

B.Sc. Allied Health Sciences Second Year Semester-III

July/August 2019 Examination

B.Sc. Renal Dialysis Technology

Time: 3 Hrs.

Paper – I

[Max. Marks: 100]

Applied Anatomy & Physiology related to Dialysis Technology

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

(Use separate answer booklet for Section A & B)

Section – A

Applied Anatomy (50 Marks)

Q.P Code : J3475

LONG ESSAY

2 X 10 = 20 Marks

1. Describe the Prostate gland under the following headings
a) External features b) Lobes c) Structure d) Applied aspects (3+2+3+2)
2. Describe the Urinary bladder under following headings:
a) External features b) Microscopic structure c) Blood supply d) Nerve supply (3+3+2+2)

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

3. Describe the origin, course and branches of Brachial artery
4. Describe the peritoneal folds
5. Discuss the fate of Metanephros
6. Illustrate the microscopic structure of Kidney and mention its salient features.
7. Describe the subdivisions of Male urethra

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

8. List the parts of a Nephron
9. Mention the constrictions of Ureter
10. Enumerate any 3 branches of Femoral artery
11. List the structure in the hilum of the kidney
12. Mention the sphincters of urethra
13. Mention the Blood supply of Kidney
14. Name the tributaries of left renal vein

Section – B

Applied Physiology (50 Marks)

Q.P Code : J3476

(Use separate answer booklet for Section-B)

LONG ESSAY

2 X 10 = 20 Marks

1. Describe with flowchart intrinsic and extrinsic pathway of coagulation
2. Explain the mechanism of sodium and water reabsorption in different segments of the nephron

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

3. Describe the significance of PAH clearance.
4. List the factors affecting GFR.
5. Describe obligatory reabsorption of water.
6. List the functions of kidney
7. Define & classify renal failure.

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

8. List the non excretory functions of kidney.
9. Give the physiological basis for absence of protein in the urine.
10. List the functions of DCT.
11. Name 2 hormones acting on renal tubules.
12. Give the normal pH of blood. List the body's major buffer system.
13. Mention the 3 basic renal processes that lead to formation of urine.
14. Describe the special features of renal circulation.

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B.Sc. Allied Health Sciences Second Year Semester-III
July/August 2019 Examination
B.Sc. Renal Dialysis Technology

Time : 2 Hrs.

[Max. Marks : 40]

Paper-II

Pharmacology Related To Dialysis Technology

Q.P Code : J3480

*Your answers should be specific to the questions asked.
Draw neat labelled diagrams wherever necessary.*

Long essay

1 X 10 = 10 Marks

1. Classify diuretics. Explain mechanism of action, uses and adverse effects of frusemide. (4+2+2+2)

Short essay (Answer any three)

3 X 5 = 15 Marks

2. Mention colloids and crystalloids with their advantages and disadvantages. (2+3)
3. Explain mechanism of action, uses and adverse effects of amlodipine. (2+2+1)
4. Mention drugs used in anaphylactic shock with rationale for their use. (2+3)
5. Explain factors affecting drugs used in dialysis.

Short answer (Answer any five)

5 X 3 = 15 Marks

6. Mention **three** uses of ramipril.
7. Mention **three** uses of vitamin D.
8. Mention **three** parenteral iron preparations with their indications.
9. Explain mechanism of action and **two** uses of erythropoietin (1+2).
10. Mention **three** drugs contraindicated during dialysis.
11. Mention **three** phosphate binders with their advantages (1.5+1.5).

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B.Sc. Allied Health Sciences Second Year Semester-III

July/August 2019 Examination

B.Sc. Renal Dialysis Technology (RDT)

Time : 2.30 Hrs.

Paper - III

[Max. Marks : 80]

Concept of Renal Disease and its Management

Q.P Code : J3490

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

LONG ESSAY

2 X 10 = 20 Marks

1. Define CKD. Mention the stages of CKD and discuss the treatment of anemia in CKD
2. Define Acute Kidney Injury (AKI). Write about Classification and pathophysiology of AKI.

SHORT ESSAY (Answer any Six)

6 X 5 = 30 Marks

3. Treatment of Minimal Change Disease
4. Acute nephritic Syndrome
5. Urinary Tract Infections – causes and treatment
6. Secondary Nephrotic Syndrome
7. Nephrotic syndrome- Pathophysiology
8. Diet in CKD Stage 5
9. Food and Obesity
10. Asymptomatic Urinary abnormalities

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

11. Mention three drugs causing AKI
12. Acute interstitial Nephritis
13. Treatment of Minimal change Disease
14. Mention three common causes of CKD
15. Define Nephrotic syndrome
16. Renal osteodystrophy
17. Mention the normal values of S Calcium , S Albumin & S Phosphorus
18. Mention three common causes of CKD
19. Mention three post renal causes of AKI
20. Mention three drugs causing AKI
21. Acute interstitial Nephritis
22. Mention three organisms causing UTI