoretical subjects |
| Hours | theoretical subjects |
| 2h | Structure of the skull  |
| 2h | Muscles of the head |
| 2h | Cervical vertebrae |
| 2h | Blood supply and lymphatic vessels of the head and neck |
| 2h | **Structure of the oral cavity and nasal cavity** |
| 2h | The special senses include smell, taste, vision, hearing, and equilibrium |
| 2h | Sense organs: eye (vision) |
| 2h | Sense organs: ear (hearing) |
| 2h | Olfaction: The sense of smell |
| 2h | Gustation: The sense of taste |
| 2h | Guttural pouch and auditory tube  |
| 2h | Muscles of the pharynx and tongue |
| 2h | Salivary glands |
| 2h | .types and location of lymph nodes of the head and neck |
| 2h | Exam |
|  |  |

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| --- | --- |
|  | Head & neck anatomy/ practical subjects |
| Hours | **PRACTICAL SUBJECT** |
| 2h | Topographical anatomy of skull in domestic animals |
| 2h | **Muscles of the head (facial expression)** |
| 2h | **Comparative anatomy of cervical vertebrae** |
| 2h | **Blood supply of the head and neck** |
| 2h | **Anatomy of the oral and nasal cavity** |
| 2h | Anatomical structure of the eyeball |
| 2h | Eye chambers and eye muscles |
| 2h | Anatomical structure of the ear (external, middle and inner ear) |
| 2h | Anatomy of olfactory receptors |
| 2h | Tongue structure and the papillae: Filiform papillae, Fungi-form papillae, Foliate papillae, Vallate, or circumvallate papillae  |
| 2h | Anatomy of equilibrium in equine  |
| 2h | Muscles of the pharynx and tongue |
| 2h | Comparative anatomy of salivary gland and duct in domestic animals |
| 2h | Review  |
| 2h | Practical examination  |

SUBJECT: POULTRY MANAGEMENT

Theoretical hours: 2

Practical hours: 2

Units: 3

CODE: **POUL122**

SECOND SEMESTER

|  |  |
| --- | --- |
|  | POULTRY MANAGEMENT / theoretical subjects |
| Hours | THEORETICAL **SUBJECT** |
| 1h | Poultry science and industry development . |
| 1h | Terminology –classification of poultry. |
| 1h | Classification of domestic birds |
| 1h | Classification of domestic birds |
| 1h | Poultry Breeding |
| 1h | Poultry Breeding |
| 1h | Brooding and Broiler production |
| 1h | Brooding and Broiler production |
| 1h | Artificial hatching of chicks |
| 1h | Artificial hatching of chicks |
| 1h | Rearing and Laying |
| 1h | Nutrition of the chicken |
| 1h | Nutrition of the chicken |
| 1h | Poultry Hygiene |
| 1h | Marketing of poultry products |

|  |  |
| --- | --- |
|  | POULTRY MANAGEMENT / practical subjects |
| Hours | **PRACTICAL SUBJECT** |
| 2h | Anatomy of birds |
| 2h | Anatomy of birds |
| 2h | Phenotypic parts of chickens |
| 2h | Phenotypic parts of chickens |
| 2h | Solving problems related to some inherited traits |
| 2h | Demonstration of poultry houses and equipment |
| 2h | Demonstration of poultry houses and equipment |
| 2h | Demonstration of hatcheries |
| 2h | Solving related problems |
| 2h | Solving related problems |
| 2h | Calculation of feed Components ratios |
| 2h | Studying common management faults and corrections |
| 2h | Demonstration of possible cases |
| 2h | Possible visit to broiler Slaughtering house or a video show |
| 2h | Possible visit to broiler Slaughtering house or a video show |

SUBJECT: HUMAN RIGHTS

Theoretical hours: 1

Units: 1

CODE: **HURI122**

SECOND SEMESTER

|  |  |
| --- | --- |
| Hours | **Human rights /** Theoretical subjects |
| 1hr | مفهوم حقوق الإنسان |
| 1hr | مفهوم حقوق الإنسان |
| 1hr | الحق في اللغة والاصطلاح |
| 1hr | الحق في اللغة والاصطلاح |
| 1hr | أركان الحق |
| 1hr | حقوق الإنسان وتطورها في التاريخ البشري |
| 1hr | حقوق الإنسان في الحضارات القديمة |
| 1hr | حقوق الإنسان في الحضارات القديمة الأخرى |
| 1hr | حقوق الإنسان في الأديان والشرائع السماوية |
| 1hr | مفهوم حقوق الإنسان |
| 1hr | خصائص حقوق الإنسان |
| 1hr | حقوق الإنسان في الإسلام |
| 1hr | حرية الاعتقاد والتعبير من الحقوق الإنسانية |
| 1hr | حقوق المرأة في الإسلام |
| 1hr | العقوبات في الإسلام |

SUBJECT: English language

Theoretical hours: 1

Units: 1

CODE: **ENGL121**

SECOND SEMESTER

|  |  |
| --- | --- |
| Hours | English language / Theoretical subjects: Second Semester |
| -- | 1-Grammar and structures |
| 2 | Conditional sentences |
| 1 | preposition |
| - | 2- Reading Comprehension |
| 2 | Passage |
| 2 | Passage |
| 2 | Passage |
| - | 3-Language function |
| 1 | contrast |
| 1 | opinion |
| 1 | purpose |
| 1 | complaints |
| 2 | 4- Listening comprehension |
| 15 | Total |

SUBJECT: COMPUTER 2

Theoretical hours: 1

Practical hours: 2

Units: 2

CODE :  **COMP122**

SECOND SEMESTER

|  |  |
| --- | --- |
| Hours | COMPUTER 2/ Theoretical subjects:  |
| 1 | Microsoft Word 2007 |
| 1 | Microsoft Word 2007 |
| 1 | Microsoft Word 2007 |
| 1 | Microsoft Word 2007 |
| 1 | Microsoft Word 2007 |
| 1 | Microsoft Word 2007 |
| 2 | REVIEW |
| -- | Mid exam |
| 1 |  Microsoft Word 2007 |
| 1 |  Microsoft Word 2007 |
| 1 | Microsoft PowerPoint 2007 |
| 1 | Microsoft PowerPoint 2007 |
| 1 | Microsoft PowerPoint 2007 |
| 2 |  REVIEW |
| -- |  Final exam (30%) |
| 15 |   |

|  |  |
| --- | --- |
| Hours | COMPUTER 2/ Practical subjects:  |
| 2 | Learn Microsoft Word 2007 |
| 2 | Learn Microsoft Word 2007 |
| 2 | Learn Microsoft Word 2007 |
| 2 | Learn Microsoft Word 2007 |
| 2 | Learn Microsoft Word 2007 |
| 2 | Learn Microsoft Word 2007 |
| 4 | review |
| -- | Mid exam |
| 2 | Learn Microsoft Word 2007 |
| 2 | Learn Microsoft Word 2007 |
| 2 | Learn Microsoft PowerPoint 2007 |
| 2 | Learn Microsoft PowerPoint 2007 |
| 2 | Learn Microsoft PowerPoint 2007 |
| 4 | review |
| -- | Final exam (30%) |
| 15 |   |

SUBJECT: BIOSAFETY

Theoretical hours: 1

Units: 1

CODE: **BISA122**

SECOND SEMESTER

|  |  |
| --- | --- |
| Hours | BIOSAFETY **/** Theoretical subjects |
| 1hr | Zoonotic disease transmission |
| 2hr | Hierarchy of infection control measures |
| 2hr | Veterinary standard precautions |
| 2hr | Protective actions during veterinary Procedures..  |
| 1hr | Environmental infection control |
| 2hr | High risk veterinary procedures |
| 1hr | What to do if you have unplanned contact with a suspect animal  |
| 3hr | Employee health |
| 1hr | Creating a written infection control plan |
|  15 |  |