

Curriculum
for
Practical :- First Year
Diploma in Dialysis Technician

Practical	Topics
	1.Orientation for Dialysis technician towards importance & need of the technician.
	2.Care of Unconscious patient.
	3.Monitoring Temperature(manual).
	4.Monitoring Pulse (manual).
	5.Monitoring Respiration (manual).
	6.Monitoring BP (manual).
	7. Monitoring Temperature (with Multiparamonitor).
	8.Monitoring Pulse (with Multiparamonitor).
	9.Monitoring Respiration (with Multiparamonitor).
	10.Monitoring BP (with Multiparamonitor).
	11. Obtaining femoral access.
	12.Obtaining jugular access.
	13. Process of Haemodialysis & poritoneal dialysis.
	14.Basic life support (BLS).

Details of Curriculum for Second Year Diploma in Dialysis Technician

PAPER 1st Theory	Topics	Hours.
1. Only relevant surgical & medical conditions (relevant to dialysis technician but other than nephrology).	1. History taking. General examination of the patient. Filling Case-sheet. Common clinical words.	15 Hrs
	2. Hypertension:- Def, Causes, Pathology, Clinical features, Investigation & Management.	05 Hrs
	3. Hypotension :- Def, Causes, Pathology, Clinical features, Investigation & Management.	02 Hrs
	4. Diabetes mellitus :- Def, Causes, Pathology, Clinical features, Investigation & Management.	10 Hrs
	5. <u>Diseases of blood</u> :- Anaemia, Basics of coagulation Bleeding disorders & Haemophilia.	30 Hrs
	6. <u>Respiratory Tract</u> :- Pneumonia, Tuberculosis, B. asthma, COPD, Bronchiectasis, Collapse of lung, Pneumonitis, Pleural effusion, Pneumothorax, Empyema thoracis, Cancer lung.	50 Hrs
	7. <u>Diseases of GIT & Liver & GB</u> :-Reflux Oesophagitis, Peptic ulcers, Gastritis, Intestinal Obstruction, Hepatitis, Cirrhosis of liver, Cholecystitis.	40 Hrs
	51 <u>Diseases of Nervous system</u> :- Stroke, Meningo-encephalitis, Glasgow coma scale, Epilepsy, Head Injury.	30 Hrs
	52 <u>Diseases of Urinary tract</u> :- Urolithiasis, Benign prostatic hyperplasia.	13 Hrs
	53 <u>Endocrine system</u> :- Diabetes mellitus, hypo & Hyper thyroidism.	10 Hrs
	54 <u>Miscellaneous</u> :- Hypo & Hyper Natraemia, Hypo & Hyper Kalaemia, Hypo & Hyper Calcaemia.	10Hrs
	55 <u>Infections diseases</u> :- TB, Typhoid, Malaria, Dengue fever, Leprosy, AIDS, Amoebiasis.	30 Hrs

Details of Curriculum for Second Year Diploma in Dialysis Technician

PAPER 1st Theory	Topics	Hours.
2.Nursing Procedures like vital recording, IM/IV/SC injection, Oxygen therapy, Nebulization, IV infusion.	1. Temperature monitoring & Fever.	02 Hrs
	2. Pulse monitoring.	02 Hrs
	3. BP monitoring.	02 Hrs
	4. Respiration monitoring.	01 Hrs
	5. Types of Injection routes.	01 Hrs
	6. IM Injection.	01 Hrs
	7. IV Injection.	01Hrs
	8. SC Injection.	01 Hrs
	9. Oxygen Therapy.	03 Hrs
	10. Nebulization	03 Hrs
	11. IV Infusion (Also with infusion pump).	01 Hrs
	12. Care of Unconscious patient.	02 Hrs

Details of Curriculum for Second Year Diploma in Dialysis Technician

PAPER 2nd Theory	Topics	Hours.
1.Diseases related to Nephrology.	1. ARF- Definition, causes, types, clinical features, investigations & management.	20 Hrs
	2. CRF – Definition, causes, types, clinical features, investigations & management.	20 Hrs
	3. Basics of various types of Glomerulonephritis.	30 Hrs
	4. Basics of Tubulo-interstitial diseases.	20 Hrs
	5. Diabetic Nephropathy : Definition, Pathology, Clinical features, Investigations & management.	15 Hrs
	6. Hypertensive nephropathy : Definition, Pathology, Clinical features, Investigations & management.	15 Hrs
	7. Basics idea of Analgesic & Heavy metal nephropathy	05 Hrs
	8. Urolithiasis – Definition, types, causes, effect on kidneys, Clinical features, Investigations & management.	20 Hrs
	9. Urinary tract infection & urosepsis.	10 Hrs
	10. Basics of Congenital abnormalities of kidney.	20 Hrs
	11. Nephro toxic drdugs.	10 Hrs
	12. Hypo & Hyper natraemia.	05 Hrs
	13. Hypo & Hyper Kalaemia.	05 Hrs
	14. Basics of acidosis (metabolic & respiratory).	05 Hrs
	15. Basics of Alkalosis (metabolic & respiratory).	05 Hrs
	16. Basics of other dys-electronaemia.	20 Hrs

Details of Curriculum for Second Year Diploma in Dialysis Technician

PAPER 2nd Theory	Topics	Hours.
2.Details about dialysis (Haemodialysis & CAPD) procedure.	1. Types of dialysis & role of dialysis technician.	05 Hrs
	2.Details about dialysis machine & other instruments/equipments used in dialysis.	25 Hrs
	3.Details about dialysate fluids & dialyzers.	10 Hrs
	4.Details about RO plant & water composition used in dialysis.	10 Hrs
	5. <u>Haemodialysis</u> - Indications, preprocedure care, detail procedure, post procedure care, interaction with patients, complications & their management, record keeping.	50 Hrs
	6. <u>Peritoneal dialysis</u> - Indications, preprocedure care, detail procedure, post procedure care, interaction with patients, complications & their management, record keeping.	50 Hrs
	7.Re-dialysis Assessment.	05 Hrs
	8.Anticoagulants used in dialysis.	10 Hrs
	9.Emergency drugs used during dialysis.	20 Hrs
	10.Venous accesses: types, procedure detail & role of technician.	40 Hrs
	11.Nutritional advices in a patient of dialysis.	05 Hrs

PAPER 2nd Theory	Topics	Hours.
3.Basic biomedical engineering physics of dialysis machine, multipara monitors.	1.Basics of biomedical physics of dialysis machine.	40 Hrs
	2Basics of biomedical physics of multi-para monitors.	20 Hrs

Curriculum
for
Practical :- Second Year
Diploma in Dialysis Technician

Practical	Topics
	1. Hand on training of IM Injection.
	2. Hand on training of IV Injection.
	3. Hand on training of SC Injection.
	4. Use of Infusion pump.
	5. Hand on training of Nebulisation.
	6. Use of Defibrillator.
	7. Hands on training of femoral & jugular access.
	8. Hand on training of Assisting A-V fistula making.
	9. Hands on training of peritoneal dialysis (Pre, Intra & Post procedure role).
	10. Hands on training of Haemodialysis. (Pre, Intra & Post procedure role).
	11. Hands on training of use of regular & emergency drugs used in dialysis.
	12. Care & keeping of Instruments/equipments & consumables use in dialysis.
	13. Record keeping.