## **DIPLOMA IN DIABETOLOGY (DIP-DIAB)**

### **Course duration two years**

#### 1. **REGULATIONS:**

- 1. Every candidate must be a medical graduate possessing the degree of MBBS or equivalent recognized by PMDC.
- 2. He / she must be registered with PMDC. In case of foreign candidates the doctor must be registered with the medical registration authority of that country and temporarily registered with PMDC. If the candidate has received training in Pakistan then he must be registered with PMDC.
- 3. He / she must have completed six months house job in medicine or allied and six months in surgery or allied discipline, or one year of rotational training in Medical and allied or surgical and allied specialties.
- 4. He/she should have 12 months experience in General Medicine and or Endocrine and diabetes to be certified by consultant Physician/Endocrinologist with a major degree recognized by PMDC / CPSP.

The Diabetes Department must fulfill the following minimum criteria.

- 1. At least one consultant with a major degree in Medicine/diabetes & endocrinology.
- 2. Facilities for admission, diagnosis and treatment of all common diabetic problems.
- 3. Facilities for management of critical diabetic complications like Diabetic keto acidosis and hypoglycaemia.
- 4. Facilities for procedures like Doppler for looking after complicated diabetic foot problems( chiropody care), eye department for looking after ophthalmic complications, dialysis/renal unit.
- 5. The institution should have strong supportive services in the field of Pathology and imaging.
- 6. Must follow the university's prescribed curriculum for training as given below.
- 7. Final Selection for diploma in Diabetes would be on the basis of aggregate merit in MBBS, passing an entry test and interview.
- 8. In case of candidates who have attained the necessary experience in Diabetes abroad, they must produce a certificate from the head of institution or the head of the department that the department has necessary infrastructure as prescribed in Para 1.5. They must be registered with the medical registration authority of that country and must seek temporary registration with PMDC.
- 9. Foreign institutions who follow the prescribed curriculum will be encouraged to affiliate with PGMI.

- 10. English shall be the medium of instruction and examination.
- 11. Every candidate must be registered with PGMI 2 year before the date of examination and shall identify his / her supervisor.

### 2. <u>COURSE DURATION: (2 YEARS)</u>

- 10 Months Diabetes & Endocrinology unit
- 2 Months Diabetes counseling (communication skills) /Insulin start advice.
- 2 Months Internal medicine.
- 2 Months community diabetology (epidemiological studies community awareness and educational programmes).
- 2 Months dietician/foot care clinic.
- 4 weeks ophthalmology
- 4 weeks cardiology
- 4 weeks nephrology
- 2 weeks G.surgical/plastic surgery/A& E optional
- 2 weeks in OBG/Peads
- 2 months mandatory experience in Research and collaborating Studies in the department

This course of study and the outlines of examination prescribed by the Board of Postgraduate Studies in the syllabus may be changed by the said Board and approved by the Syndicate of KMU as and when found necessary. Such change however, shall be notified at least one year before the date of commencement of the examination in which they will become effective.

All candidates must submit to the department a research dissertation or one paper published in a journal recognized by PMDC at least three months prior to examination, which should be approved by the head of the department.

There will be an intensive course of 2-4 weeks run by diabetes & endocrinology department PGMI. All the candidates will be encouraged to attend this course. There course fee will be payable to diabetes & endocrinology Department PGMI. The course will be covering all areas of the curriculum.

#### 3. EXAMINATION:

- 1. There shall be one examination each year.
- 2. There will be no supplementary examination.
- 3. Success in examination will lead to the award of Diploma in Diabetology by Khyber Medical University, Peshawar.

- 4. The examination will be conducted in one part.
- 5. The examination shall be held once in a year in the month of December at PGMI.
- 6. Candidate having successfully completed 2yrs training with more than 80% attendance, have presented in 4 (four) hospital clinical meetings, conducted an audit and completed dissertation will be allowed to sit in exam.
- 7. The examination shall consist of the following components.

#### **OUTLINES OF EXAMINATION**

#### Paper A

- a. Written paper in basic, Clinical and applied diabetes.
- b. There shall be 10 short essay question of 6 marks each and MCQ of 40 marks with a total of 100 marks.
- c. Time allocated shall be 3 hours.

#### Paper B

- a. Written paper in prevention of diabetes and management of complications and recent advances in diabetology.
- b. There shall be 10short essay question of 6 marks each and MCQ of 40 marks with a total of 100 marks.
- c. Time allocated shall be 3 hours.

#### D. ORAL AND PRACTICAL

1.	Viva Voce	100 marks.
2.	Short Cases	50 marks.
3.	Long Cases	50 marks.
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**Grand Total 200 marks** 

Viva Voce will also include interpretation of X-Rays, slides, Data interpretation, E.C.G, Fundal photographs, Case studies and special reports.

The minimum number of passing marks to pass this examination shall be 50% in theory component and 50% oral and practical component separately. The aggregate pass marks shall be 55%. A candidate who secures 80% marks or above shall be declared to have passed with distinction.

Head of the department of diabetes & endocrinology PGMI will be the convener of the examination.

There shall be a total of 4 examiners, two from PGMI and two external. At least one internal and one external must be a diabetologist. Two examiners should be from the related specialties like ophthalmology, nephrology, plastic/general surgery, peadiatrics, gynaecology, internal medicine. The examiners will be selected by the controller of examinations, University of Peshawar in consultation with the head department of diabetes & endocrinology, postgraduate medical institute /Hayatabad medical complex Hospital Peshawar.

The questions in written papers will be shared on 50% basis both for setting and marking purposes by the internal and external examiners. However, the MCQs shall be prepared and marked by the examiners from PGMI.

The board of examiners shall arrange the result of written, clinical, practical and oral in a consolidated form and send it as soon as possible but not later than 7 days after the completion of examination to the controller of examination for formal declaration. There should be no limit of the number of attempts for diploma examinations.

#### 4. **EXAMINATION FEE**

- 1. A fee of Rs. 2,000/- (or whatever amount stipulated by PGMI/KMU from time to time) shall be charged for admission to the examination. The application form with admission fee should reach the controller of examination Khyber Medical University, Peshawar not later than 30 days before commencement of the examination.
- 2. A late fee of Rs. 1,000/-shall be charged in addition to admission fee, for application submitted after the last date of submission of application forms, provided such application form and examination fee are received no later than fifteen days before the commencement of the examination. No application for examination will be accepted after that.

#### 5. REQUIREMENTS TO SIT IN THE EXAMINATION:

- 1. MBBS or equivalent qualification recognized by PMDC.
- 2. 12 months house job certificate as already described
- 3. Registration certificate from PMDC. In case of foreign candidates registration from the medical registration authority of the country and temporarily registration of PMDC.
- 4. One year experience certificate in General Medicine as prescribed in section 4 and 5 before joining the training. Certificate of having successfully completed 2 years training for diploma in diabetes & endocrinology. The certificate must also reflect that the candidate has completed the following mandatory practical work during his/her stay in the unit.
- 5. CVP Line.
- 6. Insulin pump monitoring.
- 7. Doppler examination of legs.
- 8. Diabetic foot care plan.
- 9. Diabetic Eye Screening
- 10. Diabetic counseling programme
- 11. CPR and diabetic crises/coma management.

### SYLLABI AND COURSES OF READING

#### **PART-I**

- **1.** Introduction to diabetes / History of Diabetes.
- 2. Diagnosis and classification of Diabetes.
- 3. Public Health aspects of Diabetes.
- 4. Normal physiology of Insulin secretion and action.
- 5. Epidemiology and aetiology of type 1 diabetes.
- 6. Epidemiology and aetiology of type 2 diabetes.
- 7. Insulin resistance and Metabolic syndrome.
- 8. Other types of Diabetes.
- 9. Diabetes control and its measurement.
- 10. Management of type 1 diabetes.
- 11. Management of type 2 diabetes.
- 12. Global, National and regional strategies for control of Diabetes

#### **PART II**

- 1. Diabetic ketoacidosis and hyperosmolar non-ketotic hyperglycaemia
- 2. .Hypoglycaemia
- 3. Control and complications.
- 4. Diabetic eye disease.
- 5. Diabetic nephropathy
- 6. Diabetic neuropathy.
- 7. Blood lipid abnormalities.
- 8. Hypertension in diabetes.
- 9. Macrovascular disease in diabetes.
- 10. Foot problems in diabetes.
- 11. Sexual problems in diabetes.
- 12. Gastrointestinal problems in diabetes.
- 13. Skin and connective tissue disorders in diabetes.

- 14. Psychological and psychiatric problems in diabetes.
- 15. Some intercurrent problems in diabetes.
- 16. Pregnancy and diabetes.
- 17. Diabetes in childhood.
- 18. Diabetes in old age.
- 19. Diabetes and lifestyle.
- 20. Organization of diabetes care: Diabetes specialist nursing, diabetes education and general practice.
- 21. Future directions in diabetes management and research.

### **BOOKS AND JOURNALS FOR READING**

# A. BOOKS:

- 1. Text Book of Diabetes. J.C.Pickup & G. Williams.
- 2. Insulin resistance A. Krentz.
- 3. A practical manual of Diabetic foot care. M.E.Edmunds, A.V.M.Fosters.
- 4. Diabetes and its Management. P.J.Watkins, S.A.Amiel,S.L.Howell & E.Turner.

# B. <u>JOURNALS:</u>

- 1. Diabetic Medicine.
- 2. Diabetes care.
- 3. Diabetologia
- 4. Diabetes.
- 5. New England journal of medicine.
- 6. Journal college of Physicians and Surgeons of Pakistan.