



وصف المقرر الدراسي

قسم طب الاسنان

Subjects of the 1st Year Dental College

No.	Subjects
١.	Medical Physics
٢.	Computer
٣.	Medical Chemistry
٤.	Medical Biology
٥.	Dental Anatomy
٦.	Human Rights & Democracy
٧.	English & Dental Terminology
	Total

Subjects of the 2nd Year Dental College

No.	Subjects
١.	Human Anatomy
٢.	Prosthetic Dentistry
٣.	General Histology

Σ.	Medical Physiology
ο.	Biochemistry
Ϛ.	Oral Histology & Embryology
∇.	Dental Materials

Subjects of the 3rd Year Dental College

No.	Subjects
1.	Prosthetic Dentistry
2.	Oral Surgery
3.	Microbiology
Σ.	General Pathology
ο.	Pharmacology
Ϛ.	Operative Dentistry
∇.	General Surgery
Λ.	General Medicine

Subjects of the 4th Year Dental College

No.	Subjects
1.	Periodontics
2.	Community Dentistry
3.	Orthodontics

Σ.	Oral Surgery
ο.	Operative Dentistry
Ϛ.	Oral Pathology
Υ.	Prosthetic Dentistry
Λ.	Dental Radiology

Subjects of the 6th Year Dental College

No.	Subjects
1.	Periodontics
2.	Preventive Dentistry
3.	Oral Surgery
Σ.	Prosthetic Dentistry
ο.	Operative Dentistry
Ϛ.	Orthodontics
Υ.	Paedodontics
Λ.	Oral Medicine

UNIVERSITY COLLEGE

المرحلة الثانية

Subject : Computer

(Theory)

Topics
Introduction
Skull and cervical vertebrae
The face and scalp
The posterior triangle of the neck
The anterior triangle of the neck
Deep dissection of the neck
Parotid region
The temporal and infratemporal regions
Trigeminal nerve and TMJ
Submandibular region
The mouth (palate and floor)
Tongue
Pharynx
Nasal cavity
Orbit
Larynx
Ear
The back of the neck
The facial spaces of the neck
The meninges
The blood vessels of the brain
The base of the brain
The hindbrain
The midbrain
The cerebrum + spinal cord
The ventricles
Basal ganglia +thalamus +optic tract
The bony thorax
The wall of the thorax
Mediastinum, the pericardium and heart
Pleura and lung
The great blood vessels of the thorax
The lymph nodes of head and neck

Subject : **Human Anatomy**

(Practical)

Topics
Skull and cervical vertebrae
The face and scalp
The posterior triangle of the neck
The anterior triangle of the neck
Deep dissection of the neck
Parotid region
The temporal and infratemporal regions
Trigeminal nerve and TMJ
Submandibular region
The mouth (palate and floor)
Tongue
Pharynx
Nasal cavity
Orbit
Larynx
Ear
The back of the neck
The meninges
The blood vessels of the brain
The base of the brain
The hindbrain
The midbrain
The cerebrum
The ventricles
Basal ganglia
The bony thorax
The wall of the thorax
Mediastinum, the pericardium and heart
Pleura and lung
The great blood vessels of the thorax

Subject : **Prosthetic Dentistry**

(Theory)

Topics
Complete denture prosthesis (definition and objectives)
Anatomical landmark of upper arch
Anatomical landmark of upper arch
Impression trays: definition and classification

Primary impression
Special tray materials and types , secondary impression objectives and techniques
Final impression materials ,boxing of impression
Record bases and occlusion rims , examination
Jaw relationship(definition), Vertical jaw relation :Method of recording
امتحان الفصل الأول
Horizontal jaw relation :Method of recording, Eccentric jaw relation
Articulators, classification
Face bow :definition and types
Mounting the cast on the articulator
Selection of artificial teeth
Arrangement of upper and lower six anterior and posterior teeth
Examination
Wax contouring of the denture
Flasking of the denture
Wax elimination
Packing of the denture
Deflasking of the denture
امتحان الفصل الثاني ٢٥/٤/٢٠١٢
Finishing and polishing, Selective grinding
Denture repair ,relining and rebasing

Subject : **Prosthetic Dentistry** (Practical)

Topics
Primary impression
Construction of special tray
Construction of record base
Construction of occlusal rims
Mounting casts on the articulator
Arrangement of anterior and posterior teeth in class I relation
Wax contouring of the denture
Flasking of the dentures wax
Wax elimination
Packing and deflasking
FINISHING AND POLISHING
REPAIR OF DENTURE
ARRANGEMENT OF ARTIFICIAL TEETH IN CLASS II AND CLASS III
RELINING AND REBASING

Subject : **General Histology** (Theory)

Topics
Introduction
Glands
Blood (erythrocytes, leukocytes, platelets)
Hemopoiesis
Blood circulatory system(arteries, veins capillaries, heart)
Lymph circulatory system(lymph capillaries , collecting vessels)
Lymphoid organs(lymph node, spleen,thymus, tonsils
Nervous tissue (neurons, neuroglia, nerve, ganglia, nerve endings, C.N.S.)
Integumentary System
Respiratory system(larynx, trachea lung)
Endocrine glands(pituitary, suprarenal, thyroid, parathyroid)
Digestive system(oral cavity, alimentary tract,major digestive glands)
Urinary system(kidney, ureter, urinary bladder)
Ear and Eye
Male reproductive system(testis, male genital ducts)
Female reproductive system(ovary, fallopian tube, uterus)
Apoptosis (lymphatic system)
Paracrine cells
Stem cells
T.B. disease (Respiratory system)

Subject : **General Histology** (Practical)

Topics
Blood smear
Bone marrow
Medium artery, medium vein, arteriole venule
Aorta, vena cava
Heart
Lymph node, thymus
Spleen, tonsils
Neuron , ganglia
Nerve I.s., x. s.
Pacinian corpuscle,motor nerve endings
Cerebellum, spinal cord
Thick and Thin skin
Lung, larynx

Trachea, olfactory epithelium
Pituitary gland, suprarenal
Thyroid, parathyroid
Tongue (papillae of tongue)
Salivary glands
Lip , esophagus
Stomach (fundic ,pyloric)
Small intestine
Ileum, Paneth cell
Colon, anal canal
Liver
Pancreas, gall bladder
Kidney, ureter, urinary bladder
Testis, epididymis
Ovary
Fallopian tube, uterus
Revision

Subject : **Medical Physiology** (Theory)

Topics
Physiology of muscle
Physiology of nerve
Motor function of spinal cord (reflex)
Sensory function of CNS
Pain + opioid receptors
Special sense
Synapse
Anatomy of CNS
Cardiovascular system conductive system
ECG
Cardiac output
Hypertension +Atherosclerosis
Relation between blood flow&pressure&resistance
Respiratory passage way
Gas exchange
Cellular respiration
Lung capacities and volumes
Control of respiration
Endocrinology, introduction

Nature, Synthesis and properties of hormones
--

Thyroid gland hormone

Parathyroid gland hormone

Adrenal gland hormone

Renal system, introduction

Nephron function

Control of blood composition

Oral physiology

Digestive system

Subject : **Medical Physiology** (Practical)

Topics
Blood physiology / RBC count
W B C count
Platelet count
P C V
E S R
HB estimation
Clotting time / bleeding time
Blood group
Blood indices
Blood pressure
Effect of exercise on blood pressure
Body temperature
Superficial and deep reflexes
Eye reflexes
Lung volumes
Vital capacity and pulmonary ventilation
E C G
Vision
Color blindness
Hearing/ defense
Equilibrium
Physiology of muscle and nerve
Pithing
Simple muscle twitch
Fatigue
Tetanus
Effect the strength of stimulus on muscle contraction

Effect of temperature on muscle contraction
Effect of Ach and nor epinephrine on frogs heart

Subject : **Biochemistry** (Theory)

Topics
Enzymes
Nature of enzyme ,mode of action ,mechanism of enzyme action
Specificity , Nomenclature , classification
Factors affecting enzyme action
Isoenzyme , clinical diagnosis , co-enzyme function & important
Vitamins
Fat – soluble and water – soluble vitamins ,chemistry, function , Physiological role, deficiency and requirements
Digestion & absorption
Organs & secretion , chemistry & composition of bile & feces , Carbohydrate digestion & absorption
Protein digestion & absorption
Lipid digestion & absorption
Carbohydrate metabolism
Glycolysis (Aerobic & anaerobic) , kreb's cycle
Glycogenesis, glycogenolysis, gluconeogenesis
HMP, Hormonal regulation of carbohydrate metabolism
Diabetes mellitus and GTT
Protein metabolism
Anabolic and catabolic reaction of amino acids
Transamination, Deamination, Urea cycle and its disorder
Metabolism of individual amino acids
Lipid metabolism
Blood lipid, Body stores of fat
Lipoproteins
Fatty acids oxidation, phospholipids and Cholesterol synthesis
Ketosis and Ketone body formation, Metabolism ion starvation
Mineral metabolism
Minor & Major elements with special consideration for Na ,K,CL,PO Σ , Ca, F, iron, copper, zinc, iodine, Mn, Mg, cd, Mo
Physiological role , deficiency & level in blood
Hormone
Structure of hormones, mechanism of hormone action
Classification of hormone

Topics
Nucleic acid metabolism
Synthesis & catabolism of purine & pyrimidine
Purine & pyrimidine disorder
Porphrins Bile pigments
Free radicals and antioxidant nutrient

Subject : **Biochemistry** (Practical)

Topics
Enzyme (saliva)
Salivary stone
Types of specimens
Urine (General Analysis)
Urine (normal constituents)
Urine (abnormal constituents)
Colorimetry and spectrophotometry
Calibration curve
Haemoglobin
Serum or plasma total protein
Protein electrophoresis
Amylase
Serum glucose
Total cholesterol
Total calcium
Uric acid
Creatinine
Alanine transaminase
Aspartate transaminase
Urea
Alkaline phosphatase
Bilirubin
S. I. Unit

Subject : **Oral Histology & Embryology** (Theory)

Topics
Introduction – the development of human being (three germ layers)
The development of pharyngeal arches and the development of primitive mouth.
The development of the face
The development of the palate, tongue and the development of thyroid gland
The development of the teeth, morphological stages and histological stages
Enamel (physical and chemical properties)
Amelogenesis
Dentin – types of dentin – dentinogenesis
Dental pulp
Cementum
Periodontal ligament
Oral mucous membrane
Gingiva & lip
Salivary glands
Alveolar process (maxilla & mandible)

Subject : **Oral Histology & Embryology** (Practical)

Topics
General Embryology
Embryology of the head, face and oral cavity
The development of the tooth and its supporting tissues
Enamel
Composition and structure
Formation (Amelogenesis)
Dentin
Composition and structure
Formation (Dentinogenesis)
Dental pulp
Periodontium
a. Cementum
b. Alveolar process
c. Periodontal ligament

Physiological tooth movement: eruption and shedding

Salivary glands

Oral mucosa

Temporo-mandibular joint

Subject: **Dental Material**

(Theory)

Topics

Introduction to dental materials (Definition and importance)
--

Physical, Mechanical, chemical and biological properties
--

Gypsum products , plaster of Paris , stone
--

Investments

Impression materials, classification

Indications and uses of impression materials
--

Properties of impression materials

Non metallic denture base materials

History, Types of polymers

Polymerization

Heat and cold cured acrylic resin properties
--

Light cured , flexible acrylic

Metallic denture base materials, Stainless steel, Cobalt-chromium

Gold

Precious, non precious metals. Metals for crowns and bridges
--

Waxes , Types , composition, and uses

Soft liners, types, composition

Tissue conditioners

Artificial teeth, Acrylic, porcelain, advantages and disadvantages
--

Non colored filling materials

Amalgam restorative materials, Types and properties

Dental cements and cavity liners

Linking materials

Temporary fillings, periodontal packs

Polishing materials and abrasive materials
--

Maxillofacial materials

Implant materials

Miscellaneous

Subject: **Dental Material**

(Practical)

Topics
Different gypsum products
Water /powder ratio of dental plaster
W/ P ratio of dental stone
W /P ratio of die stone
Setting time of dental plaster (vicat needle)
Setting time of dental plaster (Arbitrary method)
Setting time of dental stone (vicat needle)
Setting time of dental stone (Arbitrary method)
Exothermic temperature of gypsum plaster
Factors Affecting setting time (use of salt)
Factors affecting setting time (use of impurities)
Strength of gypsum products
Non elastic impression materials
Elastic impression materials (elastomers)
Elastic impression materials (hydrocolloids)
Waxes (manipulation)
Problem solving
Beading and boxing
Non metallic denture base materials (flasking)
Shrinkage porosity
Gaseous porosity
Metallic denture base materials
Investment materials (manipulation)
Amalgam manipulation
Setting time of amalgam
Strength of amalgam
Cement materials (manipulation)
Setting time of cement materials (strength of cement)
Abrasive materials
Problem solving