

DIPLOMA IN DIALYSIS TECHNICIANS 1ST YEAR

Anatomy

- * Definition and branches of anatomy
- * Introduction of anatomical terms
- * Organization of cell. Tissue organ and system
- * Skeletal system
- Bones: Definition structure function and types
- * Detail study of structure of regional bone
- * Joint: Definition classification structure movement
- Muscular system:
Definition structure function and type
Different muscular position and action
- Cardiovascular system
heart its position structure conduction system nerve supply and blood supply
Blood vessels : structure differences position of chief vessels function
Circulation of blood : systemic pulmonary portal
- Respiratory system:
Structure position function of respiratory organs
- Digestive system
Structure position and function of digestive organs
- Urinary system:-
Position structure of organ of urinary system
- Nervous system:
Introduction classification structure of nervous system
Sense organs
Structure of Ear Eye Nose Tongue Skin
- Female reproductive system:
External and internal organs
- Male reproductive system:
Internal and external organs

Physiology

- * Definition and introduction of physiology
- * Organization of cell. Tissue organ and system
- * Connective tissue its types function
- * Muscular system:
* Definition structure function and types
- * Cardiovascular system:-
* Heart its position structure nerve supply and blood supply
* Blood vessels:- structure differences position of chief vessels function Lymphatic system
* Circulation of blood:- systemic pulmonary portal
* Cardiac output stroke volume blood pressure pulse rate cardiac rate cardiac cycle Blood:-
detail description blood group rh factor
- * Respiratory system:- respiration physiology lung volume and lung capacity
- * Digestive system:- process of mastication deglutition digestion and absorption Metabolism
of blood constituents

- * Urinary system:-
- * Physiology of blood filtration maturation
Regulation of blood temperature
- * Fluid and electrolyte balances
- *

Nervous system:-

- * Introduction classification structure and function of nervous system
- * Sense organs:- ear eye nose skin tongue structure and function of ear eye nose skin and tongue
- * Female reproductive system:
- * Menstrual cycle function
- * Male reproductive system:
- * External and internal organs
- * Endocrine system:- structure and function of pituitary pancreas gland thyroid parathyroid gland thymus and suprarenal gland

General microbiology

- 1- Definition role scope and branch of microbiology
- 2- Bacteriology: - shape size and structure of bacteria
- 3:- Infection : - definition source and mode of transmission of infection
- 4:- Immunith: - types in detail immunization schedule
- 5:- Sterilization and disinfectant

General pathology

- 1:- Definition role scope and branch of pathology
- 2:- Inflammation its stage and sign
- 3 Derangement of body fluid
- 4:- Shock
- 5:- Introduction of hemorrhage thrombosis embolism

Pharmacology

- 1:- Definition role scope of pharmacology
- 2:- General pharmacokinetics and pharmacodynamics
- 3:- Diuretics
- 4:- Antidiuretics
- 5:- Antibiotics

Basic of dialysis management

- 1:- Function of kidney nephron glomerulus tubules GFR urinary bladder Urethra
- 2:- Basic chemistry of body fluid and electrolytes metric system atomic compound molecules atomic weight and molecular weight ion ionic

bonding solution concentration of solution electrolyte conductivity moles (s i unit) morality normality osmolality hydrogen ion conc. ph acids buffer

3:- body fluids fluids

balances 4:- Types of

dailysis Haemodailysis

peritoneal dialysis Role of

dialysis technician

DIPLOMA IN DIALYSIS TECHNICIANS 2nd YEAR

General medicines and general surgery

Infection and communicable diseases

Metabolic disorder:- diabetes obesity gout

Diseases of endocrine system

Diseases of nervous system

Diseases of G I T

Disease of blood

Diseases of cardiovascular system

Disease of ear nose and throat

Disease of respiratory system

Diseases of eye

General surgery

1-Wound

2- Ulcer

3- Skin graft

4- Burn

5- Orthopedic conditions

6- Gynecological and obstetrics conditions

7-other surgical conditions

7-

Clinical nephrology

#- Various diagnostic procedures of renal diseases

#- Manifestation of renal diseases

#- Renal vascular diseases

#- Renal involvement in systemic diseases

#- Infection conditions of kidney and urinary tract

#- Obstruction of urinary tract

#- Effects of the drugs on the kidney

#- Tumors of kidney and urinary tract

#- Hard water syndrome

#- Water fluid and electrolyte imbalance

Dialysis management

- 1- Concept of dialysis
- 2- Haemo dialysis
- 3- Water for dialysis procedure
- 4- Filtration decantation distillation
- 5- Softener deionizer
- 6- Reverse osmosis different in purities
- 8 Water used in dialysis compare ro with d i
- 9- Different types of dialyzer
description reuse indication care factors improving performance choosing dialyzer priming
sterility washing formalin use hemofiltration haemoperfusion

10- Dialysis equipment:-

Accessory equipment and functions blood pump monitors of temp. Flow pressure monitors of
daily sate concentration ph

11- Chemicals used in daily sate advantages and disadvantages

12- Delivery system

13 Care assessment preparations

15 Complications:-

Complication during and after dialysis. If management potential problems during dialysis
prevention hypovolacmia and its management

18- Peritoneal dialysis

Indication.daily sate preparation procedure types care complication- management. toxic substances
added

19- Re- Dialysis assessment

20- Temporary vascular access

23- Goal of dialysis

24- Anti coagulant drug added in PD

25- Emergency drugs and injections

24- Disinfection procedure of machines and instruments

25- Clinical basics of i v fluid creatinin clearance

26- Role of dialysis technician

