

PROVISIONAL ANSWER KEY

Question 82/2024/OL
Paper Code:
Category 581/2023
Code:
Exam: Lab Assistant Dialysis
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Department Medical Education

Question1:-All the following are functions of kidneys except

- A:-Maintenance of acid base status
- B:-Production of erythropoetin and active vit D
- C:-Production of β_2 microglobulin
- D:-Excretion of waste products

Correct Answer:- Option-C

Question2:-All the following statements are correct regarding anatomy of kidney and urinary tract except

- A:-Kidneys are bean shaped organs
- B:-Ureters drain urine to urinary bladder
- C:-Male urethra is longer than female urethra
- D:-Prostate gland is situated on the top of urinary bladder

Correct Answer:- Option-D

Question3:-Regarding water balance all the following statements are correct except

- A:-Total body water is 40% of body weight
- B:-Major electrolyte is the extravascular compartment in sodium
- C:-During dialysis we can correct the serum sodium by sodium profiling
- D:-Urea, creatine, uric acid phosphate etc are removed during dialysis

Correct Answer:- Option-A

Question4:-Identify the correct statement regarding AKI

- A:-Take 3 months for recovery
- B:-Urine output less than 100 ml over 24 hr is must to diagnose AKI
- C:-Acute rise in S. creatinine of ≥ 0.3 z observed over 48 hrs
- D:-Anaemia will not occur in AKI

Correct Answer:- Option-C

Question5:-All the following are indicators for dialysis in chronic kidney disease except

- A:-Uraemic pericarditis

B:-Chronic kidney disease stage IV

C:-Intractable hyperkalemia

D:-Uraemic encephalopathy

Correct Answer:- Option-B

Question6:-All the following statements regarding temporary venous catheters are correct except

A:-Survival rates of patients as catheters are 60% at 6 months and 40% at 1 year

B:-Blood flow is limited to 300 ml/mt

C:-Femoral catheters are longer than jugular catheters

D:-Venous catheters have high URR

Correct Answer:- Option-D

Question7:-Identify the wrong statement regarding subclavian access

A:-Not used routinely

B:-Major complications are pneumothorax and nerve injury

C:-Central venous stenosis can occur later

D:-Better than left jugular access

Correct Answer:- Option-D

Question8:-All the statements regarding anticoagulation in dialysis are correct except

A:-Citrate alone is used as an anticoagulant with concentrators of approximately 30%

B:-Cardiac arrhythmias can occur as a complication of high dose citrate

C:-4% solution is usually used

D:-Heparin based catheter lock solution are better than citrate based solution in preventing infection

Correct Answer:- Option-D

Question9:-Identify the wrong statement regarding access imaging

A:-Doppler imaging is used to detect stenosis and mapping of aneurysm

B:-Incidence of nephrogenic systemic fibrosis has increased with the use of new contrast agents for MRA

C:-Angiography and angioplasty are best method for correction of stenosis

D:-Best method for imaging access is MRA

Correct Answer:- Option-B

Question10:-All the following statements regarding AV access cannulation are correct except

A:-Ladder pattern is used for cannulation of AVF

B:-Buttonhole method is used for AVF cannulation in hemodialysis

C:-Buttonhole method is used in AV graft cannulation

D:-Pressure must be applied at access site for 10 mts after removed by needle

Correct Answer:- Option-C

Question11:-All the following statements regarding exit site infection of permanent catheter are true except

A:-Catheter should be removed if there is leukocytosis and temperature more than 38°C and sign of systemic infection

B:-If pus is expressed from the track of the catheter

C:-If blood culture are positive a course of antibiotics given and catheter retained

D:-If infection persists after a course of antibiotics catheter is removed

Correct Answer:- Option-C

Question12:-All the statements regarding catheter related blood stream infections are correct except

A:-IDSA recommends blood cultures to be taken from catheter hub, peripheral veins and catheter tip if it is removed

B:-To confirm CRBSI both blood cultures and catheter tip should be positive with same organism

C:-For taking cultures from skin or catheter hub clean the area with chlorhexidine

D:-Taking a blood sample from dialysis circuit is not a substitute for peripheral blood sample

Correct Answer:- Option-D

Question13:-Identify the incorrect statement regarding antibiotic lock solution

A:-To treat bacteremia antibiotic lock is used without systemic antibiotics

B:-It is used to salvage catheter in the absence of tunnel or exit site infection

C:-catheter removal is indicated if there is infection with staph-aureus or candida

D:-Catheter lock solution dwell time should not exceed 48 hrs

Correct Answer:- Option-A

Question14:-All the following statements regarding catheter dysfunction are correct except

A:-Failure to deliver blood flow rate of at least 300ml/mt at a pre pump pressure less negative than -250 mm of Hg

B:-Inability to aspirate blood from catheter lumen

C:-Frequent pressure alarms not responding to catheter flushing and reposition

D:-Failure to deliver blood flow of at least 200 ml/mt at a pre pump pressure less negative than -250 mm of Hg

Correct Answer:- Option-D

Question15:-All the following are risk factors for development of central venous stenosis except

- A:-Subclavian route of insertion
- B:-Use of stiff non silicone catheter
- C:-Use of peripherally inserted central catheters
- D:-Silicone catheter

Correct Answer:- Option-D

Question16:-All the following are the factors favouring clotting of the extra corporeal circuit except

- A:-low blood flow
- B:-high ultrafiltration rate
- C:-use of drip chambers
- D:-low haematocrit

Correct Answer:- Option-D

Question17:-All are the complications of Heparin therapy except

- A:-Hypernatremia
- B:-Heparin induced thrombocytopenia
- C:-Hypertriglyceridemia
- D:-Osteoporosis

Correct Answer:- Option-A

Question18:-All the following statements are correct regarding Heparin induced thrombocytopenia except

- A:-Two types of Heparin induced thrombocytopenia
- B:-HIT-2 is the serious one
- C:-Argatroban is used in the treatment of HIT
- D:-Low molecular wt heparin is used in the treatment of HIT

Correct Answer:- Option-D

Question19:-All the following statements regarding citrate as anticoagulant are current except

- A:-An alternative heparin free method for H.D
- B:-Platelet activation is less
- C:-Blood flow rates have to be kept very high
- D:-Alkalosis is one of the accepted complication

Correct Answer:- Option-C

Question20:-All the following are newer anticoagulants except

- A:-Nafamostat maleate
- B:-Thrombin inhibitors argatroban

C:-Heparinoids-Danaparoid and fondaparinux

D:-Dalteparin

Correct Answer:- Option-D

Question21:-A 50 year old woman is received in the Haemodialysis unit. She has been treated with thrice weekly Haemodialysis via Left Brachiocephalic fistula for the last 5 years. Over the past 2 months, she reports prolonged bleeding when needles are removed, often upto 40 to 50 minutes, despite continuous pressure. Examination of the AVF revealed a strong thrill with no collapse visible on raising the arm. What is the most likely cause of this prolonged bleeding?

A:-Beta 2 Microglobulin Amyloidosis

B:-Inadequate frequency of dialysis sessions

C:-Low molecular weight Heparin used during haemodialysis

D:-Venous outflow stenosis of the AVF

Correct Answer:- Option-D

Question22:-The sensitivity of the blood leak monitor in the hemodialysis circuit is between

A:-0.25 to 0.35 ml of blood per litre of dialysate

B:-0.75 ml to 1 ml of blood per litre of dialysate

C:-1.25 ml to 1.5 ml of blood per litre of dialysate

D:-1.75 ml to 1.85 ml of blood per litre of dialysate

Correct Answer:- Option-A

Question23:-Balancing chamber is for

A:-Balancing conductivity of dialysate

B:-Balancing the temperature in the blood and the dialysate circuit

C:-Balancing the pressure between the blood and the dialysate compartment

D:-For ultrafiltration

Correct Answer:- Option-D

Question24:-The temperature of the dialysate when exceeds 45 degree celcius, the important complication which can develop include

A:-Acute cerebrovascular accident

B:-Sudden cardiac arrest

C:-Acute liver failure

D:-Tetany

Correct Answer:- Option-B

Question25:-Acetate intolerance manifests as

A:-Acute severe Hypertension

B:-Hypotension

C:-Jaundice

D:-Hemolysis

Correct Answer:- Option-B

Question26:-Heparin is infused into

A:-Pre pump arterial segment

B:-Post pump pre dialyser segment

C:-Post dialyser segment

D:-Any of the above sites

Correct Answer:- Option-B

Question27:-Causes of low arterial pressure alarm include all of the following except

A:-Fall in blood pressure

B:-Kink between needle and pump

C:-Suction of vessel wall into needle

D:-Unclamping of saline infusion line

Correct Answer:- Option-D

Question28:-Identify the true statement about phosphate in dialysis

A:-Normally absent in dialysis solution

B:-Duration of dialysis has no effect on phosphate removal

C:-Dialyser with a KoA of 500 ml/mt has good phosphate clearance

D:-Phosphate inhibits vascular calcification in patients with chronic kidney disease

Correct Answer:- Option-A

Question29:-For optimum dialysis the ratio of blood flow to dialysate flow should be

A:-2:1

B:-1:2

C:-2:3

D:-3:1

Correct Answer:- Option-B

Question30:-Degassing is performed by exposing the heated water to

A:-Air trap

B:-Positive pressure

C:-Negative pressure

D:-Both 1 and 2

Correct Answer:- Option-C

Question31:-45 yrs old lady with diabetes and end stage kidney disease has been on regular Haemodialysis for the last 5 years. Her BP is often uncontrolled often, 180/100 mmHg and has always leg edema and facial puffiness. Her interdialytic weight gain is 4-5 Kg. She is currently on 4 hour sessions of hemodialysis, 3 times

per week, with a blood flow rate of 350. She is specifically asking for change of dialysers, to improve her edema and long term mortality. What should be ideal for her?

A:-Dialyser with $KuF > 20 \text{ ml/h/mmHg}$

B:-Dialyser with a KuF of $< 8 \text{ ml}$

C:- $KoA > 800 \text{ ml/mt}$

D:- $KoA < 500 \text{ ml/mt}$

Correct Answer:- Option-A

Question32:-Priming volume of most dialysers is usually within the range of

A:-60 to 120 ml

B:-100 to 150 ml

C:-160 to 270 ml

D:- $< 60 \text{ ml}$

Correct Answer:- Option-A

Question33:-Molecular Weight (MW) of creatinine

A:-113

B:-133

C:-1355

D:-11800

Correct Answer:- Option-B

Question34:-Heat sterilisation involves the used of

A:-Heated 2.5% citric acid at 95 degree C

B:-Heated water at 108 degree C

C:-Heated water at 105 degree C

D:-Heated 0.06% citric acid at 105 degree C

Correct Answer:- Option-C

Question35:-Maximum reduction in total cell volume of dialyser acceptable for reuse is

A:-20%

B:-10%

C:-80%

D:-90%

Correct Answer:- Option-A

Question36:-76 years old man with end stage kidney disease, diabetes and hypertension, has been undergoing haemodialysis for the last 3 years. His regimen is 4 hours session 3 times weekly with a blood flow of 300 ml/minute. His dialyser specifications are as follows

Specification

Result

| | |
|-------------------------------|----------------------|
| Dialyser material | Acrylonitrile (AN69) |
| Surface area | 1.2 sq.m |
| KuF | 10ml/hr/mmHg |
| Beta2 microglobulin clearance | 16 ml/mt |
| Method of sterilisation | Chemical |

He was recently seen by his cardiologist and was started on Ramipril (ACE-I) and aspirin daily. Today a few minutes after the start of the dialysis, he developed swelling of conjunctiva, lips and bronchospasmand hypotension. Dialysis was stopped and he was resuscitated successfully and admitted to ICU for further management

What is the most appropriate plan for his dialysis after discharge?

A:-Give hydrocortisone and antihistamine (Avil) at the start of the haemodialysis session

B:-Stop ACE-I all together

C:-Switch to a polycarbamate dialyser

D:-Switch to a steam sterilised dialyser

Correct Answer:- Option-C

Question37:-A 30 year old man on haemodialysis for the last 2 years through AV fistula, with previous sessions have all been without any complications. Suddenly, the machine started alarmingand the haemodialysis circuit started jerking with the movement of the blood pump. You notice that arterial pressure has become more negative than before. Based on the structure of the haemodialysis circuit, what is the most likely problem causing this alarm

A:-Bubbles is clot

B:-Kink between blood pump and dialyser

C:-Kink in arterial line between needle and the blood pump

D:-Kink in venous line between dialyser and the patient

Correct Answer:- Option-C

Question38:-45 years old man on thrice weekly maintenance Haemodialysis for the last 3 years, without any known complications. Today pt collapsed after dialysis and is being resuscitated. He was drowsy, BP 90/60 mmHg, pulse 55 beats/mt and is sweating with cold and clammy extremities. The technicians noticed a brown discolouration of blood in the venous line and his pottassium is 6.6 mEq/l

What is the most likely cause for his clinical presentation?

A:-Acute hemolysis

B:-Air embolism

C:-Cardiac arrhythmia

D:-Haemorrhage

Correct Answer:- Option-A

Question39:-A protein from the blood of horseshoe crab is used for detecting which contaminant in the water treatment system?

A:-Hard water

B:-Fluoride

C:-Sulphate

D:-Endotoxin

Correct Answer:- Option-D

Question40:-Empty Bed Contact time of carbon in carbon filter must be atleast

A:-10 mts

B:-15 mts

C:-20 mts

D:-40 mts

Correct Answer:- Option-A

Question41:-Unit of Kt/V , which is used to calculate adequacy of dialysis is

A:-Litre

B:-Litre per hour

C:-Hour

D:-Dimensionless

Correct Answer:- Option-D

Question42:-Minimally adequate dose of hemodialysis given 3 times per week to patients excluding residual kidney function [RKF] is

A:- $spKt/V$ of 1.2 per dialysis

B:- $spKt/V$ of 1 per dialysis

C:- $spKt/V$ of 0.8 per dialysis

D:- $spKT/V$ of 1.6 per dialysis

Correct Answer:- Option-A

Question43:-In hemodialysis which is false regarding dialysis adequacy?

A:-Equilibrated Kt/V (eKt/V) is always higher than $spKt/V$

B:-With a conventional 4-hour HD treatment, eKt/V is about 0.2 Kt/V units lower than $spKt/V$

C:-Urea rebound is higher in high-efficiency HD or hemodiafiltration

D:-The amount of urea rebound depends on the intensity of dialysis given

Correct Answer:- Option-A

Question44:-In blood circuit of hemodialysis apparatus, which of the following statement is/are true?

A:-Inflow (Arterial) blood line prepump segment pressure (p_1) is always positive

B:-Inflow line prepump segment contain sampling port and heparin infusion line

C:-Outflow blood line contain venous drip chamber and air detector

D:-All of the following

Correct Answer:- Option-C

Question45:-Which of the statement is/are true about conductivity?

A:-Conductivity is measured in Millisiemens (mS) per centimeter

B:-Normal conductivity range for dialysis solution is 12-16 mS/cm

C:-Low water inlet pressure cause dialysis solution conductivity out of range

D:-All of the following

Correct Answer:- Option-D

Question46:-Which of the statement is false about central venous access in hemodialysis?

A:-The optimal insertion site is the right internal jugular vein

B:-The risk of infection of uncuffed catheter increases markedly after first week of insertion

C:-Use of subclavian site is associated with less incidence of insertion related complications

D:-When femoral catheter is used tip should be in the inferior vena cava

Correct Answer:- Option-C

Question47:-All of the following are immediate complication of central venous catheterization except

A:-Pneumothorax

B:-Central venous stenosis

C:-Air embolism

D:-Retroperitoneal hemorrhage

Correct Answer:- Option-B

Question48:-Which among the following is/are the complications of catheter related blood stream infections

A:-Endocarditis

B:-Osteomyelitis

C:-Suppurative thrombophlebitis

D:-All of the following

Correct Answer:- Option-D

Question49:-Ultrapure dialysis solution contain

A:-Bacteria level <100 CFU/ml, endotoxin level <0.25

B:-Bacteria level <200 cfu/ml, endotoxin level <0.1

C:-Bacteria level <0.1 cfu/ml, endotoxin level <0.03

D:-Bacteria level <1 CFU/ml, endotoxin level <0.3

Correct Answer:- Option-C

Question50:-Causes of intradialytic hypotension include all except

- A:-Large weight gain
- B:-Short weekly dialysis time
- C:-Low dialysis solution temperature
- D:-Autonomic neuropathy

Correct Answer:- Option-C

Question51:-Treatment resistant muscle cramps during dialysis is usually due to

- A:-Hyponatremia
- B:-Hypernatremia
- C:-Hypomagnesemia
- D:-Hypercalcemia

Correct Answer:- Option-C

Question52:-Which among the following is false about headache during hemodialysis?

- A:-Headache occur in nearly 70% of patients during dialysis
- B:-It may be a subtle manifestation of dialysis disequilibrium syndrome
- C:-Magnesium deficiency may cause headache during dialysis
- D:-Acetaminophen is contraindicated for the treatment

Correct Answer:- Option-D

Question53:-Which among the following is true about dialyzer reaction?

- A:-Type B Dialyzer reaction is anaphylactic type
- B:-Type A reactions in the past were due to hypersensitivity reactions to ethylene oxide
- C:-AN 69 associated reactions are treated with ACE (angiotensin converting enzyme) inhibitors
- D:-Type B dialyzer reactions may occur when dialysis solution contaminated with bacteria and endotoxin

Correct Answer:- Option-B

Question54:-Dedicated dialysis machine is recommended for the dialysis of

- A:-Hepatitis B positive patients
- B:-Hepatitis C positive patients
- C:-HIV patients
- D:-All of the following

Correct Answer:- Option-A

Question55:-Vaccination schedule for hepatitis B in CKD patients is

- A:-0, 1, 2 Months
- B:-0, 1, 6 Months

C:-0, 1, 2, 6 Months

D:-0, 1, 8 Months

Correct Answer:- Option-C

Question56:-Reason for choosing incentre over home based HD include

A:-Patient safety concerns

B:-Vascular access or cannulation problem

C:-Patient preference

D:-All of the following

Correct Answer:- Option-D

Question57:-Daily hemodialysis (DHD) is indicated in all of the following conditions except

A:-Refractory volume overload

B:-Refractory hyperphosphatemia

C:-Pregnancy

D:-Patient with bleeding manifestations

Correct Answer:- Option-D

Question58:-Following statement is false about home hemodialysis

A:-AV fistula is the preferred access

B:-Rope ladder technique is the preferred mode of cannulation

C:-Buttonhole cannulation may result in increased rate of staphylococcus aureus bacteremia

D:-Single needle dialysis reduces the risk of bleeding due to line disconnection

Correct Answer:- Option-B

Question59:-Safety measures for prevention of morbidity when lines are disconnect in home hemodialysis include

A:-closed connector devices

B:-moisture detectors

C:-two pump single needle system

D:-all of the above

Correct Answer:- Option-D

Question60:-NxStage System 1 device is used in

A:-Home hemodialysis

B:-CAPD

C:-Hemoperfusion

D:-CRRT

Correct Answer:- Option-A

Question61:-All are true except

A:-Parietal peritoneum accounts for about 80% of the total peritoneal surface area

B:-Parietal peritoneum is more important in peritoneal dialysis

C:-Visceral peritoneum is supplied by superior Mesenteric artery

D:-Total peritoneal Blood flow range from 50-100 ml/min

Correct Answer:- Option-A

Question62:-Transport processes involved in peritoneal dialysis are all except

A:-Diffusion

B:-Absorption

C:-Conduction

D:-Ultrafiltration

Correct Answer:- Option-C

Question63:-Aquaporins in the endothelial cell membrane transport which of the following

A:-Water and solutes

B:-Water only

C:-Solute only

D:-Water, Solutes and Proteins

Correct Answer:- Option-B

Question64:-According to the three pore model, large pores are with a radius of

A:-More than 40 nm

B:-20-40 nm

C:-5-20 nm

D:-0.8-5 nm

Correct Answer:- Option-B

Question65:-Aquaporins are

A:-Large pores

B:-Small pores

C:-Ultrapores

D:-None of the above

Correct Answer:- Option-C

Question66:-A standardised Peritoneal Equilibration Test (PET) uses

A:-2.5%, 2.0 L dextrose solution

B:-2.5%, 4.0 L dextrose solution

C:-1.5%, 2.0 L dextrose solution

D:-Icodextrin

Correct Answer:- Option-A

Question67:-Standard PD solutions contain all except

A:-Dextrose

B:-Calcium

C:-Sodium

D:-Potassium

Correct Answer:- Option-D

Question68:-Causes of fluid overloaded in PD patients include

A:-loss of residual renal function

B:-Inappropriate bag selection

C:-Abdominal leak

D:-All of the above

Correct Answer:- Option-D

Question69:-All may suggest peritonitis, except

A:-Demonstration of bacteria in peritoneal effluent

B:-Cloudy peritoneal fluid

C:-Peritoneal fluid cell count of 50/mcL

D:-Abdominal pain

Correct Answer:- Option-C

Question70:-Most common agent causing peritonitis in CAPD is

A:-Fungus

B:-Gram positive bacteria

C:-Gram negative bacteria

D:-Chemical peritonitis

Correct Answer:- Option-B

Question71:-Preferred mode of initial treatment in CAPD peritonitis is

A:-Intravenous antimicrobials

B:-Oral antimicrobials

C:-Intra peritoneal antimicrobials

D:-Catheter removal

Correct Answer:- Option-C

Question72:-Most common sign of peritonitis is

A:-Increased temperature

B:-Abdominal tenderness

C:-Blood leukocytosis

D:-Cloudy peritoneal fluid

Correct Answer:- Option-D

Question73:-All are relative contraindications for Peritoneal Dialysis except

A:-Heart failure

B:-Acute pulmonary edema

C:-Large abdominal hernias

D:-Life threatening Hyperkalemia

Correct Answer:- Option-A

Question74:-Which is usually not a complication of CAPD?

A:-Weight gain

B:-Protein loss

C:-Dyslipidemia

D:-Hypoglycemia

Correct Answer:- Option-D

Question75:-Dialysis can be a good option for all except

A:-Patient with vascular access failure

B:-Children

C:-Hyperkalemia

D:-Patient with good residual renal function

Correct Answer:- Option-C

Question76:-Which of the following is not an advantage of hemodiafiltration compared to hemodialysis?

A:-better preservation of residual renal function

B:-higher inflammatory profile

C:-less incidence of carpal tunnel syndrome

D:-reduction in intradialytic hypotension

Correct Answer:- Option-B

Question77:-All of the following are advantages of predilution HDF except

A:-reduced fibre and membrane fouling than post dilution HDF

B:-high solute clearance and removal of small, middle and high molecular weight solutes than post dilution HDF

C:-decrease in proteincrit and hematocrit than post dilution HDF

D:-preserves hydraulic and solute membrane permeability than post dilution HDF

Correct Answer:- Option-B

Question78:-Which of the following is not a preferable characteristic of high-flux hemodiafilter

A:-KUF > 50 ml per hour per mmHg

B:-internal fibre diameter < 200 micrometers

C:-length of fibre bundle < 30 cm

D:-sieving coefficient for beta 2 microglobulin >0.6

Correct Answer:- Option-B

Question79:-Computerised medical records helps in ensuring the following except

A:-Assess the dry weight of the patient

B:-Accuracy of patients records

C:-Fast data retrieval

D:-Research activities

Correct Answer:- Option-A

Question80:-Hemodialysis software helps in

A:-interpretation of monthly routine lab test results

B:-assessment of hemodialysis adequacy

C:-treatment of chronic kidney disease

D:-Record and analysis of intra-access pressure

Correct Answer:- Option-C

Question81:-What is the KDIGO recommendation regarding choice of anticoagulation in CRRT in AKI?

A:-Unfractionated heparin

B:-Regional citrate anticoagulation

C:-Low molecular weight heparin

D:-Regional heparin anticoagulation

Correct Answer:- Option-B

Question82:-What is the recommendation regarding the delivered dose of CRRT in AKI?

A:-20 to 25 ml/kg/hour

B:-25 to 30 ml/kg/hour

C:-30 to 35 ml/kg/hour

D:-35 to 40 ml/kg/hour

Correct Answer:- Option-A

Question83:-All of the following are conditions where CRRT is preferred over intermittent hemodialysis except

A:-Sepsis and multiorgan failure

B:-Raised intracranial pressure

C:-Hemodynamic instability

D:-Drug overdose

Correct Answer:- Option-D

Question84:-All of the following are advantages of CRRT except

A:-better hemodynamic stability

B:-facilitates administration of parenteral nutrition and intravenous medications

C:-stable intracranial pressure

D:-rapid correction of azotemia, electrolyte and acid base disturbances.

Correct Answer:- Option-D

Question85:-To avoid overconcentration of rbc's and protein and fouling of dialyzer membranes, it is recommended to keep the filtration fraction in CRRT below

A:-25%

B:-30%

C:-33%

D:-35%

Correct Answer:- Option-A

Question86:-All of the following are complications of regional citrate anticoagulation except?

A:-Metabolic acidosis

B:-Metabolic alkalosis

C:-Hypocalcemia

D:-Hyponatremia

Correct Answer:- Option-D

Question87:-All of the following are true regarding regional citrate anticoagulation except?

A:-to inhibit coagulation, extracorporeal blood citrate concentration level to 4 to 6 mmol / l has to be achieved

B:-to avoid clotting prefilter ionised calcium level has to be kept below 0.35 mmol / l

C:-citrate toxicity is likely if the ratio of total serum calcium to ionised calcium is less than 2.5

D:-hypocalcemia is a dangerous complication associated with regional citrate anticoagulation

Correct Answer:- Option-C

Question88:-According to AAMI standards, ultrapure dialysate characteristics are?

A:-100 CFU and 0.3 IU endotoxin

B:-0.1 CFU and 0.3 IU endotoxin

C:-0.1 CFU and 0.03 IU endotoxin

D:-100 CFU and 0.03 IU endotoxin

Correct Answer:- Option-C

Question89:-All of the following are true regarding SLED except?

A:-It is a form of hybrid therapy with extended duration, reduced blood and dialysate flow rate

B:-Blood flow rate is 150 to 200 ml/min and dialysate flow rate is 100 to 300 ml/min

C:-Replacement solution is required

D:-SLED can be done using regular hemodialysis equipment

Correct Answer:- Option-C

Question90:-All of the following are true in case of prefilter dilution in HDF except?

A:-Reduces filter clotting

B:-Prolongs filter life

C:-More replacement solution is needed

D:-Increases urea clearance upto 20%

Correct Answer:- Option-D

Question91:-50 year old man presented with congestive heart failure and fluid overload. He has progressive breathlessness despite medical management. His renal function tests and electrolytes are normal. Which of the following extracorporeal therapy is ideal for his treatment?

A:-SLED

B:-SCUF

C:-CRRT

D:-Intermittent hemodialysis

Correct Answer:- Option-B

Question92:-All of the following are advantages of SLED except?

A:-Improved patient mobility and hemodynamic stability

B:-Reduced need for anticoagulation

C:-Can be done using conventional hemodialysis equipment

D:-Excellent middle molecule clearance

Correct Answer:- Option-D

Question93:-All of the following are true regarding hemodiafiltration except?

A:-Clearance is based on diffusion and convection

B:-Dialysate used has to be ultra pure

C:-There is enhanced clearance of middle molecules

D:-There is reduced loss of albumin

Correct Answer:- Option-D

Question94:-Poisons with molecular weight of 10,000 to 40,000 Da and are less than 80% protein bound are better removed by which of the following extracorporeal therapy?

A:-High flux hemodialysis

B:-Hemodiafiltration

C:-Hemoperfusion

D:-Plasmapheresis

Correct Answer:- Option-B

Question95:-Criteria for consideration of hemoperfusion in a case of poisoning include all the following except?

A:-severe intoxication with depression of brain function

B:-progressive deterioration despite intensive supportive therapy

C:-impairment of normal drug excretory function in the presence of hepatic or renal insufficiency

D:-intoxication with drugs that can be removed rapidly by endogenous elimination by liver or kidney

Correct Answer:- Option-D

Question96:-All of the following are factors that determine dialyzability of a poison except?

A:-Molecular weight

B:-Volume of distribution

C:-Protein binding

D:-Chemical stability

Correct Answer:- Option-D

Question97:-Intermittent hemodialysis is not effective in the management of which of the following drug overdose?

A:-Metformin

B:-Ethylene glycol

C:-Salicylic acid

D:-Digoxin

Correct Answer:- Option-D

Question98:-All of the following are true regarding Hemoperfusion except?

A:-Hemoperfusion cartridge contains adsorbent material as activated charcoal or a resin

B:-Heparin requirement is less than conventional hemodialysis

C:-Typical session lasts for 3 to 4 hours as saturation of adsorbent limits treatment duration

D:-Other than the cartridge hemoperfusion circuit is same as those used for intermittent hemodialysis

Correct Answer:- Option-B

Question99:-All of the following are complications of Hemoperfusion except?

A:-thrombocytopenia

B:-leucopenia

C:-removal of coagulation factors

D:-hyperglycemia

Correct Answer:- Option-D

Question100:-Hemodialysis is indicated in the treatment of which of the following poisonings?

A:-Lithium

B:-Digoxin

C:-Toluene

D:-Mushroom

Correct Answer:- Option-A