# **UNIVERSITY OF MUMBAI**

CIRCULAR :-

No.UG/262 of 2010 Mumbai - 400 032 20th August, 2010.

The Principal and Superintendent, Anjuman-I-Islam's Dr. Mohan Ishaq Jamkhanawala Tibia Unani Medical College and Haji Abdur Razzak Kalsckar Tibbia Hospital, Anjuman Islam Complex, 60 Yari Road, Andheri (West), Mumbai - 400 061.

Sir.

I am to invite your attention to the Ordinance, Regulations and Syllabus relating to the Doctor of Medicine (M.D.) Unani degree course vide Pamphlet No.344 and to this office Circular No./UG170 of 2003 dated 9th January, 2003 and to inform you that the recommendation made by the Ad-hoc Board of Studies in Unani Medicine and Surgery (B.U.M.S.) (Kamil-e-Tib-o-Jarahat) Mihir-E-Tib (M.D.) Mahir-E-Jarahat (M.S.) at its meeting held on 11th December, 2009 has been accepted by the Academic Council at its meeting held on 3rd March, 2010 vide item No.4.37 and that, in accordance therewith, the detail syllabus of Mahir-E-Tib (Doctor of Medicine) M.D. In ILMUL QABALAT-WA-AMRAZ-E-NISWAN-WA-NAUMAULUD is as per Appendix and that the same has been brought into force with effect from the academic year 2010-2011.

Yours faithfully,

L.R.MANE Offg. REGISTRAR

# A.C./4.37/03/03/2010

No. UG/262-A of 2010,

\*\*\*\*\*\*\*\*\*\*\*\* MUMBAI-400 032

20th August, 2010

Copy forwarded with compliments for information to:-

- 1) The Dean, Faculty of Science,
- 2) The Chairman, Ad-hoc Board of Studies in Unani Medicine and Surgery (B.U.M.S.) (Kamil-c-Tib-o-Jorhat)

3) The Controller of Examinations,

4) The Co-Ordinator, University Computerization Centre,

(D. N. Jadhav) Ag. Deputy Registrar

(UG/PG Section)

The Director, Board of Colle; ge and University Development, the Deputy Registrar (Eligibility and Migration Section), the of Students Walters the Board of Colle; ge and University Development, the Deputy Registrar (Eligibility and Migration Section), the of Students Walters the Board of Colle; ge and University Development, the Deputy Registrar (Eligibility and Migration Section), the The Director, Board of College and University Development, the Deputy Registrar (Eligibility and Magnation Section), the Assistant Registrar, Administrative Secretary to the to the Vice-Chancellor, the Pro- Vice-Chancellor, the Registrar and the

The Controller of Examinatations (10 copies), the Finance and Accounts Officer (2 copies), Record Section



# **UNIVERSITY OF MUMBAI**



**DETAILS SYLLABUS** 

OF

**MAHIR-E-TIB** 

(DOCTOR OF MEDICINE)

M.D.IN ILMUL

QABALAT-WA-AMRAZ-E-NISWAN WA
NAMAULUD

(with effect from the academic year 2010-2011)



# P.G. DEPARTMENT OF QABALAT WA AMRAZ-E-NISWAN WA ATFAL

### M.D. FIRST YEAR: QABALAT WA AMRAZ-E-NISWAN WA ATFAL

## Hayati Kimiya Wa Itlaqi Genetics (Biochemistry, Applied Genetics)

# Hayati Kimiya (Biochemistry) (Theory)

#### INTRODUCTION TO BIOCHEMISTRY IX)

- Historical review of development of biochemistry. 5)
- Basic concepts of cell structure and functions. 6)
- Chemical composition of human body and major bio-molecules. 7)
- Scope and importance of biochemistry in medicine and research. 8)

#### CARBOHYDRATES X)

- Biochemical importance and classification (with structures). 5)
- Digestion, Absorption and Metabolism. 6)
- Homeostasis of blood sugar. 7)
- Applied biochemistry 8)
  - Diabetes mellitus
  - □ Glycosuria
  - Inborn errors of metabolism.

#### LIPIDS XI)

- 6. Biochemical importance and classification (with structures)
- 7. Digestion, Absorption and Metabolism.
- 8. Importance and classification of lipoproteins.
- 9. Cholesterol metabolism
- 10. Applied biochemistry
  - Hypercholesterolemia.
  - Hypertriglyceridemia.
  - □ Ketosis
  - Inborn errors of metabolism.

#### XII) **PROTEINS**

- 9. Biochemical importance and classification (with structure)
- 10. Digestion, Absorption and Metabolism.
- 11. Classification of peptides and amino acids.
- 12. Biochemical importance and metabolism of essential amino acids.
- 13. Membrane proteins, plasma proteins and peptide hormones.
- 14. Methods of hormone assay.
- Biochemical importance, nomenclature and classification of enzymes. 15.
- ló. Applied biochemistry.
  - Clinical Enzymology.
  - Inborn errors of metabolism.

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# XIII) NUCLEIC ACIDS

- Chemistry and biological importance
- Protein synthesis 6.
- Biosynthesis and catabolism of purines and pyrimidines.
- 7. Applied biochemistry 8.
  - Recombinant DNA technology
  - Hyperuricaemia
  - Inborn errors of metabolism.

#### WATER AND MINERALS XIV)

- Distribution of fluids in body. 5.
- Water homeostasis. 6.
- Biochemistry of major and minor and trace elements (Fe, Ca, P, Mg, Mn 7. Zn, Cu, I, F, Se, and Mo)
- Applied biochemistry Electrolyte disturbances (Na and K)

#### XV) VITAMINS

- Classification and chemistry (with structures). 3.
- Applied biochemistry 4.
  - Deficiencies
  - Hypervitaminosis

#### XVI) IMMUNOCHEMISTRY

- Components of Immune System. 4.
- T and B Lymphocytes 5.
- Applied Immunology 6.
  - ATDS
  - Rheumatoid Arthritis.

#### **Practical**

- Functions of various organs and their biochemistry assessments. 7.
- 8. Specimen preparation for biochemical analysis-Blood, Urine and CSF.
- 9. Significance of various tests of carbohydrates, proteins, and lipids.
- Principles of analytic techniques Analytical chemistry, Photometry. 10. chromatography and immunoassay.
- 11, Biochemical tests of blood:
  - Quantitative estimation of glucose, urez. creatinine, bilirubin, cholesterol. triglycerides, uric acid, protein (total), Phosphatases and transminases.
- Biochemical tests of urine: 12.
  - Test of normal constituents

Organic: Urea, Uric acid, and Creatinine.

Inorganic: Bicarbonates, Chloride, Phospha:es, Ammonia and Sulphate.

- Test of abnormal constituents: Protein, Glucose, Ketones, Bile Salt and Bile pigments and blood.
- Quantitative estimation of glucose, calcium, diastase and Creatinine, Biochemical tests of faeces: occult blood, bile pigments, fats and fatty acids.

# Itlagi Genetics (Applied Genetics) (Theory)

- 10) HISTORICAL BACKGROUND
  - Evolution of genetics
  - Mendel and Mendelism
  - Mendel's law
  - 11) CYTOGENETICS
    - The gene
    - □ The genetic code
    - a Ribonucleic acid (RNA)
    - Genetic regulation
  - 12) CELL REPRODUCTION
    - n The chromosomes and their replications.
    - □ 'Mitosis
    - Meiosis
  - 13) MOLECULAR GENETICS
    - Structure of DNA
    - Types of DNA
  - 14) CHROMOSOMAL ABERRATIONS
    - Structural aberration
    - Auto-immune disorders
  - 15) DEVELOPMENTAL GENETICS
    - Factors influencing development
    - Sex determination and differentiation.
  - 16) **BIOCHEMICAL GENETICS** 
    - □ Inborn errors of metabolism
  - 17) GENETICS OF BLOOD GROUPS
    - □ A B O Blood group system
    - D Rhesus blood group system
    - Other blood group system
  - 18) CANCER GENETICS
    - □ Retro virus
    - Oncogenes
    - Classification and function of Oncogenes.
    - Chromosomal aberration cancer

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# Paper II: Usool-E-Tahqiq Wa Hayati Shumariyat (Research

#### Introduction to Research methodology 1.

- Research and its importance
- Objectives, Types, Design and methods of research
- Design of apparatus and experiment
- Design of apparatus and one
   Research ethics-Secrecy, acknowledgement, Sacrifice and consent

#### Research Protocol 2.

- Selection of topic
- Review of literature
- Design of study

#### Clinical trials 3.

- Types
- Randomization and Blinding
- + Placebo
- Phases of Clinical trails Phase I, II, III, IV

#### Scope of research in Qabalat Wa Amraz-e-Niswan 4.

- Unani contraceptives
- Uterine tonics (Muqawwi Reham)
- Unani Menstruation regarding drugs
- ♦ Abrotifacients

#### Biostatistics 5.

- Aims of statistical analysis
- Reporting of results
- Numerical computations-Mean, Median, Mode, and Average.
- Variation, Dispersion & correlation
- Co-efficient of variation and ANOVA
- ♦ Null hypothesis
- ♦ Tests of significance t- tests, chi-square test
- Significance levels and degree of freedom
- Graphical representation of date.

### M.D. FINAL YEAR: QABALAT WA AMRAZ-E-NIŚWAN WA ATFAL

#### Itlagi Kulliyat, Tashreeh Wa Munafe-ul-Aaza

#### ITLAQI KULLIYAT

- i. Umoor-e-Tabiyah
- ii. Significance of Nabz, Boul + Baraz in pregnancy.
- Significance of Nabz, Boul + Baraz in the diagnosis of gynaecological iii. disorders.
- iv. Usool-e-llaj in pregnancy.

TLAQI TASHREEH (Applied Anatomy)

Development of female genital organs

Ostcology of female pelvis ii.

Histology of ovary, uterus and vagina iii.

Anatomy of female reproductive organs iv.

# TLAQI MUNAREUL AZA (Applied Physiology)

Physiology of menstruation

Physiology of ovulation

\* Oogenesis

Ovarian sterodogenesis

♦ : Neuro-hormonal control of ovaries function

Maturation and fertilization of ovum iii.

Physiology of puberty and menopause. iv.

# Paper II: Ilm-ul-Qabalat

- Physiology of pregnancy 1.
  - Maternal changes due to pregnancy
  - Diagnosis of pregnancy
  - ♦ The foetus in normal pregnancy
  - Assessment of foetal well being
  - Antenatal care
- Pathology of pregnancy 2.
  - ♦ Hyperemesis gravidarum
  - ♦ Hypertensive disorders of pregnancy
  - Diseases of cardio vascular system
  - Tuberculosis and pregnancy
  - Acute maternal viral infection and infection diseases
  - Veneral diseases
  - Anaemia in pregnancy
  - Diseases of the urinary system
  - Diabetes in pregnancy
  - Other diseases complicating pregnancy
  - Surgical emergencies during pregnancy
  - Diseases and abnormalities of fetal membrane and placenta
  - Abortion
  - Ectopic pregnancy
  - Antepartum haemorrhage
  - Placenta previa
- 3. Physiology of Labour
  - Causes and stages of labour
  - The mechanism of labour
  - Conduct of normal labour
  - Clinical course and management of labour
- 4. Pathology of Labour

- Mal-position, Mal-presentation and cord prolapse.
- Multiple pregnancy
- Dystocia
- Tumours of uterus, adnexa and neighbouring structures
- Contracted pelvis
- Management of labour in contracted pelvis
- Complications of third stage of labour
- Physiology of puerperium 5
  - Normal Puerperium
  - Care of puerpera
  - Care of neonate
- Pathology of puerperium 6.
- Diseases of Neonate 7.
  - Asphyxia Neonatorum
  - Respiratory distress
  - Jaundice in newborn
  - Haemorrhagic diseases of the newborn
  - Convulsion in newborn
  - Injuries of new born
  - Infections of new born
  - Diarrhoea in new born
  - Vomiting of new born
  - ♦ Congenital malformation in new born
- 8. Special topics
  - High risk pregnancy
  - Post dated pregnancy
  - Placental insufficiency
  - Coagulation disorders in obstetrics

## Paper III : Amraz-F.-Niswan

- 1. Congenital malformation
- 2. Gynecological problems from birth to adolescence.
- 3. Sex and Intersextuality
- 4. Gynaecological diagnosis
- 5. Menstrual disorders
  - Amenorrhoea
  - Dsmenorrhoea
  - Polymenorrhoea
  - Metrorrhagia
  - Menorrhagia
  - Premenstrual syndrome
- Disfunctional uterine bleeding Gynaecological infections 6.
  - Infection of Vulva
  - Infection of Vagina

- Infection of Cervix
- Infection of uterus
- Infection of Fallopian tubes
- Infection of Ovaries
- Endometriosis and adenomyosis 7.
- Displacement of uterus 8.
  - Retroversion
  - Inversion
  - Prolapse
- Pathology of conception 9.
  - Vaginismus
  - Dysparunia
  - Inferlitity
  - Sterility
- Genital benign and malignant lesions 10.
  - Lesions of Vulva
  - Lesions of Vagina
  - ♦ Lesions of cervix
  - Lesions of uterus
  - Lesions of fallopian tubes
  - Lesions of ovaries
- Contraception 11.
- Genital tract fistulas and injuries. 12.

# Paper IV: Jadid Tahqiqi Izafat and Thesis

- 1. Hormone therapy in Gynecology
- Radio and chemotherapy in Gynecology 2.
- 3. Operative Gynecology
  - Gynecological operations
  - Specimens and Instruments
- 4. Endoscopy in Gynecology
  - Laproscopy
  - Hysteroscopy
  - Salphingioscopy
  - Culdoscopy
  - Colposcopy
- 5. " Imaging modalities in Gynecology

X-ray, Ultrasonography, X-ray CT, Radionuclide imaging, MRI.

- 6. Population dynamic and control of conception
  - Radiology in obstetrics
  - **Amniocentesis**
  - Ultrasonics in obstetrics
  - Biochemical tests in obstetrics
  - Immunological tests in obstetrics
- 7. Aids to diagnosis in obstetrics

- Artificial Insemination 8.
- Obstetric instruments 9.
- Operative obstetrics 10.
  - ♦: AThe foreceps
  - Version and destructive opération
  - Caesarean section
  - Enlargement of pelvic cavity
  - Induction of abortion and labour
- 10. Pharmacotherapeutics in obstetrics

#### Amraz-e- Atfal. Paper V:

- Growth and development and its disorders. 1 1
  - Nutritional disorders and vitamin deficiencies 2.
  - Haematological disorders
    - ♦ Anaemias
    - ♦ Bleeding disorders
    - ♦ Haemophilia
  - Infectious diseases 4.
    - Infectious diseases

      Chicken pox, Measles, Enteric fever, Mumps, Poliomyelitis, Diphthena
  - 5. Helminttic infestations
  - 6. Gastrointestinal diseases
    - ◆ Vomiting, Diarrhea, abdominal pain, Jaundice, Indian childhood cirrhosis
  - 7. Cardio vascular diseases
    - ◆ Foetal circulation, congenital heart diseases, Rheumatic heart disease
  - 8.
    - ◆ Epistaxis, Pneumonia's. Bronchial asthma, foreign body aspiration.
  - 9. Urinary System disorders
    - Proteinuria, Nephrotic syndrome, Urinary tract infections.
  - Diseases of Nervous System 10.
    - Meningitis, Encephalitis, Hydrocephalous, Convulsions, Epilepsy, Chorea, Cerebral palsy, Mental retardation.
  - Endocrine and metabolic disorders 11.
    - Diabetes mellitus, growth hormone deficiency and excess, Obesity, Hypothyroidism, Cushing syndrome.
  - Childhood malignancies 12.
  - Leukemias, Wilm's tumour, Brain and Bone tumours. 13. Pharmacotherapeutics in Pediatrics.
  - Practical Pediatric procedures. 14.

# PRACTICAL OF MAHIR-E-TIB (Final Year) M.D. IN ILMUL QABALAT-WA-AMRAZ-E-NISWAN-WA- NAOMAULUD

# ILMUL QABALAT:

- 1) Methods of MTP in 1st & IInd trimesters including hysterotomy
- 2) Cervical Cercalage
- 3) Amniocentesis
- 4) Intrauterine transfusion
- 5) Chorion villus sampling
- 6) Fetoscopy .
- 7) Version
- 8) Episiotomy
- 9) Obstetric forcep operation
- Vaccume operation 10)
- Cesarean Section 11)
- Symphysiotomy 12)
- Breeach extraction 13)
- Repair of obstetric trauma 14)
- fetal destructive operation 15)
- Operation for uterine inversion 16)

# AMRAZ-E-NISWAN

- 1) Operations on the vulva
- 2) Excitions of bartholin's cyst
- 3) Marsupiliztion of bartholin's cyst
- 4) Vulvectomy
- 5) Excision of imperforate hymen
- 6) Excision of Vaginal Septum
- 7) Mc-Indoe's vagino plasty
- 8) William's Vulvovaginoplasty
- 9) Electrocautrization of the cervix
- 10) Cervical punch Biopsy
- 11) Cervical Conization
- 12) Cryo Surgery
- 13) Laser Surgery
- 14) Culdoscopy and Culdoplasty
- 15) Operation for Uterovaginal prolaps & Vault prolaps
- 16) Vesico Vagional fistula repair
- 17) Recto vaginal fistula repair
- 18) Urethro perinioplasty
- 19) Laproscopy
- 20) Hysteroscopy & Microhysteroscopy
- 21) Operative treatment of tubal ectopic gestation
- 22) Ovarian Cystectomy-
- 23) Ovaritomy
- 24) Ovarian Suspension
- 25) Re-construction of the fallopian tube
- 26) Myomectomy
- 27) Hysterectomy (Abdominal & Vaginal)
- 28) Wertheim's Operation

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