

## PROVISIONAL ANSWER KEY

Question 68/2025/OL

Paper Code:

Category 025/2024

Code:

Exam: Assistant Professor in Cardio Vascular and Thoracic Surgery

Date of Test 26-06-2025

Department Medical Education

Question1:-The muscular shelf in the right ventricle that separates the tricuspid and pulmonary valves is the

A:-Moderator band

B:-Trabecular septum

C:-Anterior papillary muscle

D:-Supraventricular crest

Correct Answer:- Option-D

Question2:-Hypothermia causes all the following except

A:-Reduced heart rate

B:-Reduced cardiac contractility if in sinus rhythm

C:-Reduced renal perfusion

D:-Marked hyperglycemia

Correct Answer:- Option-B

Question3:-All of the following are true in zero balance ultrafiltration except

A:-Can remove excess fluid in CPB circuit

B:-used to correct hyperkalemia

C:-Removes cytokines and complement generated during CPB

D:-Involves use of a balanced solution infusion into the CPB circuit

Correct Answer:- Option-A

Question4:-The following are potential advantages of miniplegia except

A:-Increases oxygen supply

B:-Relies on added buffers like tromethamine

C:-Reduces bleeding complications

D:-Minimises risk of potassium overdose

Correct Answer:- Option-B

Question5:-The following drugs are used in fast-track cardiac surgery except

A:-Cisatracurium

B:-Neostigmine

C:-Low dose opioids

D:-Pancuronium

Correct Answer:- Option-D

Question6:-The starting dose for inhaled nitric oxide is typically

A:-2000 ppm (parts per million)

B:-200 ppm

C:-20 ppm

D:-2 ppm

Correct Answer:- Option-C

Question7:-Fresh frozen plasma indicated in

A:-Excessive bleeding with coagulation factor deficiency on ROTEM/TEG

B:-Urgent warfarin reversal when no active bleeding

C:-Urgent warfarin reversal when PCC is available

D:-Volume replacement

Correct Answer:- Option-A

Question8:-Chylothorax after lung resections

A:-are more common on the left side

B:-are uncommon with an incidence below 0.02%

C:-are commoner after pneumonectomies

D:-are unusual after lymph node dissections

Correct Answer:- Option-C

Question9:-The following are true of IABP except

A:-increases cardiac output

B:-increases coronary diastolic perfusion

C:-increases systemic after load

D:-increases augmented systolic pressures

Correct Answer:- Option-C

Question10:-All are true of cardiac tamponade except

A:-Occurs in 3 to 5% of open-heart surgeries

B:-Fall in urine output

C:-Reduced pulmonary artery diastolic pressures

D:-Reduced cardiac output and blood pressures

Correct Answer:- Option-C

Question11:-Absolute contraindication for off pump CABG includes all except

A:-Cardiogenic shock

B:-Small and calcified coronary arteries

C:-Ischemic arrhythmias

D:-Previous left pneumonectomy

Correct Answer:- Option-B

Question12:-In left ventricular aneurysm, surgical ventricular restoration is indicated in all except

A:-Intractable ventricular arrhythmias

B:-Severe right ventricular dysfunction

C:-Left ventricular dysfunction with LVESVI  $> 60 \text{ ml/m}^2$

D:-Confirmed presence of akinetic or dyskinetic segments

Correct Answer:- Option-B

Question13:-The following are true regarding negative modified Allen's test

A:-Radial artery can be harvested

B:-Both radial and ulnar arteries are patent

C:-Ulnar artery is not patent

D:-Ulnar artery is patent

Correct Answer:- Option-C

Question14:-The following statements regarding left ventricular aneurysm are true except

A:-There is positive ventricular remodelling

B:-Cardiac MRI is the gold standard in diagnosis

C:-It is a complication of acute transmural MI

D:-Surgical ventricular restoration is the gold standard of treatment

Correct Answer:- Option-A

Question15:-In post infarction VSR, which statement is false?

A:-Patients with cardiogenic shock is a true surgical emergency

B:-If associated with MR, murmur is heard at the apex with thrill

C:-9% step up in  $O_2$  saturation from RA to PA

D:-Acute MR is a common association with inferior infarction

Correct Answer:- Option-B

Question16:-In patient with STEMI, regarding CABG, the following statements are true except

A:-CABG is preferable in patients with higher syntax score

B:-It is the primary reperfusion strategy in uncomplicated cases

C:-Preferable in patients with poor ventricular function

D:-Mortality is higher if surgery is done in less than 6 hours

Correct Answer:- Option-B

Question17:-The following statements regarding post myocardial infarction ventricular septal rupture are true except

A:-The interval between AMI and the onset of VSR is longer in patients treated with thrombolysis

B:-Early thrombolysis is associated with decreased operative mortality in post MI VSR

C:-Posterior VSR occurs due to occlusion of dominant RCA

D:-May be associated with MR

Correct Answer:- Option-A

Question18:-In hybrid coronary revascularisation, the following are contraindications, except

A:-Severe renal dysfunction

B:-Severe calcific ascending aorta

C:-In-stent stenosis in a non-LAD territory

D:-Severe malignant arrhythmia

Correct Answer:- Option-B

Question19:-In multi detector computed tomography (MDCT), regarding the following statements,

- i. Had 100% specificity and sensitivity in detecting total occlusion.
- ii. It does not provide the flow characteristics of the graft.
- iii. It can identify variations in coronary anatomy than coronary angiography.
- iv. Graft not visualised on coronary angiography are visualised on MDCT.

A:-Only i and ii are true

B:-iii is false

C:-All are false

D:-All are true

Correct Answer:- Option-D

Question20:-In ischemic valvular heart disease, the following are true except;

A:-It is a functional regurgitation

B:-It is a myocardial disease producing a valve dysfunction

C:-It is the result of lesions involving papillary muscles, chordae, leaflets and left ventricular free wall

D:-The murmur is softer and predominant at apex without thrill

Correct Answer:- Option-C

Question21:-Which of the following statements are correct regarding functional anatomy of mitral, aortic and tricuspid valves?

- i. Type IIIa dysfunction in mitral regurgitation (Carpentier classification) describes restricted leaflet motion in systole only.
- ii. Sino tubular junction is the narrowest part of the aortic root.
- iii. Tricuspid valve annulus is saddle shaped and non planar
- iv. The area corresponding to the anterosetal commissure of tricuspid valve is

close to right coronary cusp (RCC) of aortic valve

A:-Only i and ii

B:-Only ii and iii

C:-Only i, ii and iii

D:-All of the above

Correct Answer:- Option-B

Question22:-With reference to Systolic Anterior Motion (SAM) in mitral valve repair, all statements are true EXCEPT

A:-5-10% incidence after mitral valve repair

B:-Common in patients with myxomatous degeneration

C:-Seen in patients with excessively hypertrophied left ventricle

D:-Substitution with small, rigid or full Annuloplasty ring is effective in managing SAM

Correct Answer:- Option-D

Question23:-Identify the INCORRECT cause of LV Rupture/AV dehiscence following Mitral Valve Replacement (MVR)

A:-Undue traction on the annulus

B:-Lifting of heart after mitral valve replacement

C:-Chordal sparing mitral valve replacement

D:-Excessive decalcification in AV groove

Correct Answer:- Option-C

Question24:-Which of the following statements is/are correct about combined Aortic and Mitral valve replacement (DVR)?

i. In most patients, multivalver disease is rheumatic in origin but manifest in different pathogological conditions.

ii. Mortality of simulatneous Aortic and Mitral valve replacement ranged from 6.9 to 9.9%.

iii. LV enlargement is a powerful indicator for death late post operatively

iv. Lillehei and colleagues were the first to report simultaneous mitral and aortic valve replacement

A:-Only (i and iii)

B:-Only (i, ii and iii)

C:-Only iii

D:-All of the above

Correct Answer:- Option-B

Question25:-Regarding Annulo aortic ectasia, all statements are true EXCEPT

A:-Most often caused by Cystic Medial Degeneration

B:-Aortic cusps may be unaffected

C:-Dilation of aortic wall at Sino-tubular junction

D:-LV-aortic junction is also usually increased in size

Correct Answer:- Option-D

Question26:-Which of the following statement is INCORRECT regarding Bicuspid Aortic valve disease?

A:-Calcification is frequently present by age 40

B:-25 to 40% of affected patients will have cardiac events like AS, infective endocarditis by age 50

C:-Aortic dilatation and aneurismal progression is more when compared to tricuspid aortic valve

D:-Risk of acute ascending aortic dissection is same as tricuspid aortic valve

Correct Answer:- Option-D

Question27:-Which is the most common etiologic organism in acute Tricuspid valve endocarditis?

A:-*Pseudomonas aeruginosa*

B:-*Staphylococcus aureus*

C:-*Candida albicans*

D:-*Streptococcus viridans*

Correct Answer:- Option-A

Question28:-Statements regarding Tricuspid valve disease are true EXCEPT

A:-Hall mark of Tricuspid Stenosis is commissural fusion

B:-Hemodynamic effects of anatomically moderate TS is equivalent to moderate Mitral Stenosis

C:-In Tricuspid Regurgitation (TR) septal leaflet part of the annulus *lengthens least*

D:-Rheumatic Tricuspid Disease almost always associated with rheumatic disease of other valves

Correct Answer:- Option-B

Question29:-In Prosthetic Valve Endocarditis (PVE) which of the following statements is/are CORRECT.

i. Overall risk of infective endocarditis is 1-5% in the first year after valve replacement

ii. If PVE occurs within two months, *S. epidermidis* is the major offending organism

iii. Prognosis and mortality are same as native valve endocarditis

iv. Bioprosthetic valves seem less likely to develop endocarditis than mechanical prosthesis

A:-Only iv

B:-Only (i and iii)

C:-Only (i, ii and iii)

D:-Only (i, ii and iv)

Correct Answer:- Option-D

Question30:-The following are the risk factors for persisting Tricuspid Regurgitation (TR) after repair for TR includes all EXCEPT

A:-Persisting Pulmonary artery hypertension

B:-Depressed RV/LV function

C:-Right Atrial enlargement

D:-Tethering of Tricuspid valve leaflets

Correct Answer:- Option-C

Question31:-In a patient undergoing surgery for left atrial myxoma with severely paroxysmal atrial fibrillation, the most definitive surgical step to reduce arrhythmia recurrence is

A:-MAZE III procedure using cryoablation

B:-Isolated pulmonary vein ablation

C:-Atrial venous nodal modification

D:-Cox MAZE IV via topical radiofrequency ablation

Correct Answer:- Option-D

Question32:-The most critical structure to avoid during surgical ablation of atrial return to prevent postoperative sinus node dysfunction is

A:-The terminal crest artery

B:-Eustachian ridge

C:-SA nodal artery from RCA or LCx

D:-Crista terminalis

Correct Answer:- Option-C

Question33:-Which of the following anatomic regions is most commonly targeted in surgical ablation for typical atrial flutter?

A:-Crista terminalis

B:-Cavotricuspid isthmus

C:-Pulmonary vein ostia

D:-Left atrial appendage

Correct Answer:- Option-B

Question34:-In ischemic cardiomyopathy, ectopic arrhythmic foci most often localize to :

A:-Borderzone of infarction

B:-Subventricular septum

C:-Right ventricular apex

D:-Left atrial appendage

Correct Answer:- Option-A

Question35:-In non-penetrating trauma, the earliest ECG finding in myocardial contusion is typically

A:-ST elevation

B:-Bradycardia

C:-Nonspecific ST-T changes

D:-Complete heart block

Correct Answer:- Option-C

Question36:-Cardiac MRI showing a right atrial mass with intense early enhancement and 'sunray' appearance on T1-weighted imaging suggests

A:-Myxoma

B:-Angiosarcoma

C:-Metastatic melanoma

D:-Thrombus

Correct Answer:- Option-B

Question37:-Which tumor appears as 'sea anemone' on macroscopic examination and very frequently embolizes?

A:-Myxoma

B:-Papillary fibroelastoma

C:-Angiosarcoma

D:-Mesothelioma

Correct Answer:- Option-B

Question38:-Sudden cardiac death in a young adult with a calcified ventricular septal mass is most consistent with

A:-Myxoma

B:-Cardiac fibroma

C:-Lipoma

D:-Teratoma

Correct Answer:- Option-B

Question39:-In patient with blunt chest trauma and suspected coronary artery dissection, the most appropriate management is

A:-Emergent PCI

B:-Watchful waiting with aspirin

C:-Surgical bypass

D:-Thrombolysis

Correct Answer:- Option-A

Question40:-The cardia tumor most frequently associated with tuberous sclerosis is



- A:-Fibroelastoma
- B:-Angiosarcoma
- C:-Rhabdomyoma
- D:-Myxoma

Correct Answer:- Option-C

Question41:-All the following are features of arrhythmogenic right ventricular cardiomyopathy EXCEPT

- A:-Characterised by fibrofatty replacement of myocardium
- B:-Biventricular involvement occurs in up to 50% of cases
- C:-A classic 'epsilon wave' in the right precordial leads is a specific but insensitive finding
- D:-Caused by molecular alteration in genes encoding lamin A/C protein

Correct Answer:- Option-D

Question42:-Features of Takotsubo cardiomyopathy include all EXCEPT

- A:-Is a self-limited disorder
- B:-Significantly elevated levels of serum natriuretic peptide are seen during acute phase
- C:-Recurrence of Takotsubo cardiomyopathy is common
- D:-Involve Left ventricular apex in more than 80% of patients

Correct Answer:- Option-C

Question43:-Which of the following feature is characteristic of restrictive cardiomyopathy?

- A:-Systolic dysfunction with dilation of all four chambers
- B:-Impaired ventricular filling with preserved systolic function
- C:-Asymmetric septal hypertrophy
- D:-Right ventricular fibro-fatty replacement

Correct Answer:- Option-B

Question44:-Which cardiomyopathy is associated with Biventricular thickening with normal cavity size and atrial septal thickening in Cardiac MRI?

- A:-Cardiac amyloidosis
- B:-Hypertrophic cardiomyopathy
- C:-Peripartum cardiomyopathy
- D:-Takotsubo cardiomyopathy

Correct Answer:- Option-A

Question45:-The most common non-cardiac site of sarcoid involvement is

- A:-Lungs
- B:-Liver

C:-Gastrointestinal

D:-Nervous system

Correct Answer:- Option-A

Question46:-The key histological feature of hypertrophic cardiomyopathy is

A:-Myocardial cellular disarray

B:-Fatty infiltration of myocardium

C:-Subendocardial fibrosis

D:-Granulomatous inflammation

Correct Answer:- Option-A

Question47:-The primary MHC Class II molecules related to solid organ transplantation are all EXCEPT

A:-HLA-DR

B:-HLA-DP

C:-HLA-DM

D:-HLA-DQ

Correct Answer:- Option-C

Question48:-All of the following are hallmarks of humoral rejection in heart transplantation EXCEPT

A:-Endothelial cell activation

B:-Increased vascular permeability

C:-Microvascular thrombosis

D:-Mononuclear inflammatory cell response

Correct Answer:- Option-D

Question49:-Most common causes of death during the first year after cardiac transplant are all EXCEPT

A:-Infections

B:-Allograft coronary artery disease

C:-Rejection

D:-Early graft failure

Correct Answer:- Option-B

Question50:-All the following are common feature of advanced coronary artery disease in transplanted heart EXCEPT

A:-Angina

B:-Ventricular arrhythmias

C:-Heart failure

D:-Sudden death

Correct Answer:- Option-A

Question51:-Which of the following finding in X ray chest most reliably correlate with aortic tear in blunt trauma chest?

A:-Widened mediastinum > 10 cm

B:-Loss of aortic knob contour

C:-Elevated left main bronchus

D:-Apical capping

Correct Answer:- Option-B

Question52:-Which of the following statements about acute aortic dissection is true?

i. In patients with Type A dissection emergency surgery is the treatment

ii. It is reasonable to transfer a patient with Type A dissection and stable haemodynamics to a high volume centre from a low volume centre.

iii. It is reasonable to address visceral malperfusion before ascending aorta repair in patients with Type A dissection and mesenteric ischaemia

A:-Only i and ii

B:-Only i and iii

C:-Only ii and iii

D:-All of the above (i, ii and iii)

Correct Answer:- Option-D

Question53:-Which of the following is true?

i. In Marfan Syndrome patients aortic root replacement is indicated if aortic root diameter is > 5 cm

ii. In patients with bicuspid aortic valve, aortic root replacement is indicated if aortic root diameter is > 5.5 cm

iii. Aortic coarctation is not a risk factor for aortic dissection in Turner's Syndrome

A:-Only i and ii

B:-Only i and iii

C:-Only ii and iii

D:-All of the above (i, ii and iii)

Correct Answer:- Option-A

Question54:-Which one is the preferred material for aorto-renal bypass in children?

A:-Autologous saphenous vein

B:-PTFE Graft

C:-Dacron graft

D:-Hypogastric artery

Correct Answer:- Option-D

Question55:-Which of the following statements are true about CSF drainage in thoraco-abdominal aortic surgery?

- i. CSF drainage helps to prevent paraplegia by improving spinal cord perfusion pressure
- ii. CSF drainage can be continued for 72 hours after Thoraco-abdominal-aortic surgery
- iii. CSF drainage should not be combined with left atrio-femoral bypass

A:-Only i and ii

B:-Only i and iii

C:-Only ii and iii

D:-All of the above (i, ii and iii)

Correct Answer:- Option-A

Question56:-McConnell's sign is an echocardiography finding in

A:-Constrictive pericarditis

B:-Hypertrophic obstructive cardiomyopathy

C:-Myocardial contusion

D:-Pulmonary embolism

Correct Answer:- Option-D

Question57:-Following statements about pulmonary artery aneurysms are true except

A:-Pulmonary artery aneurysms can occur in Marfan syndrome

B:-Pulmonary artery aneurysms can result in myocardial ischaemia

C:-Resection of the aneurysm and reconstruction with vascular graft is an accepted way of treatment

D:-Dissection and rupture of pulmonary artery aneurysms is not reported

Correct Answer:- Option-D

Question58:-The commonest primary malignant tumour of the pulmonary artery is

A:-Adenocarcinoma

B:-Germcell tumour

C:-Sarcoma

D:-Malignant carcinoid

Correct Answer:- Option-C

Question59:-Which of the following congenital heart disease is most commonly diagnosed in adulthood

A:-Tetralogy of fallot

B:-Total anomalous pulmonary venous connection

C:-Atrial septal defect

D:-Pulmonary atresia with MAPCAS

Correct Answer:- Option-C

Question60:-A 25 year old man presented with new onset seizure disorder. His CVS examination revealed ejection systolic murmur in left parasternal border, single S2 with no cardiomegaly or cyanosis. CT brain showed features suggestive of brain abscess. The most probable diagnosis in relation to CVS in this patient is

- A:-Atrial septal defect
- B:-Ventricular septal defect
- C:-Tetralogy of Fallot
- D:-Transposition of great arteries with VSD

Correct Answer:- Option-C

Question61:-The following are true of Scimitar syndrome except

- A:-symptoms are not related to the degree of left to right shunt from the anomalous vein
- B:-pulmonary venous connection of the right lung to the inferior vena cava is a constant
- C:-cardiac catheterisation and angiography is diagnostic
- D:-up to 70% have associated intracardiac anomalies

Correct Answer:- Option-A

Question62:-In atrioventricular canal defects there is

- A:-Lengthening of the inlet septum to ventricular apex dimension
- B:-Shortening of the outlet septum to ventricular apex dimension
- C:-Loss of normal wedged position of the aortic valve between the AV valves
- D:-All of the above

Correct Answer:- Option-C

Question63:-Ventricular septal defect classification that is commonly used was

- A:-proposed by Edwards and Carpentier
- B:-by Corlett and Edwards
- C:-developed by Stanford
- D:-developed by Soto and modified by Van Praagh

Correct Answer:- Option-D

Question64:-All of the following are potential univentricular lesions except

- A:-Mitral atresia
- B:-Balanced AV canal defects
- C:-Double inlet ventricle
- D:-Tricuspid atresia

Correct Answer:- Option-B

Question65:-In pulmonary atresia with severe right ventricular hypoplasia

A:-Tricuspid valve Z score is greater than minus 2

B:-RVOT infundibular cavity is absent

C:-Right ventricular morphology is tripartite

D:-Right ventricle dependant coronary circulation is rare

Correct Answer:- Option-B

Question66:-The modified Blalock Taussig Thomas shunt was developed and named by

A:-Gazzaniga

B:-Marc de Leval

C:-Alfred Blalock

D:-Denton Cooley

Correct Answer:- Option-B

Question67:-Which of the following are not part of stage one palliation of hyperplastic left heart syndrome

A:-Relieving systemic outflow obstruction

B:-Improving pulmonary vein inflow into RV

C:-SVC to PA shunt

D:-RV to PA shunt

Correct Answer:- Option-C

Question68:-Which of the following is not used in neonatal correction of Ebstein malformation?

A:-Cone repair

B:-Knot Craig approach

C:-Modified Starnes approach

D:-Cardiac transplantation

Correct Answer:- Option-A

Question69:-The commonest cause of acute failure of arterial switch operation is

A:-Aortic insufficiency

B:-Pulmonary stenosis

C:-Residual VSD

D:-Coronary artery obstruction

Correct Answer:- Option-D

Question70:-All are common in ALCAPA except

A:-Mitral insufficiency

B:-Congestive heart failure

C:-Right axis deviation on ECG

D:-Cardiomegaly

Correct Answer:- Option-C

Question71:-What is the most critical factor influencing chest wall stability after resection of a primary chest wall tumor?

A:-Size of resection

B:-Location of the defect

C:-Number of ribs conected

D:-Patient age

Correct Answer:- Option-B

Question72:-In right upper sleeve lobectomy, which technique is used to match the caliber of the right main bronchus to the bronchus intermedius?

A:-Oblique resection of the right main bronchus

B:-Anastomosis with cartilage-to-cargilage rotation

C:-Posterior wall telescoping of bronchus intermedius

D:-Pericardial buttress interposition

Correct Answer:- Option-C

Question73:-Which of the following findings best indicates a trapped lung, contraindicating decortication in malignant pleural effusion?

A:-Pleural thickening on CT

B:-Positive cytology for adenocarcinoma

C:-Low pleural pH

D:-Non-expanding lung on post-thoracentesis imaging

Correct Answer:- Option-D

Question74:-In surgical decision-making for symptomatic adult diaphragmatic eventration, which of the following intraoperative findings best distinguishes true eventration from chronic paralysis?

A:-Thinned but contractile diaphragm fibers

B:-Absence of diaphragmatic excursion on fluoroscopy

C:-Lack of phrenic nerve conduction of EMG

D:-Fibrotic, non contractile diaphragmatic dome

Correct Answer:- Option-A

Question75:-A 55-year-old male undergoes resection of a high-grade chondrosarcoma involving the anterior second to fifth ribs with full-thickness involvement. You plan rigid reconstruction. Which reconstructive choice would provide the best combination of structural support and infection control in this oncologic setting?

A:-Autologous rib grafts with muscle flap

B:-Polypropylene mesh only

C:-Methyl methacrylate between dual mesh layers

D:-Titanium plating with soft tissue flap

Correct Answer:- Option-D

Question76:-A 32-year-old patient with a posterior mediastinal mass presents with Horner's syndrome. The most likely tumor is

- A:-Schwannoma
- B:-Ganglioneuroma
- C:-Paraganglioma
- D:-Neuroblastoma

Correct Answer:- Option-B

Question77:-A patient with post-intubation tracheal stenosis at 3 cm below vocal cords undergoes segmental resection. Intraoperatively, the tension across anastomosis is high despite neck flexion. What additional maneuver is justified?

- A:-Inferior tracheal release
- B:-Hilar release via right thoracotomy
- C:-Suprahyoid laryngeal release
- D:-Cricoid resection with thyotracheal anastomosis

Correct Answer:- Option-C

Question78:-A patient develops chylothorax after left pneumonectomy. Initial conservative measure fail. Thoracic duct ligation is planned. Where is the most reliable site for ligation?

- A:-Above diaphragm on right side
- B:-Above diaphragm on left side
- C:-Behind esophagus at T4
- D:-At the aortic hiatus during laparotomy

Correct Answer:- Option-A

Question79:-In delayed presentation (> 24 hours) of spontaneous esophageal perforation with contained leak and minimal sepsis, which is the preferred management strategy?

- A:-Primary surgical repair with wide drainage
- B:-Esophagectomy with cervical diversion
- C:-Nonoperative management with NPO, antibiotics and drainage
- D:-Endoscopic clipping or stenting with nasogastric decompression

Correct Answer:- Option-D

Question80:-A 58-year-old chronic smoker presents with shoulder pain, Horner's syndrome and weakness of intrinsic hand muscles. Imaging reveals a superior sulcus tumor with vertebral body erosion but no distant metastases. Next best step?

- A:-Surgery along via posterolateral thoracotomy
- B:-Chemoradiotherapy followed by surgery
- C:-Palliative radiation



D:-Neoadjuvant chemotherapy only

Correct Answer:- Option-B

Question81:-All of the following statements are correct regarding pectus excavatum except

A:-Most common anterior chest wall deformity

B:-CT scan with Haller index of more than 3.25 is an indication of operation

C:-The manubrium, first and second costal cartilages are typically involved

D:-The Nuss procedure is a minimally invasive corrective surgery done after 12 years

Correct Answer:- Option-C

Question82:-Which of the following statements about chest wall tumour are correct?

- i. Homer Wright Rosettes are diagnostic of Malignant Fibrous Histiocytoma
- ii. Chondrosarcomas are the most common primary malignant tumours
- iii. Askin tumour most commonly seen in children and young adults
- iv. Surgical resection with chest wall reconstruction is the standard of care

A:-i, ii, iii

B:-ii, iii, iv

C:-i, iii, iv

D:-ii and iv only

Correct Answer:- Option-B

Question83:-All of the following statements regarding post pneumonectomy Bronchopleural fistule are correct except

A:-Left side is commoner than right

B:-Buttressing of bronchial stump with vascular tissue prevents the complication

C:-Transternal approach is effective and more preferred for recalcitrant fistulae of right side

D:-Keeping the patient with the fistule side dependent is crucial in nursing care

Correct Answer:- Option-A

Question84:-Regarding neoplasms of trachea, which of the following statement is correct

A:-Benign tumours are more common than malignant

B:-Fibroma is the most common benign tumour

C:-Submucosal spread is seen in Adenoid cystic carcinoma

D:-Hemoptysis is the most common presentation

Correct Answer:- Option-C

Question85:-Which of the following statements regarding oesophageal perforation are correct?

- i. Thoracic perforations are commoner than cervical

- ii. Boerhaave's syndrome involves left lower oesophages near oesophagogastric junction
- iii. Mid oesophageal perforations are best approached from left thoracotomy
- iv. The most common cause of oesophageal perforation is iatrogenic

A:-i, ii, iii

B:-ii, iii, iv

C:-i, ii, iv

D:-i, iii, iv

Correct Answer:- Option-C

Question86:-In TNM staging of Lung Cancer (9th edition); which of the following comes under metastasis?

A:-Contralateral mediastinal lymph node

B:-Pleural nodule

C:-Phrenic nerve involvement

D:-Supreclavicular lymph node involvement

Correct Answer:- Option-B

Question87:-The most common lobe of lung affected by congenital lobar emphysema is

A:-Left upper lobe

B:-Right upper lobe

C:-Right middle lobe

D:-Left lower lobe

Correct Answer:- Option-A

Question88:-With regards to diaphragmatic openings for visceral structures and their vertebral levels, match the following.

- |                             |             |
|-----------------------------|-------------|
| i. Aorta                    | x. $T_{10}$ |
| ii. IVC (Inferior Venacava) | y. $T_8$    |
| iii. Oesophagus             | z. $T_{12}$ |

A:-i-z, ii-x, iii-y

B:-i-x, ii-y, iii-z

C:-i-y, ii-x, iii-z

D:-i-z, ii-y, iii-x

Correct Answer:- Option-D

Question89:-All of the following statements regarding pulmonary sequestration are true except

A:-No bronchial communication with normal tracheobronchial tree in extralobar type

B:-Arterial blood supply is from a systemic vessel

C:-Male to female ratio of occurrence is 3 :1

D:-Extralobar type is commoner than intralobar type

Correct Answer:- Option-D

Question90:-A 50 year old man (smoker) is diagnosed as having a Solitary Pulmonary Nodule (SPN) without extrathoracic dissemination. The appropriate management would be

A:-Perform image guided needle aspiration (TTNA) and cytology

B:-Proceed with pulmonary resection after evaluating fitness

C:-Obtain serial chest X ray/CT scan every 3 months to assess growth potential and keep on follow up

D:-Get baseline serum levels of CEA and  $P_{53}$

Correct Answer:- Option-B

Question91:-Atrophy (wasting) of the hand muscles, along with electrophysiological abnormalities on nerve conduction studies, attributed to chronic compression of the brachial plexus nerve roots by a cervical rib or anomalous fibrous band at the level of the thoracic outlet is known by

A:-Gilliat-Sumner Hand

B:-Paget-Schroetter Syndrome

C:-Hypothennar Hammer Syndrome

D:-Both 1 and 2

Correct Answer:- Option-A

Question92:-All about Tunica intima is true except

A:-An elastic layer composed of elastic fibers and an endothelial tissue made up of a single layer of endothelial cells

B:-Endothelial cells are optimally arranged along the direction of blood flow to reduce blood flow resistance and maintain the stability of the vascular internal environment

C:-Endothelial cells maintain blood fluidity and prevent blood coagulation by releasing anticoagulant factors such as nitric oxide, prostacyclin and tissue plasminogen activator and by expressing thrombomodulin to inhibit platelet aggregation and fibrin formation

D:-Houses various cell types, including fibroblasts, progenitor cells and immune cells such as macrophages, T cells, B cells, and dendritic cells

Correct Answer:- Option-D

Question93:-Facts about the use of Color coded Doppler Ultrasound (CUS) for detection of recurrent deep vein Thrombosis are true except

A:-CUS for the detection of suspected contralateral recurrent DVT has comparable sensitivity (89-100%) and specificity (87-100%)

B:-Features of acute and chronic Deep Vein Thrombosis are easily distinguished by routine ultrasound doppler scanning

C:-Ipsilateral recurrent DVT may be diagnosed with some certainty in case of a new non compressible venous segment

D:-CUS provides visualization of flow, color coded for velocity and direction. Absent or partially absent color coded flow is diagnostic for thrombosis

Correct Answer:- Option-B

Question94:-Popliteal artery entrapment syndrome-False statement is

A:-Uncommon cause of intermittent claudication

B:-Occurs when an anatomic variation in the insertion of the medial head of the gastrocnemius

C:-Compression of Popliteal muscle causes this syndrome

D:-Typically suspected when an elderly sedentary adult female complains of leg pain

Correct Answer:- Option-D

Question95:-Regarding management of Peripheral Arterial Disease (PAD) following are true (2024 guidelines Guideline for the Management of Lower Extremity Peripheral Artery Disease) Except

A:-Lipid-lowering therapy with statin medications has been shown to improve outcomes and should be prescribed for all patients with PAD

B:-In Hypertensive patients anti hypertensives are administered to maintain systolic BP less than 130 and diastolic BP less than 80

C:-The combination of full-intensity oral anticoagulation and dual antiplatelet therapy, known as "triple therapy", is not associated with an increased risk of bleeding complications

D:-In patients with symptomatic PAD, single antiplatelet therapy is recommended to reduce the risk of MACE

Correct Answer:- Option-C

Question96:-Regarding Acenocoumarol (Acitrom) action and metabolism all are true except

A:-Inhibits vitamin K reductase, resulting in depletion of the reduced form of vitamin K and subsequent activation of vit K dependent coagulant factors

B:-Protein bound (98.7%) mainly to Globulin

C:-Extensively metabolized in the liver via oxidation

D:-Route of elimination is mostly via kidney as metabolites

Correct Answer:- Option-B

Question97:-Regarding development of Aortic arch following statements are correct

i. First aortic arch regresses except for a very small part that gives rise to the maxillary artery

ii. Right Fourth aortic arch is the genesis of the proximal part of the right subclavian artery

iii. Second aortic arch regresses completely and very early in the development

A:-i and ii

B:-i and iii

C:-ii and iii

D:-i, ii and iii

Correct Answer:- Option-A

Question98:-The following are true about the management of Renal Artery Stenosis (RAS) except

A:-Hemodynamically significant stenosis 50% diameter or larger stenosis with a systolic trans-lesion gradient more than 20 mm Hg

B:-70% diameter or larger stenosis by quantitative angiographic methods

C:-70% diameter or larger stenosis by intravascular ultrasound measurement

D:-50% diameter or larger stenosis with a mean trans-lesion gradient more than 20 mm Hg

Correct Answer:- Option-D

Question99:-In chronic Thoracic and thoracoabdominal aneurysm following are true except

A:-In thoracoabdominal aneurysm, who did not undergo operative treatment, rupture of the aneurysm is the most common cause of death

B:-Angiotensin receptor blockers and ACE inhibitors may slow the growth rate of aneurysm in Marfan's syndrome

C:-Medical treatment is of limited value in managing Thoracic aneurysms

D:-Statin therapy has been associated with decreased long-term mortality in patients with thoracic aortic aneurysms compared to abdominal aortic aneurysm

Correct Answer:- Option-D

Question100:-Correct statement about *endoleaks* are

i. Type I endoleak occurs when there is a gap between the graft and the vessel wall at seal

zones. Typically requires urgent attention due to high risk of sac enlargement and rupture

ii. Type II endoleak results when there is persistent blood flow in the aneurysm sac from

small side branches coming off the aorta. This is the most common type of endoleak

iii. A Type III endoleak results from a defect or misalignment between the components of endografts

iv. A Type IV endoleak occurs soon after some EVAR procedures due to the porosity of certain graft materials

v. A Type V endoleak, is thought to occur when increased graft permeability allows pressure to be transmitted through the aneurysm sac, affecting the native aortic wall

A:-i, ii, iii and iv only

B:-i, ii and iii only

C:-i, ii, iii, iv and v

D:-iii, iv and v only

Correct Answer:- Option-C