SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

B.Sc. Renal Dialysis Technology (Semester-III)

September-2023 Examinations

Applied Anatomy & Physiology related to Dialysis Technology

Time : 3 Hrs. **[Max. Marks :100]**

Sec-A

Applied Anatomy(50 Marks)

Q.P Code: J3475

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary

LONG ESSAY **2×10=20 Marks**

1. Describe the kidney under following headings (5+3+2)
   a) Relations b) blood supply c) nerve supply
2. Describe ureter. Add a note on its histological features

SHORT ESSAY (Answer any three) **3×5=15 Marks**

3. Inguinal hernia
4. Profunda femoris artery
5. Describe the external features and lobes of prostate gland
6. Mention origin, course and branches of axillary artery
7. Describe the subdivisions of male urethra

SHORT ANSWERS (Answer any five) **5×3=15 Marks**

8. Illustrate the microscopic structure of urinary bladder
9. Name the sites of constrictions of ureter
10. Name the branches of femoral artery
11. Draw a neat labelled diagram of nephron
12. Median cubital vein
13. What is lobulated kidney
14. Name the types of abdominal hernia

Sec-B

Applied Physiology

Q.P Code : J3476

(Use separate answer booklet for section-B)

LONG ESSAY **2 X 10 = 20 Marks**

1. Define Hemostasis and explain the extrinsic and intrinsic mechanism of blood coagulation in a flow chart (2+8)
2. Define GFR give is the normal value and name the substance used to measure it ? List five factors influencing GFR and explain any 2 (3+7)

SHORT ESSAY (answer any 3) 3 **X5 =15Marks**

3. Explain the Tubular reabsorption of sodium in the nephron
4. Define and classify renal failure
5. Describe the mechanism of the tubuloglomerular feedback
6. Draw a neat, labelled diagram of the nephron and list the function of each component
7. Explain the role of Renin Angiotensin mechanism in regulation of blood pressure

SHORT ESSAY (answer any 5 5x3=15 Marks

8. What is Renal Glycosuria
9. Give a brief note on the Artificial Kidney
10. What is Inulin Clearance? What is its clinical application
11. Name three substances secreted in the DCT
12. List any three functions of the Kidney
13 What is the role of ADH in water reabsorption
14 List any three peculiarities of renal circulation.