

# **BABA FARID UNIVERSITY OF HEALTH SCIENCES, FARIDKOT**

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| Dialysis Technician<br>(under Baba Farid University of Health Sciences, Faridkot) |                                                                                                                               |                                 |
| QUESTION BOOKLET NO                                                               |                                                                                                                               | IMPRESSION OF THE CANDIDATE     |
| OMR ANSWER SHEET NO                                                               |                                                                                                                               |                                 |
| ROLL NO:                                                                          | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> | FULL SIGNATURE OF THE CANDIDATE |
|                                                                                   |                                                                                                                               | FULL SIGNATURE OF INVIGILATOR   |

Time Allowed: 1:00 Hour (12:00 Noon to 01:00 PM)

Maximum Marks: 50

1. Use BLACK FINE TIP BALL PEN only. Use of pencil is not allowed.
2. Write your Roll number on the OMR answer-sheet and also on the question-booklet only in the space provided for the purpose and at no other place in the question booklets and Answer-sheet
3. Enter the Question Booklet Set and Number on the OMR Answer-sheet and also darken the corresponding bubbles with BLACK FINE TIP BALL PEN.
4. Do not put any marks anywhere in the Question booklet /on the OMR Answer-sheet.
5. **There are 50 objective type questions in all of 1 Mark each.** Before attempting the questions, check that the Question-booklet is complete. In case any question/part of question or page is missing, inform the Centre Superintendent within 5 minutes of the start of the examination. After that no claim will be entertained.
6. **Each question is followed by four alternative responses listed as A), B), C) and D) out of which only one is correct / most correct. In case, all the ovals are left blank, there will be deduction of marks @ 0.25 mark for each such unattempted question. Fifth oval 'E' (introduced for security purpose) is to be darkened in case you do not want to attempt the question to avoid negative marking.**
7. To open the question booklet, remove the seal gently when asked to do so. Handover the OMR Answer-sheet to the officer on duty on the completion of the time before you leave the examination hall.
8. **The candidates are permitted to carry his/her question booklet after completion of the examination but OMR Sheets are compulsory required to be deposited with the invigilator.**
9. A candidate who create disturbance of any kind or changes his/her seat or is found in possession of any paper possibility of any assistance to him/her or unfair means will be expelled from the examination by the Centre superintendent/Observer, whose decision shall be final. ("Expulsion" for this purpose would mean cancellation of the entire examination of the candidate).
10. **THE CANDIDATES ARE NOT PERMITTED TO CARRY ANY TELECOMMUNICATION EQUIPMENT SUCH AS WATCH, CELLULAR PHONE, WIRELESS SET, SCANNER ETC, INSIDE THE EXAMINATION HALL.**
11. For rough work, use only the blank space of the Question booklet.
12. The candidates will not be allowed to leave the examination hall during the examination.
13. Borrowing any material is not allowed.
14. The answer-sheet is designed for Computer evaluation. If the instructions are not followed properly, the candidate alone shall be responsible for the resultant loss.
15. Smoking Refreshment shall not be allowed in the Entrance Test Centre/Hall.
16. Male candidates shall affix their Left Thumb Impression (LTI) while Female candidates shall affix Right Thumb Impression (RTI) at the prescribed place on the OMR answer sheet, Question Booklet and attendance sheet. The Centre superintendent shall also obtain and retain it for record.
17. The candidate must fill both the question booklet number and OMR answer sheet number on the attendance sheet.
18. No candidate shall be allowed to leave the centre before **01:00 PM**.

- (1) Hemodialysis rids your body of harmful wastes. What else does hemodialysis remove?
- A. Extra protein
  - B. Extra salt
  - C. Extra water
  - D. B and C
- (2) What is the filter called that acts as an artificial kidney in hemodialysis?
- A. Dialyzer
  - B. Hemolyzer
  - C. Nephrolyzer
  - D. None of the above
- (3) Your patient becomes restless and tells you she has a headache and feels nauseous during hemodialysis. Which complication do you suspect?
- A. Infection
  - B. Air embolism
  - C. Hypotension
  - D. Acute hemolysis
- (4) Diffusion rate depends on all of the following except?
- A. Blood and dialysate flow rate
  - B. Membrane surface area and thickness
  - C. Solution viscosity
  - D. Membrane resistance
- (5) Patient complaints of severe right-sided flank pain, nausea, vomiting and restlessness. He appears slightly pale and is diaphoretic. Vital signs are BP 140/90 mmHg, Pulse 118 beats/min., respirations 33 breaths/minute, and temperature, 98.0F. Which subjective data supports a diagnosis of renal calculi?
- A. Pain radiating from loin to groin
  - B. History of mild flu symptoms last week
  - C. Dark-colored coffee-ground emesis
  - D. Dark, scanty urine output
- (6) You are developing a care plan with the nursing diagnosis risk for infection for your patient that received a kidney transplant. A goal for this patient is to:
- A. Remain afebrile and have negative cultures
  - B. Resume normal fluid intake within 2 to 3 days
  - C. Resume the patient's normal job within 2 to 3 weeks.
  - D. Try to discontinue cyclosporine as quickly as possible
- (7) How often must hemodialysis usually be done in ESRD?
- A. Every day
  - B. Once a week
  - C. Twice a month
  - D. Two to three times a week.

(8) What is a common side effect for hemodialysis?

- A. Muscle cramps
- B. Dizziness
- C. Nausea
- D. All of the above

(9) A patient with diabetes has had many renal calculi over the past 20 years and now has chronic renal failure. Which substance must be reduced in this patient's diet?

- A. Carbohydrates
- B. Fats
- C. Protein
- D. Vitamin C

(10) Another way to clean the blood is called peritoneal dialysis. Which part of the body acts as a filter for this method?

- A. The lining of the stomach
- B. The lining of the intestines
- C. The lining of the lungs
- D. The lining of the abdomen

(11) Which dietary mineral must be limited for a person on hemodialysis?

- A. Potassium
- B. Iron
- C. Zinc
- D. Molybdenum

(12) What is a common problem with peritoneal dialysis?

- A. Nausea
- B. Insomnia
- C. Abdominal infection
- D. Respiratory problems

(13) Select the answer that BEST defines Continuous renal replacement therapy (CRRT)

- A. A fluid removal therapy
- B. A kind of dialysis.
- C. A therapy indicated for continuous solute and/or fluid removal in critically ill patients
- D. A therapy indicated for intermittent solute and/or fluid removal in critically ill patients

(14) Acute renal failure combined with hemodynamic instability is often used as an indication to begin continuous renal replacement therapy (CRRT). Which of the conditions listed below might also be used as a non-renal indication to start therapy?

- A. Severe fluid overload
- B. Systemic inflammatory response syndrome (SIRS) and sepsis
- C. Rhabdomyolysis
- D. All of the above.

- (15) Select the correct answer(s). In Slow continuous ultrafiltration (SCUF):
- A. The principle used is ultrafiltration
  - B. Substitution and dialysate fluids are used
  - C. Primary indication is fluid overload without electrolyte disturbances
  - D. All of the above
- (16) Select the statement that BEST describes Continuous veno-venous hemodiafiltration (CVVHDF):
- A. The principle used is convection
  - B. The principle used is diffusion
  - C. Requires only a dialysate fluid
  - D. Uses the principles of diffusion and convection
- (17) Reprocessing agents used in hemodialyzer include
- A. Formaldehyde
  - B. Paracetic acid-hydrogen peroxide
  - C. Glutaraldehyde
  - D. All of the above
- (18) Common site of temporary dialysis catheter insertion:
- A. Internal Jugular
  - B. Femoral
  - C. Subclavian
  - D. All of these
- (19) Which of the following is middle molecular weight uremic solute:
- A. Hippuric acid
  - B. Creatinine
  - C. B2 Microglobulin
  - D. Guanidine
- (20) What kind of polymers make up synthetic membranes?
- A. Polysulfone (PSF)
  - B. Polyethersulfone (PES)
  - C. Polymethylmethacrylate (PMMA)
  - D. All of the above
- (21) Sin wave pattern is seen
- A. Hypokalemia
  - B. Hyperkalemia
  - C. Hypercalcemia
  - D. Hypothermia
- (22) Administration of which of the following is useful in the management of hypotension during dialysis
- A. Isotonic saline
  - B. 10 ml of 23% saturated hypertonic saline
  - C. Salt poor albumin
  - D. 25% Dextrose

- (23) Hypotension during dialysis can be prevented by
- Careful evaluation of dry weight, ultrafiltration modelling
  - Avoiding heavy meals during dialysis, cooling of dialysate during dialysis treatment
  - Withholding of antihypertensive medications, midodrine
  - All of the above
- (24) The principle behind dialysis is
- Adhesion
  - Cohesion
  - Capillary Action
  - Reverse-Osmosis
- (25) The dialysate consists of
- Sodium
  - Potassium
  - Iron
  - Carbon
  - Magnesium
  - Manganese
  - Chlorine
  - Sulphur
  - Phosphorus
  - Calcium
- 1,3,8,9
  - 6,7,9
  - 1,2,5,7,10
  - 1,3,9,10
- (26) Treatment for muscle cramp during haemodialysis;
- Hypertonic Saline
  - 25% Mannitol
  - 50% Dextrose
  - All of these
- (27) On which parameters haemodialysis is done:
- GFR via Blood Test
  - Number of WBCs in Blood Test
  - Presence of blood in urine
  - Low urine quantity
- (28) When a subclavian vein or a femoral vein is used for dialysis, what kind of incision/insertion is made?
- Catheter
  - Shunt
  - Graft
  - Fistula

- (29) In Brescia-Cimino fistula cephalic vein is anastomosed end to side to radial artery for
- A. Dialysis access
  - B. Ventriculo-atrial shunt
  - C. Peritoneo-caval shunt
  - D. Peripheral arterial bypass
- (30) Categories of dialysis membrane
- A. Cellulose
  - B. Cellulosynthetic
  - C. Synthetic
  - D. All of the above
- (31) Muscle cramps during hemodialysis prevented by
- A. Reducing volume removal during dialysis
  - B. Use of higher concentrations of sodium in dialysate
  - C. Quinine sulfate before treatment
  - D. All of the above
- (32) What levels of KT/V per treatment defines minimal standards for adequacy among ESRD patients
- A. 0.8
  - B. 1.0
  - C. 1.2
  - D. 1.4
- (33) You have a patient that is receiving peritoneal dialysis. What should you do when you notice the return fluid is slowly draining?
- A. Check for kinks in the outflow tubing
  - B. Raise the drainage bag above the level of the abdomen
  - C. Place the patient in a reverse Trendelenburg position
  - D. Ask the patient to cough
- (34) Blood flow rate in the extracorporeal circuit in hemodialysis machine ranges. from
- A. 50 to 100 ml/min
  - B. 100 to 200 ml/min
  - C. 250 to 500 ml/min
  - D. 500 to 750 ml/min
- (35) In hemodialysis, dialysate flows in an opposite counter-current direction at the rate of
- A. 100 to 300 ml/min
  - B. 300 to 500 ml/min
  - C. 500 to 800 ml/min
  - D. 800 to 1000 ml/min

- (36) For how many hours dextrose containing solution is allowed in the peritoneal cavity in continuous ambulatory peritoneal dialysis
- A. 1 to 2 hours
  - B. 2 to 4 hours
  - C. 4 to 6 hours
  - D. 6 to 8 hours
- (37) Which is not a neurological complication of haemodialysis:
- A. Restless leg syndrome
  - B. Dialysis disequilibrium
  - C. Muscle cramps
  - D. Dialysis associated steal syndrome
- (38) Size of urea molecule and creatinine molecule is
- A. 50 Da and 100 Da respectively
  - B. 60 Da and 113 Da respectively
  - C. 70 Da and 123 Da respectively
  - D. 80 Da and 132 Da respectively
- (39) How much dextrose containing solution is infused in the peritoneal cavity in peritoneal dialysis
- A. 1 to 3 L
  - B. 4 to 6 L
  - C. 6 to 8 L
  - D. 10 to 12 L
- (40) Which of following is not part of Nephron:
- A. Glomerulus
  - B. Proximal convoluted tubule
  - C. Middle convoluted tubule
  - D. Distal convoluted tubule
- (41) Which hormone is secreted by kidney:
- A. Renin
  - B. Aldosterone
  - C. Thyroxine
  - D. Growth Hormone
- (42) What is normal GFR in adult humans:
- A. 90 to 120 ml/minute
  - B. 50 to 100 ml/minute
  - C. 100 to 200 ml/minute
  - D. 60 to 90 ml/minute
- (43) Most common organism for exit site infection for CAPD is:
- A. Streptococcus
  - B. E. Coll
  - C. Staphylococcus aureus
  - D. Klebsiella

- (44) Standard treatment duration for CAPD peritonitis is:
- A. 2-3 weeks
  - B. 4-5 weeks
  - C. 7 days
  - D. 10 days
- (45) Which drug is indicated for pain related to acute renal calculi?
- A. Narcotic analgesics
  - B. Nonsteroidal anti-inflammatory drugs (NSAIDS)
  - C. Muscle relaxants
  - D. Salicylates
- (46) Polystyrene sulfonate (Kayexalate) is used in renal failure to:
- A. Correct acidosis
  - B. Reduce serum phosphate levels.
  - C. Exchange potassium for sodium
  - D. Prevent constipation from sorbitol use
- (47) Patient had underwent surgery to form an arteriovenous fistula for hemodialysis. Which Information is Important for providing care for the patient?
- A. The patient shouldn't feel pain during initiation of dialysis
  - B. The patient feels best immediately after the dialysis treatment
  - C. Using a stethoscope for auscultating the fistula is contraindicated
  - D. Taking a blood pressure reading on the affected arm can cause clotting of the fistula
- (48) Which is complication of AV Fistula:
- A. Aneurysm
  - B. Bleeding
  - C. Thrombosis
  - D. All of these
- (49) Which is not a component of normal dialysate solution:
- A. Sodium
  - B. Calcium
  - C. Magnesium
  - D. Cadmium
- (50) Which is immediate treatment of intradialysis hypotension
- A. Stopping ultrafiltration
  - B. Infusion of saline bolus
  - C. Elevating patient's legs
  - D. All of these

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**ANSWER KEY****Recruitment test conducted on 22/01/2025 for post of Dialysis Technician  
under BFUHS, Faridkot**

|    |   |  |    |   |
|----|---|--|----|---|
| 1  | D |  | 26 | D |
| 2  | A |  | 27 | A |
| 3  | C |  | 28 | A |
| 4  | D |  | 29 | A |
| 5  | A |  | 30 | D |
| 6  | A |  | 31 | D |
| 7  | D |  | 32 | C |
| 8  | D |  | 33 | A |
| 9  | C |  | 34 | C |
| 10 | D |  | 35 | C |
| 11 | A |  | 36 | C |
| 12 | C |  | 37 | D |
| 13 | C |  | 38 | B |
| 14 | D |  | 39 | A |
| 15 | C |  | 40 | C |
| 16 | D |  | 41 | A |
| 17 | D |  | 42 | A |
| 18 | D |  | 43 | C |
| 19 | C |  | 44 | A |
| 20 | D |  | 45 | B |
| 21 | B |  | 46 | C |
| 22 | A |  | 47 | D |
| 23 | D |  | 48 | D |
| 24 | D |  | 49 | D |
| 25 | C |  | 50 | D |