

Practice, Learn and Achieve Your Goal with Prepp

### WBPSC Exam

Mains Previous Paper

# Simplifying **Government Exams**



### Dialysis techiciam - 19 DTN/19

#### DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO.

#### 2020

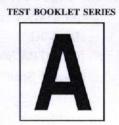
#### TEST BOOKLET

Time allowed:  $1\frac{1}{2}$  hours

Full marks: 100

Answer all the questions.

Questions are of equal value.



Serial No. 001	Roll No.:	
	Signature of the Candidate:	resident of the sale

#### INSTRUCTIONS

Candidates should read the following instructions carefully before answering the questions:

- 1. This booklet consists of 12 pages including this front page, Verify the Page Nos. and Test Booklet series on each page and bring at once to the Invigilator's notice any discrepancy.
- 2. Answers will have to be given in the Special Answer-Sheet supplied for the purpose.
- 3. Before you proceed to mark in the Answer-Sheet in response to various items in the Test Booklet, you have to fill in some particulars in the Answer-Sheet as per instructions sent to you in the Admit Card. Do not fold the Answer-Sheet as this will result in error in your marks.
- 4. All questions are of multiple-choice answer-type. You will find four probable answers (A), (B), (C) and (D) against each question. Find out which of the four answers appears to be correct or the best. Now darken the circle corresponding to the letter of the selected answer in the Answer-Sheet with Black Ball Point Pen as per instructions printed on the reverse of the Admit Card and in the Answer-Sheet.
- 5. One and only one circle is to be fully blackened for answer. Any spot in any other circle (multiple circle) or in wrong circle will be considered as wrong answer.
- 6. There will be negative marking of  $\frac{1}{3}$  mark for each wrong answer.
- 7. There is a blank page at the end of this Booklet for Rough Work.
- 8. The Special Answer-Sheet should be handed over to the Invigilator before leaving the Examination Hall. You are permitted to take away the used Test Booklet after completion of the examination.

PleaSe Turn OVer

19969

- 1. The investigation commonly used to measure donor GFR before renal transplant is
  - (A) DMSA Scan
  - (B) MRI
  - (C) DTPA Scan
  - (D) CT Scan
- 2. False negative urine dipstick for protein occurs in
  - (A) presence of blood
  - (B) alkaline urine
  - (C) high urine specific gravity
  - (D) non albumin proteinuria
- 3. Thrombocytopenia with paradoxical arterial and / or venous thrombosis occurs in
  - (A) Type 1 HIT
  - (B) Fondaparinux use
  - (C) Regional citrate anticoagulation
  - (D) Type 2 HIT
  - 4. Vaccine is available for all except
    - (A) Pneumococcus
    - (B) Hepatitis C
    - (C) Varicella
    - (D) Hepatitis B
- 5. Which of the following is not used in clinical practice?
  - (A) Iron-dextran
  - (B) Iron Sucrose
  - (C) Ferricarboxymaltose
  - (D) None of the above

- 6. The 2011 AAMI Standard for the maximum allowable bacteria count in water is Less than (cfu/ml)
  - (A) 200
  - (B) 100
  - (C) 0·25
  - (D) 2
- 7. If a dialyzer turns yellow, the first blood test advised is
  - (A) Sodium
  - (B) Creatinine
  - (C) Potassium
  - (D) LFT and Viral Serology
  - 8. Anti N antibodies are associated with use of
    - (A) Formaldehyde
    - (B) Bleach
    - (C) Heparin
    - (D) Peracetic acid
  - 9. In human, the Kidneys together receive
    - (A) 50% of cardiac output
    - (B) 5% of cardiac output
    - (C) 10% of cardiac output
    - (D) 25% of cardiac output
- 10. Plasmapheresis is given in all the following diseases except
  - (A) G. B. Syndrome
  - (B) Anti GBM disease
  - (C) TTP
  - (D) Obstructive Uropathy

- **11.** Which of the following may cause a slow heart rate?
  - (A) Hypernatremia
  - (B) Hypercalcemia
  - (C) Hyperkalemia
  - (D) Hypokalemia
- 12. The most likely cause of post-renal failure is
  - (A) Severe dehydration
  - (B) Nephrotoxic drug
  - (C) Glomerulonephritis
  - (D) Benign prostatic hypertrophy
- 13. The following may be the symptoms of dialysis disequilibrium syndrome except
  - (A) Skin rash
  - (B) Coma
  - (C) Seizures
  - (D) Nausea, Vomiting
- **14.** Which of the following has got the longest half life?
  - (A) Darbopoietin
  - (B) CERA
  - (C) Erythropoietin alpha
  - (D) Erythropoietin beta
  - 15. Usual number of cuffs in Perm Cath is
    - (A) 2
    - (B) 1
    - (C) 3
    - (D) 0

- **16.** The recommended single pool Kt/v for a dialysis session in a CKD 5 patient is at least
  - (A) 1.5
  - (B) 1.6
  - (C) 1·2
  - (D) 0.8
- 17. The maximum decrease of TCV acceptable for continued use of a dialyzer is
  - (A) 10%
  - (B) 20%
  - (C) 30%
  - (D) 40%
- 18. Imaging of the AV fistula and grafts are done by all except
  - (A) X ray
  - (B) Doppler ultrasonography
  - (C) Magnetic resonance angiography
  - (D) Access angiography
- 19. Dialysis patients have lowest mortality risk with a predialysis serum potassium level of (mmol/L)
  - (A) 5.0 5.5
  - (B) 2.0 2.5
  - (C) 6.0 6.5
  - (D) 7.0 7.5
- **20.** Usually dialysis is initiated in CKD V patients when the eGFR/1·73m<sup>2</sup> decreases to about
  - (A) 8 ml/min
  - (B) 25 ml/min
  - (C) 30 ml/min
  - (D) 27.5 ml/min

PleaSe Turn OVer

- 21. The concentration of Potassium in PD fluid is
  - (A) Zero
  - (B) 2 Meq/L
  - (C) 2.2 Meg/L
  - (D) 3 Meq/L
- **22.** All the followings are LMWH compounds except
  - (A) Dalteparin
  - (B) Nadroparin
  - (C) Fondaparinux
  - (D) Enoxaparin
- 23. All of the following are used in conservative management of hyperkalemia except
  - (A) Nebulisation
  - (B) Calcium gluconate
  - (C) Insulin and dextrose
  - (D) Magnesium sulphate
- **24.** Calcium concentration in Dialysis solution is (meq/L)
  - (A) 4.5 5.5
  - (B) 1.0 1.25
  - (C) 2.5 3.0
  - (D) 125 145
- 25. Ideal shape of a storage tank in water treatment plant is
  - (A) conical with apex at the bottom
  - (B) conical with apex at the top
  - (C) cylindrical
  - (D) square

- **26.** Air embolism during hemodialysis is mainly prevented by
  - (A) Venous line air trap and detector
  - (B) Arterial line air trap and detector
  - (C) Dialyzer
  - (D) Vascular access
  - 27. AV fistula infections are usually caused by
    - (A) Staphylococcus
    - (B) Pneumococcus
    - (C) Virus
    - (D) Protozoa
  - 28. The dose of LMWH is expressed in
    - (A) Antifactor Xa Institute Choay units
    - (B) Antifactor IX Institute Choay units
    - (C) Antifactor II Institute Choay units
    - (D) Antifactor XIIa Institute Choay units
- **29.** What is the difference between diet for peritoneal dialysis (PD) and hemodialysis (HD) patients?
  - (A) More Calories in PD
  - (B) More Proteins in PD
  - (C) More Calcium in PD
  - (D) More Carbohydrates in PD
  - 30. The heparin half life in dialysis patients is
    - (A) 48 hours
    - (B) 5-8 hours
    - (C) 10 12 hours
    - (D) 30 minutes 2 hours

- 31. The Sodium concentration in a hemodialysis solution is usually between (Meq/L)
  - (A) 155 165
  - (B) 165 175
  - (C) 115-125
  - (D) 135 145
- **32.** Puncture of the Internal Jugular vein is preferred by which technique?
  - (A) USG guidance
  - (B) Blind puncture
  - (C) CT guidance
  - (D) MRI guidance
- 33. In routine heparin, constant infusion method, heparin infusion is given at the rate of (per hour)
  - (A) 1200 units
  - (B) 3000 units
  - (C) 4000 units
  - (D) 5000 units
- **34.** Which of the following is the least common cause of intradialytic hypotension?
  - (A) Antihypertensive medication
  - (B) Anaemia
  - (C) Pericardial tamponade
  - (D) Excessively low target (dry) weight
- Signs of clotting in the extracorporeal circuit are all except
  - (A) Extremely light coloured blood
  - (B) Shadows or black streaks in the dialyzer
  - (C) Teetering
  - (D) Rapid filling of transducer monitors with blood

- 36. The Urine output in the Risk Stage of RIFLE criteria is
  - (A) < 0.3 ml/kg/hr for 24 hours
  - (B) Anuria for 12 hours
  - (C) < 0.5 ml/kg/hr for 6 hours
  - (D) < 0.5 ml/kg/hr for 12 hours
- **37.** All of the following are complications of Plasmapheresis except
  - (A) Hypotension
  - (B) Bleeding
  - (C) Hypercalcemia
  - (D) Anaphylaxis (FFP)
  - 38. The heparin infusion line is situated in the
    - (A) Pre pump segment
    - (B) Post pump segment
    - (C) Venous line
    - (D) Dialyzer
- **39.** The endotoxin level in ultrapure water is below (EU/ml)
  - (A) 0.03
  - (B) 0.05
  - (C) 0·07
  - (D) 0.5
- **40.** All may be the complications of Internal Jugular Catheter Insertion except
  - (A) Hemothorax
  - (B) Pneumothorax
  - (C) Retroperitoneal hemorrhage
  - (D) Arterial Puncture

PleaSe Turn OVer

- 41. Darbopoietin alfa has a half life of
  - (A) 2-4 hours
  - (B) 30 minutes to 1 hour
  - (C) 25 50 hours
  - (D) 8 hours
- 42. The standard volume of CAPD bag in adult is
  - (A) 2 lit
  - (B) 4 lit
  - (C) 500 ml
  - (D) 750 ml
- **43.** The recommended dose of Hepatitis B vaccine in CKD patients on each session is
  - (A) 40 mcg
  - (B) 20 mcg
  - (C) 10 mcg
  - (D) 50 mcg
  - 44. Bleach is
    - (A) Sodium hypochlorite
    - (B) Potassium hypochlorite
    - (C) Magnesium hypochlorite
    - (D) Formaldehyde
- **45.** Causes of intradialytic hypotension are all except
  - (A) Large weight gain
  - (B) Short weekly dialysis time
  - (C) Excessively high target dry weight
  - (D) Anaemia

- **46.** The recommended protocol to prevent air embolism after removal of dialysis catheters from the neck are all except
  - (A) no heparin on the day of planned removal.
  - (B) patient in head up position during catheter removal.
  - (C) Air occlusive dressing.
  - (D) None of the above
- 47. The Molecular weight of beta 2 microglobulin is
  - (A) 11800
  - (B) 12800
  - (C) 13800
  - (D) 14800
  - 48. URR is expressed as
    - (A) a percentage
    - (B) M mol/L
    - (C) Mg/dl
    - (D) Meq/L
- **49.** The lock commonly used with heparin in double lumen hemodialysis catheter lumen is
  - (A) Gentamycin
  - (B) Ciprofloxin
  - (C) Ceftriaxone
  - (D) Meropenem
  - 50. Deionzers remove all except
    - (A) Calcium
    - (B) Aluminium
    - (C) Fluoride
    - (D) Endotoxins

- 51. Conductivity is measured in terms of
  - (A) Milli Siemens per cm
  - (B) Milli Siemens per second
  - (C) Millilitres per cm
  - (D) Millilitres per second
- **52.** The temporary access that is usually avoided if AV fistula is planned on same side:
  - (A) Subclavian
  - (B) Internal jugular
  - (C) Femoral
  - (D) External jugular
  - 53. eKt/v is
    - (A) more than spKt/v
    - (B) less than spKt/v
    - (C) equal to spKt/v
    - (D) None of the above
- **54.** The normal range for Serum phosphorus is (mg/dl)
  - (A) 9 11
  - (B) 135 145
  - (C) 8 10
  - (D) 2.7 4.6
- **55.** A commonest complication while doing an internal jugular access is
  - (A) Recurrent laryngeal nerve palsy
  - (B) Arterial puncture
  - (C) Hemothorax
  - (D) Pneumothorax

- **56.** The duration of the disease required for declaring chronic kidney disease is
  - (A) 1 month
  - (B) 2 months
  - (C) 3 months
  - (D) 4 months
- 57. The volume of dialysis solution the patients are exposed during each dialysis treatment is
  - (A) 400 500 L
  - (B) 120 200 L
  - (C) 50 100 L
  - (D) 600 700 L
- **58.** Two bags with a Y Set System using flush before fill technique is used in
  - (A) CAPD
  - (B) Hemodialysis
  - (C) SLED
  - (D) SCUF
- **59.** Which of the following is not a component of Juxtaglomerular apparatus?
  - (A) Macula densa
  - (B) Extraglomerular mesangium
  - (C) Terminal portion of the afferent arteriole
  - (D) Collecting duct
- **60.** The most common cause of chronic kidney disease is
  - (A) Diabetes
  - (B) Hypertension
  - (C) Glomerulonephritis
  - (D) Polycystic kidney disease

PleaSe Turn Over

- **61.** The ion that is required for the coagulation process is
  - (A) Sodium
  - (B) Potassium
  - (C) Calcium
  - (D) Magnesium
- **62.** Which of the following drug can cause acute rise of creatinine?
  - (A) Amikacin
  - (B) Calcium Carbonate
  - (C) Amlodipin
  - (D) Metoprolol
- **63.** The effectiveness of Hepatitis B vaccination can be measured by
  - (A) AntiHBs titre
  - (B) HBsAg titre
  - (C) HBeAg titre
  - (D) HBcAg titre
  - 64. BCM is used to measure
    - (A) Dialyzer efficacy
    - (B) Dry weight
    - (C) Bone mineral density
    - (D) Water quality
- **65.** All of the following may cause hemolysis during dialysis except
  - (A) Kinked blood line tubing
  - (B) Chloramine
  - (C) Calcium
  - (D) Copper

- 66. Which of the following is not nephrotoxic?
  - (A) Amikacin
  - (B) Gentamycin
  - (C) Diclofenac
  - (D) Amlodipin
- **67.** The 'empty bed contact time' of the water with the carbon must be at least
  - (A) 2 hours
  - (B) 50 minutes
  - (C) 10 minutes
  - (D) 5 hours
- **68.** We usually normalize GFR to body surface area
  - (A) per 2.5m<sup>2</sup>
  - (B) per 0.5m<sup>2</sup>
  - (C) per 1m<sup>2</sup>
  - (D) per 1.73m<sup>2</sup>
  - 69. Dialysate flow rate is zero ml/min in
    - (A) SCUF
    - (B) SLED
    - (C) Hemodialysis
    - (D) Continuous hemodiafiltration
- **70.** Which of the following is true regarding nocturnal intermittent peritoneal dialysis (NIPD)?
  - (A) In day time abdomen is kept dry
  - (B) There is a long day dwell
  - (C) There is a morning day dwell
  - (D) There is an evening day dwell

- 71. Excess Aluminium in water causes all except
  - (A) Ventricular fibrillation
  - (B) Dialysis encephalopathy syndrome
  - (C) Anaemia
  - (D) Bone disease
- 72. High flux dialyzers usually have
  - (A) KoA > 20ml/h/mmHg
  - (B) KUF > 20ml/h/mmHg
  - (C) KoA < 8ml/h/mmHg
  - (D) KUF < 8ml/h/mmHg
- 73. Argatroban is a
  - (A) Heparinoid
  - (B) LMWH
  - (C) Heparin
  - (D) Thrombin inhibitor
- **74.** In Nocturnal Hemodialysis, the duration per session is
  - (A) 6-10 hours
  - (B) 24 hours
  - (C) 1.5 3 hours
  - (D) 4 hours
- **75.** The CKD 5 patients, in HDF treatment, the UF volume in post dilution mode, per treatment should be targeted to
  - (A) 100 L
  - (B) 20 24 L
  - (C) 1-2L
  - (D) 3-5L

- **76.** The dialysate temperature should in the range of
  - (A) 36.5 38.5C
  - (B) 34.5 36.5C
  - (C) 38.5 40.5C
  - (D) 40·5 42·5C
- 77. Increased delivery of NaCl to the macula densa causes:
  - (A) Vasodilation of afferent arteriole
  - (B) Vasoconstriction of afferent arteriole
  - (C) Vasoconstriction of efferent arteriole
  - (D) None of the above
- **78.** Factors favouring clotting of the extracorporeal circuit are all except
  - (A) low ultrafiltration rate
  - (B) low blood flow
  - (C) high hematocrit
  - (D) intradialytic lipid infusion
  - 79. DRIL procedure is used to treat
    - (A) Catheter related blood stream infection
    - (B) CAPD peritonitis
    - (C) Ischemia in AV fistula hand
    - (D) an AV fistula pseudoaneurysm
- **80.** High Serum Alkaline Phosphatase in combination with elevated serum PTH is an indication of
  - (A) Hyperactive parathyroid gland
  - (B) Hypoactive parathyroid gland
  - (C) Hyperthyroidism
  - (D) Hypothyroidism

PleaSe Turn Over

- 81. In Cockcroft-Gault equation, the multiplication factor used if the sex is female is
  - (A) 0.85
  - (B) 1.75
  - (C) 1·154
  - (D) 1·210
  - 82. Brescia-Cimino fistula is
    - (A) Radiocephalic
    - (B) Snuffbox
    - (C) Ulnar artery to basilic vein
    - (D) Brachial artery to cephalic vein
- 83. Absolute indications for initiation of dialysis are all except
  - (A) Intractable volume overload
  - (B) Hypokalemia
  - (C) Severe hyperkalemia refractory to conservative treatment
  - (D) Metabolic acidosis refractory to conservative treatment
- **84.** Indications of Heparin free dialysis are all except
  - (A) Eye Surgery
  - (B) Pericarditis
  - (C) Kidney biopsy done 1 day back
  - (D) Normal PT, APTT and platelet count
- **85.** The length of the dialysis session in first dialysis is
  - (A) 2 hours
  - (B) 4 hours
  - (C) 4 and half hours
  - (D) 5 hours

- **86.** Which of the following site is usually avoided for doing temporary access in a patient planned for renal transplant?
  - (A) Right femoral
  - (B) Right internal jugular
  - (C) Left internal jugular
  - (D) Left femoral
- **87.** All of the following membranes are synthetic except
  - (A) Polysulfone
  - (B) Cellulose
  - (C) PAN
  - (D) PMMA
  - 88. The usual no. cuffs in a CAPD catheter is
    - (A) 1
    - (B) 2
    - (C) 3
    - (D) 4
- **89.** The left kidney is approximately at the vertebral level of
  - (A) T12-L3
  - (B) L4 L5
  - (C) D3-D6
  - (D) S4 S5
- **90.** Which of the following can be given to prevent hypotension during dialysis?
  - (A) Beta blockers
  - (B) ACE inhibitors
  - (C) Clonidin
  - (D) Sertraline

- 91. Hydronephrosis is commonly associated with
  - (A) Dehydration
  - (B) Snake bite
  - (C) Stone
  - (D) Diabetes
- **92.** The following may be helpful to reduce itching in CKD patients except
  - (A) Antihistamines
  - (B) Pregabalin
  - (C) Tacrolimus ointment
  - (D) keeping the skin dry
- **93.** All of the following are advantages of albumin as replacement solution in Plasmapheresis except
  - (A) No risk of hepatitis
  - (B) No concern about ABO blood group
  - (C) Allergic reaction are rare
  - (D) Supplies coagulation factors
- **94.** A hemodialysis patient suddenly develops trouble breathing, hives, itching and hypotension. The most likely cause is
  - (A) an air embolism
  - (B) an anaphylactic reaction
  - (C) Angina
  - (D) Disequilibrium syndrome
- **95.** The difference in the diet of a Hemodialysis patient and a predialysis patient is
  - (A) more protein intake in hemodialysis patient.
  - (B) more potassium intake in hemodialysis patient.
  - (C) more sodium intake in hemodialysis patient.
  - (D) more calcium intake in hemodialysis patient.

- **96.** Erythropoietin therapy should not be started until the hemoglobin falls below
  - (A) 10g/dl
  - (B) 11g/dl
  - (C) 12g/dl
  - (D) 13g/dl
  - 97. The osmotic agent used in PD solutions is
    - (A) Sodium Chloride
    - (B) Sodium Bicarbonate
    - (C) Calcium Chloride
    - (D) Glucose
- **98.** Which of the following is not the predisposing factor for muscle cramp?
  - (A) Normal or high Sodium dialysis solution
  - (B) Hypotension
  - (C) Hypovolemia
  - (D) High ultrafiltration rate
- **99.** The first measure taken in case of severe hypotension during hemodialysis is
  - (A) stop ultrafiltration
  - (B) raise foot end of bed
  - (C) infuse 25% Dextrose
  - (D) infuse Mannitol
- 100. The normal range for Serum calcium is (mg/dl)
  - (A) 8.4 10.2
  - (B) 1-2
  - (C) 2 3
  - (D) 5-6

DTN/19 A-12

Space for Rough Work



### Prepp

## Latest Sarkari jobs, Govt Exam alerts, Results and Vacancies

- Latest News and Notification
- Exam Paper Analysis
- ► Topic-wise weightage
- Previous Year Papers with Answer Key
- Preparation Strategy & Subject-wise Books

To know more Click Here









