

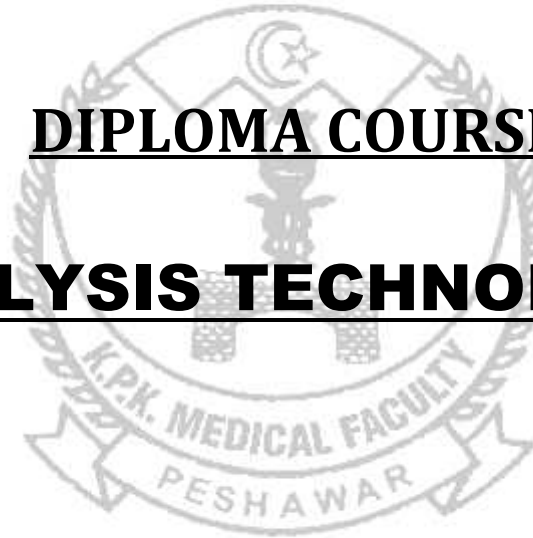
**KHYBER PAKHTUNKHWA MEDICAL FACULTY PESHAWAR**

**CURRICULUM**

**2<sup>nd</sup>, 3<sup>rd</sup>, & 4<sup>th</sup> Semester**

**DIPLOMA COURSE**

**DIALYSIS TECHNOLOGY**



Bungalow No.86/D-5 Abdara Road University Town,  
Peshawar.

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## **2<sup>nd</sup> Semester (Theory)**

### **Paper A Renal Anatomy & Physiology**

### **Paper B Renal Anatomy & Pathology**

Time 70 Hrs  
Total time: 190 Hrs

1. Morphology of the kidney and its development
2. General features and its relations to the different body organs
3. Surface anatomy of the kidney
4. Brief anatomy of ureter bladder and urethra
5. Brief description of the renal glands
6. Physiology function of Nephrons
7. Formation of Urine
8. Effects of hormones on the kidney

### **Renal Pathology & Medicine**

Time 120 Hrs

1. Developmental disorders of the kidney, ureter and the bladder
2. Pathology of common renal disease
3. Pathology of acute renal failure
4. Chronic renal failure
5. Renal cell carcinoma
6. **Practical** pathology of the **kidney** and clinical assessment
7. Acid base, fluid and **electrolyte** disorders

### **Teaching & Learning**

- Lectures
- Models
- Demonstration on patient

## 3<sup>rd</sup> Semester (Theory)

Total time: 160 Hrs

**Paper A clinical Aspects of renal Pathology-I**

**Paper B clinical Aspects of renal Pathology-II**

1. Sign & symptoms of renal disease
2. Clinical assessment of Hyponatrimia
3. Hyponatrimia
4. Metabolic acidosis
5. Respiratory acidosis and alcoholosis
6. Hyperkemia
7. Hypocalcomia
8. Hyperphosphalemia
9. Oedema and clinical uses of diureties
10. Introduction to the glomarular Diseases
11. Renal involvement **in the following**
  - Cardiovascular Disease
  - Connective Tissues disorders
  - Diabetes
  - Chest Disease
  - Cancers
  - Gastrointestinal Disease
12. Biology and pathophysiology of acute Renal Failure
13. Acute Renal Failure and Metabolic Derangement
14. Management of Acute Renal Failure

15. Drugs during different Nephropathy
16. Principles of drug therapy in Renal Failure
17. Sickle Cell Nephropathy
18. Polycystic and acquired cystic disease
19. Uranus syndrome and \_\_\_\_\_ disorders
20. **Medullary** cystic disease
21. Tubular interstitial disease
22. Nephrolithlasis
23. Urinary Tract infection
24. Kidneys in infants/Children/Pregnancy
25. The aging kidney
26. Introduction to Chronic Renal Failure
27. Hypertension
  - Its pathogenesis
  - Essential Hypertension
  - Treatment

## **Teaching & Learning**

- Lectures
- Models
- Demonstration on patient

# **4<sup>th</sup> Semester (Theory)**

Total time: 190 Hrs

## **Paper A treatment of aduers renal disease & life support procedure**

## **Paper B dialysis & clinical pathological Aspects**

1. Treatment of Metabolic derangements
2. ECG normal and abnormal in renal disease
3. Treatment of glomerular disease
4. Role of steroids in renal disease
5. Treatment modalities in Acute Renal Failure & Chronic Renal Failure
6. Treatment of Renal Emergencies
7. Pre and post dialysis care and instructions
8. Complications of dialysis
9. Shock and renal involvement in shock
10. Septicemia
11. Cardiac arrest
12. Use of contrast in renal medicine
13. The importance of Cardio-pulmonary resuscitation

## **Teaching & Learning**

- Lectures
- Models
- Demonstration on patient