

# Government Medical College and Hospital Sector 32, Chandigarh

Post: Senior Resident CTVS

## QUESTION BOOKLET

Time: 120 Minutes

Number of Question: 100

Maximum Marks: 100

Name of Candidate

Roll Number: In figure

In Words

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Signature of the Candidate: \_\_\_\_\_

**DO NOT OPEN THE SEAL ON THE BOOKLET UNTIL ASKED TO DO SO**

### **INSTRUCTIONS:-**

1. Write your Roll Number on the Question Booklet and also on the OMR Sheet in the space provided. You will be required to give your thumb impression on the OMR sheet in the space provided.
2. This question booklet contains 100 MCQ's. Once you are permitted to open the Question Booklet, please check for any missing question / misprint etc. and in case of any discrepancy, inform the Assistant Superintendent / Invigilator within 10 minutes of the start of the test.
3. Each question has four alternative answer (A, B, C, D) out of which only one is correct. For each question, **darken only one bubble (A or B or C or D)**, whichever you think is the correct answer, on the OMR Answer sheet **with Black or Blue Ball Pen only**. Do not use any other Pen / Gel pen / Pencil etc. **Do not Tick  $\checkmark$  or  $\times$  on the OMR Sheet**. Darken the bubbles in the OMR Answer Sheet according to the Serial No. of the Questions given in the Question Booklet.
4. Each MCQ is of One (01) mark. There is no negative marking.
5. If you do not want to answer a question, leave all the bubbles corresponding to that question blank in the OMR Answer sheet.
6. The OMR Answer sheet is designed for computer evaluation. Therefore, if you do not follow the instructions given, it may make evaluation by the computer difficult. Any resultant loss to the candidates on the above account, i.e. not following instructions completely and properly, shall be the responsibility of the candidates only.
7. After the test, handover the Question Booklet and OMR sheet to the Invigilator on duty.
8. A Candidate who creates disturbance of any kind or changes his/her seat or is found in possession of any paper or the any assistance or found giving or receiving assistance or found using any other unfair means during the examination will be expelled from the examination by the Centre superintendent/Observer whose decision shall be final.
9. Telecommunication equipment such as pager, cellular phone, wireless, scanner, smart watch/ watch etc. is not permitted inside the examination hall. Use of calculators is not allowed.
10. Candidate should ensure accuracy of their personal details on the OMR Sheet i.e. Name and Roll No. as well as thumb impression. The personal details are to be filled in by the candidates with his/her own hand writing.



1. Which is the best method to evaluate pericardial effusion?
  - A. CECT
  - B. Pericardial window
  - C. Echocardiography
  - D. Physical examination
2. Most common complication of acute myocardial infarction:
  - A. Ventricular aneurysm
  - B. Cardiogenic shock
  - C. Arrhythmias
  - D. Pericarditis
3. A 20-month old asymptomatic child is found to have a systolic murmur, upper extremity hypertension, diminished femoral pulses. Which of the following is most likely true about this child's disorder?
  - A. ASD
  - B. Atherosclerotic disease
  - C. Claudication on walking
  - D. Rib notching on CXR
4. An 18 y/o female suddenly dies, and autopsy reveals a small jelly-like mass in the left atrium. Prior symptoms included a low grade fever, weight loss, mild shortness of breath. The mass appears fibrous with papillary projections and an organised thrombus. It appears to be growing all over the mitral valve. There is no evidence of a malignancy. She may have which of the following conditions?
  - A. Endocarditis
  - B. Cardiac myxoma
  - C. Rheumatic fever
  - D. Ruptured chordae
5. ECG finding not usually seen with hyperkalemia:
  - A. Loss of P wave
  - B. Widening of the QRS complex
  - C. Peaked T waves
  - D. Shortened PR interval
6. A 65 y/o patient presents with low grade fever, chest discomfort, mild shortness of breath. Quick examination reveals that she has pulsations of the capillary bed in the nails. What is your probable diagnosis?
  - A. Aortic regurgitation
  - B. Right to left shunt
  - C. ASD
  - D. Arsenic poisoning
7. Which of the following is an absolute indication for a Greenfield filter?
  - A. Complications of anticoagulation
  - B. Presence of a free-floating ilio-femoral thrombus
  - C. Prophylaxis for DVT
  - D. Contraindication of anticoagulation therapy
8. False regarding Scimitar syndrome:
  - A. Anomalous systemic arterial supply
  - B. Hypoplasia of right lung
  - C. Venous drainage is to superior vena cava
  - D. There may be associated congenital heart defects
9. Digoxin is used in atrial fibrillation as it decreases the heart rate. What is the mechanism of action?
  - A. Stimulates the SA node
  - B. Blocks sodium uptake
  - C. Enhances vagal tone on the AV node
  - D. Acts centrally and decreases sympathetic drive
10. A 14 y/o boy is seen in the clinic for mild dyspnoea. Echo reveals a single atrioventricular valve and yet he has survived without any previous hospital admission. What other anatomical finding may have helped improve his prognosis?
  - A. Pulmonary stenosis
  - B. Coarctation of Aorta
  - C. Presence of ASD
  - D. RVH
11. A 68 Y/O female is found to have a 6cm abdominal aortic aneurysm. Select the correct statement.
  - A. Survival rate of ruptured AAA is 40%
  - B. Over the next 5 years, the patient has a 40% risk of rupture
  - C. Surgical repair presents normal cardiac risk
  - D. The AAA should be monitored yearly with ultrasound.
12. Best medical treatment to close patent ductus arteriosus is:
  - A. Aspirin
  - B. Indomethacin
  - C. Prostaglandin
  - D. Alcohol



13. A young female presents to you with a mass in the posterior mediastinum. She has been complaining of back pain for 3 months. A CT scan reveals a mass very close to the vertebral column and an MRI is ordered. Which of the following is false?
- Neurogenic tumors are more common in females
  - Even if asymptomatic, they should be removed
  - Infiltration of the vertebral column suggests malignancy
  - Surgery involves a combined neurosurgical and thoracic procedure
14. A Patient with a previous TIA has a significant carotid lesion. Cardiac catheterisation reveals critical triple coronary vessel disease. How do you proceed?
- Carotid surgery first followed by triple vessel bypass in same setting
  - Stage surgery with carotid first followed by CABG later
  - Stage surgery with CABG first followed by carotid later
  - Stent coronary lesions and do carotid only
15. Which of the following is false about prosthetic valves?
- The incidence of prosthetic valve endocarditis (PVE) is greater in the aortic position than in the mitral position.
  - Native valve endocarditis is more common in the mitral position than in the aortic position
  - Ring abscess in PVE render antibiotic sterilization difficult
  - Fungal PVE can be treated with aggressive antibiotics
16. Classic ECG finding in pulmonary embolism:
- large Q wave in lead II
  - S wave in lead I, Q wave in lead III, T wave inversion in lead III
  - Inverted T wave in lead II
  - Right axis deviation
17. The Intra-aortic balloon pump (IABP) can be utilised for all except:
- ECMO
  - Supraventricular arrhythmias
  - Bridge to transplant
  - Septic shock
18. Most common location of atherosclerotic aneurysms:
- Coronary arteries
  - Ascending aorta
  - Thoracic aorta
  - Abdominal aorta
19. In what position should a patient be placed after a left lung collapse secondary to aspiration?
- Left lateral decubitus
  - Right lateral decubitus
  - Trendelenburg
  - Reverse Trendelenburg
20. The third aortic arch gives rise to which of the following structures?
- Descending aorta
  - Internal carotid artery
  - Pulmonary artery
  - None of the above
21. True regarding ASD is:
- Account for 25% of congenital heart disease
  - All of them require surgery soon after birth
  - May present with a fixed split of the second heart sound
  - A continuous murmur is a common feature in presence of large defects
22. False about heart-lung transplantation:
- The lung is usually protected from rejection compared to the heart
  - Eisenmenger's syndrome from a VSD can be treated by repairing the heart defect and a single lung transplant
  - Rejection may be difficult to exclude from infection
  - A close size match between donor and recipients is required



23. On opening the chest for an elective coronary artery bypass grafting (CABG), a hard thickened aorta is palpated. The next step is all of the following except:
- Cannulate the groins
  - Accomplish ventricular fibrillation and hypothermia
  - Give only retrograde cardioplegia
  - Perform endarterectomy of aorta
24. To prevent development of post-phlebitis syndrome after a DVT, how long should compression stockings be worn?
- 1 week
  - 1 month
  - 3-6 months
  - 24 months
25. Which of the following signs is not seen in pleural effusion?
- Asymmetrical chest expansion
  - Decreased air entry
  - Increased tactile fremitus
  - Dull percussion
26. Which of the following statements about thrombo-obliterative disease of the aorta and its branches are correct?
- The most common cause of obstructive disease is thrombi.
  - Atherosclerosis is the most common pathologic cause of arterial obstruction.
  - Lesions occur with lesser frequency at the origin of vessels from the aorta.
  - Obstructive lesions are preferentially managed by endarterectomy.
27. Carotid artery occlusive disease most often produces transient ischemic attacks or stroke by which of the following mechanisms?
- Reduction of flow to the affected area of the brain through stenotic or occluded vessels.
  - Embolization of atheromatous debris and/or clot with occlusion of intracranial branches of the carotid artery.
  - Thrombosis and propagation of the clot into the intracranial branches.
  - All of the above are equally common.
28. True for the patients with "subclavian steal" syndrome is
- Reversed flow in the ipsilateral vertebral artery.
  - Upper extremity claudication.
  - Decreased systolic blood pressure in the ipsilateral arm
  - All of above
29. In a patient who has chronic, complete occlusion of a common iliac artery, which of the following are not true?
- The primary symptom is claudication of the calf muscles.
  - Symptoms are usually claudication of the thigh and calf.
  - Collateral iliac arterial vessels are prevalent.
  - Balloon angioplasty is appropriate in some patients.
30. Which of the following does not describe intermittent claudication?
- Is elicited by reproducible amount of exercise.
  - Abates promptly with rest.
  - Is often worse at night.
  - May be an indication for bypass surgery.
31. Which of the following statements about acute arterial occlusion today is/are not true?
- Most arterial emboli originate in the heart as a result of underlying cardiac disease.
  - It can be treated under local anaesthesia.
  - It is usually due to atherosclerotic disease.
  - Surgical treatment can usually be avoided if the lesion is diagnosed early.
32. A 21-year-old woman presents with digital color changes in response to cold stimulation. Physical examination and laboratory data, including an autoimmune disease screen, are normal. She should be advised that:
- Her condition is characteristic of vasospastic Raynaud's syndrome
  - Her fingers will get progressively worse and she will eventually lose fingers
  - She has scleroderma, which will manifest itself at a later date.
  - Her problem is "all in her head."



33. An 82-year-old man with a long history of coronary and peripheral vascular disease presents with an acutely ischemic right lower extremity. The following is/are true:
- The first step in management should be an arteriogram
  - If intractable congestive heart failure is present, non-operative treatment with heparin would be appropriate
  - If prolonged ischemia has occurred, reperfusion should be accompanied by sodium bicarbonate
  - Regardless of the period of ischemia, fasciotomy should be based on the findings postoperative
34. A 51-year-old man with a history of transmural MI one month ago presents with sudden occlusion of his abdominal aorta. The following is FALSE:
- Most likely location of the MI is anterolateral
  - The vast majority of emboli occur within 6 weeks of the occurrence of the MI
  - Occurrence of arterial embolism does not affect the overall mortality
  - Heparin can reduce the incidence of embolism after MI
35. Which of the following is/are appropriate candidates for exercise testing?
- The patient with symptoms of intermittent claudication but normal resting ankle brachial indices
  - The patient with rest pain, non-healing ulcers or gangrene
  - If the resting ankle pressure is below 30–40 mmHg
  - The patient with blue toe syndrome and readily palpable pedal pulses
36. In patients who develop a documented episode of deep venous thrombosis (DVT) the most significant long-term sequela is:
- Claudication.
  - Recurrent foot infections.
  - Development of stasis ulcer.
  - Pulmonary embolization.
37. In a 55-year-old grocery store cashier with an 8-month history of leg edema increasing over the course of a work day, associated with moderate to severe lower leg bursting pain, the most appropriate investigative study or studies are:
- Doppler duplex ultrasound.
  - Brodie-Trendelenburg test.
  - Measurement of ambulatory and resting foot venous pressure.
  - Venous reflux plethysmography.
38. Thrombolytic therapy in pulmonary embolism:
- Should precede anticoagulation.
  - Can be considered for all patients.
  - Can be considered for hemodynamically unstable patients.
  - Is indicated for the majority of patients with documented pulmonary embolism.
39. The single most important indication for emergency pulmonary embolectomy is:
- The likelihood of another episode of embolism.
  - The inability to determine whether the problem is acute pulmonary embolism or acute myocardial infarction.
  - The presence of persistent and intractable hypotension.
  - Pulmonary emphysema.
40. Which of the following does not adversely influence the patency of lower extremity autogenous vein grafts?
- Poor arterial outflow from the distal anastomosis of the graft.
  - Diabetes.
  - Small-calibre (less than 4 mm. in diameter) veins.
  - Use of reverse, rather than in situ, grafting technique
41. The most common risk associated with carotid artery aneurysm is:
- Thrombosis of the aneurysm.
  - Embolization of mural thrombus.
  - Rupture of the aneurysm.
  - Compression of the hypopharynx.



42. Carotid artery aneurysms are treated most successfully by which of the following?
- Proximal ligation.
  - Observation.
  - Resection and graft replacement.
  - None of the above
43. Of the visceral aneurysms, which is the most common?
- Celiac.
  - Superior mesenteric.
  - Hepatic.
  - Splenic.
44. In a patient with an abdominal aortic aneurysm and a history of several previous abdominal procedures for release of dense peritoneal adhesions causing episodes of intestinal obstruction, consideration should be given to which one of the following at operation?
- Cardiopulmonary bypass.
  - An incision from the xiphoid process to the symphysis pubis.
  - Incision in the left flank with a retroperitoneal approach.
  - An axillo-bifemoral graft.
45. Which of the following statements about false aneurysms of the femoral artery is not correct?
- The incidence of iatrogenic false aneurysms has increased in recent years.
  - Arteriography is the most useful study for diagnosis of iatrogenic femoral aneurysms.
  - Ultrasound-guided compression of iatrogenic false aneurysms is usually successful in achieving thrombosis.
  - All three layers of the blood vessel wall are not involved
46. Transection of the thoracic aorta following trauma usually:
- Is located just distal to the left subclavian artery.
  - Produces a true aneurysm.
  - Is non-lethal in majority of cases.
  - Follows penetrating injury to chest
47. Which of the following suggests the diagnosis of transection of the descending thoracic aorta?
- Widened mediastinum.
  - Left pleural effusion.
  - Positive aortogram.
  - All of the above.
48. The optimal management of Type A or ascending aortic dissection does not include:
- Aortography.
  - Hemodynamic monitoring and frequent recording of blood pressure, urinary output, and neurologic status.
  - Elective Surgery on next operating day
  - Emergency operation.
49. Aneurysms of the ascending aorta may be caused by:
- Type II aortic dissection.
  - Atherosclerosis.
  - Cystic medial necrosis
  - All of Above
50. When complications occur after operating on a descending thoracic aorta, perhaps the most devastating is:
- Recurrent nerve injury.
  - Bleeding with hemo-thorax.
  - Paraplegia.
  - Renal insufficiency.
51. The bronchial circulation:
- Is the blood supply to the conducting airways.
  - Drains into a peribronchial venous network that may expand considerably with conditions such as bronchiectasis and chronic obstructive pulmonary disease.
  - Is an especially important consideration in pulmonary transplantation.
  - All of the above.
52. Which of the following screening tests are important for preoperative evaluation of pulmonary function?
- History and physical examination.
  - Room air arterial blood gases.
  - Vital capacity and forced expiratory volume in 1 second (FEV 1).
  - All of the above



53. Carbon monoxide diffusion capacity (DLCO) has been shown to correlate with:
- The thickness of the alveolar lining membrane.
  - The permeability of the erythrocyte to carbon dioxide.
  - Total alveolar-capillary capacity.
  - All of the above
54. The effect of high positive end-expiratory pressures (PEEP) on cardiac output is:
- None.
  - Increased cardiac output.
  - Decreased cardiac output because of increased afterload to the left ventricle.
  - Decreased cardiac output because of decreased effective preload to the left ventricle.
55. Weaning patients from maximum ventilator support usually involves:
- Weaning PEEP first, tidal volume second, and the fraction of inspired oxygen (FIO<sub>2</sub>) third.
  - Weaning FIO<sub>2</sub> first, ventilator rate second, and PEEP third.
  - Weaning FIO<sub>2</sub> first, PEEP second, and tidal volume third.
  - Weaning FIO<sub>2</sub> first, PEEP second, and ventilator rate third.
56. Which of the following approaches is currently not acceptable for the management of spontaneous pneumothorax?
- Chest tube replacement alone for the patient with a first episode.
  - Operation on presentation for any patient with a first episode.
  - Video-assisted thoracic surgery (VATS) bleb excision and pleurodesis for recurrent pneumothorax on the same side.
  - Operation after a first episode in an airline pilot.
57. The following statement is not true
- Pyogenic lung abscess occurs most frequently in the lower lobe of the left lung.
  - Anaerobic bacteria are commonly present in pyogenic lung abscess.
  - Operation is rarely required for treating a pyogenic lung abscess.
  - Penicillin is the treatment of choice for lung abscess.
58. Which of the following statements are true?
- Chylothorax is usually is not a serious condition.
  - Chyle is easily identified by its milky appearance
  - The commonest causes of chylothorax are trauma and tumor.
  - The thoracic duct ligation has no role in treatment.
59. Which of these statements about pleural tumors is/are true?
- The commonest type of pleural tumor is primary pleural mesothelioma.
  - Exposure to asbestos dust is causally related to the development of malignant mesothelioma.
  - Localized benign mesotheliomas are asymptomatic.
  - Complete pleurectomy for malignant mesothelioma usually results in cure.
60. Which of the following correctly describe a patient with spontaneous pneumothorax?
- The patient is almost always elderly and debilitated.
  - An unsuspected primary or metastatic lung tumor may be present.
  - The administration of supplemental oxygen is of little benefit to the patient.
  - All patients should always be treated with an intercostal tube and closed pleural drainage
61. The most useful incision in the operating room for patients with penetrating cardiac injury is:
- Left anterior thoracotomy.
  - Right anterior thoracotomy.
  - Bilateral anterior thoracotomy.
  - Median sternotomy.
62. In patients who present with a penetrating chest injury, injury to the heart is most likely when the following physical sign(s) is/are present:
- Hypotension.
  - Distended neck veins.
  - Decreased heart sound.
  - All of the above.



63. In an infant with suspected PDA, the optimal method of confirming the diagnosis is
- Chest film.
  - Cardiac catheterization.
  - Retrograde aortography via an umbilical artery catheter.
  - Two-dimensional echocardiography.
64. Tetralogy of Fallot consists of all of the following features except:
- ASD.
  - VSD.
  - Pulmonary stenosis.
  - Right ventricular hypertrophy.
65. Coronary bypass procedures have been demonstrated to:
- Reduce the incidence of myocardial infarction.
  - Significantly relieves angina symptoms.
  - Statistically improve the life span.
  - All of above.
66. Which of the following arteries is most likely to be involved with serious atherosclerosis?
- The right coronary artery.
  - The left coronary artery.
  - The Left anterior descending coronary artery.
  - The circumflex coronary artery.
67. Which of the following is/are indications for aortic valve replacement for aortic stenosis?
- Syncope.
  - Congestive heart failure.
  - Angina.
  - All of above
68. Which of the following statements is false?
- Cardiopulmonary bypass has brought about remarkable progress in cardiac surgery
  - The cardiopulmonary bypass circuit consists of a venous reservoir, oxygenator, heat exchanger, filter and roller pump.
  - Cardiopulmonary bypass is not used outside cardiac surgery
  - Patients require full-dose heparin with the use of cardiopulmonary bypass.
69. Which of these is not a risk factor for ischaemic heart disease?
- Smoking
  - Obesity
  - Reduced physical activity
  - Female gender.
70. Which of these are not acyanotic heart diseases?
- Patent ductus arteriosus (PDA)
  - Total anomalous pulmonary venous drainage (TAPVC)
  - Patent foramen ovale (ASD)
  - Coarctation of the aorta
71. Which of the following statements is false?
- Cyanotic heart diseases are often more complex compared with acyanotic diseases, and result from a right-to-left shunt or a pulmonary circulation that runs in parallel to systemic circulation, or abnormal connection of blood vessels to the heart.
  - Acyanotic heart diseases are more common than cyanotic heart diseases, and usually cause heart failure in infancy
  - The coexistence of ventricular septal defect, overriding aorta, pulmonary stenosis and right ventricular hypertrophy is referred to as Fallot's tetralogy.
  - Four types of atrial septal defects are perimembranous, muscular, atrioventricular and sub-arterial.
72. Left Internal mammary artery (LIMA) is a branch of -
- Ascending Aorta
  - Descending Aorta
  - Left Subclavian Artery
  - Left Common Carotid artery
73. Which of these statements are true?
- Biological valves are obtained from animals (xenograft or heterograft), dead humans (allograft or homograft) and the patient (autograft).
  - Mechanical valves are more durable than biological valves.
  - Biological valves are at less risk of prosthetic valve endocarditis
  - All of above



74. Which of the following statements is false?
- The lungs are derivatives of the primitive foregut.
  - The left lung has more lobes and segments than the right lung.
  - Anatomical differences between the right and left main bronchi favour the inhalation of foreign bodies into the right.
  - Pulmonary function tests assess the functional capacity, the severity of pulmonary disease and help to predict response to treatment.
75. Which one of these statements is true regarding broncho-carcinoma?
- Chest radiograph yields very useful information about primary lung cancer.
  - Computed tomography (CT) is only useful for guiding fine-needle aspiration.
  - Positron emission tomography (PET) has high specificity for bronchial carcinoma.
  - Invasive procedures such as Mediastinoscopy, mediastinotomy and thoracoscopy are not staging procedures.
76. All of the following may be acceptable operative approaches to management of the thoracic outlet syndrome except:
- Scalenectomy
  - Excision of a cervical rib.
  - Thoracoplasty.
  - First rib resection.
77. Initial conservative (nonsurgical) management of the thoracic outlet syndrome may include all of the following except:
- Weight reduction.
  - Improvement of posture.
  - Exercises to strengthen the muscles of the shoulder girdle.
  - Advocating hyper-abduction.
78. A 24-year-old male has new onset of chest pain. Chest films demonstrate a large anterosuperior mass suggestive of teratoma. Appropriate evaluation would not include:
- CT of the chest.
  - Measurement of serum alpha-fetoprotein and beta-human chorionic gonadotropin.
  - A barium swallow.
  - All of above
79. Clinical features suggestive of myasthenia gravis include all of the following except:
- Proximal muscle weakness.
  - Diplopia.
  - Sensory deficits of the extremities.
  - Dysphagia.
80. Which of the following is/are acceptable alternatives in the management of malignant pericardial effusion?
- Pericardiocentesis.
  - Thoracotomy with pericardiectomy.
  - Treatment of the underlying malignancy.
  - All of the above
81. Which of the following statements about cardiac tamponade is/are correct?
- At least 500 ml. of fluid must be present in the pericardium of an adult to cause symptoms of tamponade.
  - The vast majority of patients with cardiac tamponade demonstrate a low QRS voltage, nonspecific ST T-wave abnormalities, and electrical alternans (alternation of QRS amplitude) on the electrocardiogram.
  - In trauma victims with cardiac tamponade, the three components of "Beck's triad" (hypotension, elevated jugular venous pressure (JVP), and muffled heart sounds) are almost always present.
  - When the diagnosis is made, treatment must be instituted rapidly and may include pericardiocentesis, creation of a pericardial window, and identification and treatment of the underlying cause.
82. Concerning the sternum, the following is not true:
- The xiphoid process is the anterior border of the thoracic outlet
  - The angle of Louis is at the level of the 2nd costal cartilage
  - The 11th rib is attached via costal cartilage to the xiphoid
  - The sterno-manubrial junction is at the level of T4 posteriorly



83. A 52-year-old alcoholic with fever and a cough productive of purulent sputum is found to have the opacity with obliteration of costo-phrenic angle on chest film. The following is not a true statement:
- The findings suggest a para-pneumonic empyema
  - If pus is found on aspiration of the pleural space, a chest tube should be place
  - If pus is found on aspiration, bronchoscopy is a necessary part of the patient's evaluation
  - In this situation, rib resection for drainage is preferred to a large-bore chest tube
84. Which maneuver generally is not performed early before chest compression in basic life support outside the hospital?
- Call for help.
  - Obtain airway.
  - Electrical cardioversion.
  - Ventilation.
85. Which is not true of cardiopulmonary resuscitation (CPR)?
- Closed chest massage is as effective as open chest massage.
  - The success rate for out-of-hospital resuscitation may be as high as 30% to 60%.
  - The most common cause of sudden death is ischemic heart disease.
  - Standard chest massage generally provides less than 15% of normal coronary and cerebral blood flow
86. Which intervention can be helpful to a patient with worsening dilated cardiomyopathy while on the waiting list for a heart transplant?
- Regular medication schedule
  - Use of cardiac rehabilitation
  - Use of ventricular assist device
  - External pacemaker
87. Carotid artery occlusion would result in:
- Arrhythmia
  - Bradycardia
  - Bradyarrhythmia
  - Tachycardia
88. On examination of a patient, the point of maximal impulse (PMI) is palpated below the 5<sup>th</sup> intercostal space. What does this suggest?
- Right atrial enlargement
  - Right lung collapse
  - Left ventricular enlargement
  - Left atrial enlargement
89. Best test to confirm Cor pulmonale:
- Right heart catheterization
  - Chest X-ray
  - Echo
  - Chest CT
90. Which is a distinctive feature of a cardio-embolic stroke?
- Onset of seizures right away
  - Presence of atrial fibrillation at onset of stroke
  - Decreased level of consciousness at onset of stroke
  - Usually strokes are permanent
91. Which of the following is not a complication of right internal jugular puncture?
- Arrhythmias
  - Thoracic duct injury
  - Hemomediastinum
  - Tracheal puncture
92. A 72 y/o female is recovering after angioplasty with stent for an inferior myocardial infarction. She develops orthopnea and shortness of breath. Vital signs are stable. There is jugular venous distension, a new III/IV systolic murmur at the heart base. It has a crescendo-decrescendo musical quality. There is no change with respiration. There are crackles at the lung bases. Select the most probable finding on echocardiogram.
- Anterior mitral leaflet fluttering
  - A mitral regurgitant jet that is eccentric
  - Changes with respirations of the velocity of flow across the mitral valve
  - Ventricular septal defect



93. A patient has DVT in the femoral veins and develops an embolic stroke. Select the most likely explanation.

- A. Aortic valve endocarditis
- B. Patent foramen ovale
- C. Pulmonary embolism resulting in hypotension
- D. Cerebrovascular and peripheral arterial disease

94. The lesser saphenous vein typically empties into:

- A. Great saphenous vein
- B. Femoral vein
- C. Anterior tibial vein
- D. Popliteal vein

95. Which of the following is not true about extracorporeal membrane oxygenation (ECMO)?

- A. It is used to treat congenital diaphragmatic hernias
- B. It can be used to treat meconium aspiration
- C. It can be used to treat persistent pulmonary hypertension
- D. It can be used to treat congenital adenomatoid malformation

96. What is the approximate 10 year patency of a LIMA graft?

- A. 90%
- B. 75%
- C. 50%
- D. <40%

97. True about Hamman's sign:

- A. Holosystolic murmur
- B. A sound heard after systole
- C. Presence of air in mediastinum
- D. Crepitus at lower lung bases

98. Which of the following leads to the greatest reduction in myocardial oxygen requirement during cardiopulmonary bypass?

- A. Hyperkalemic cardiac arrest
- B. Hypothermic arrest
- C. Fibrillating heart
- D. Empty beating heart

99. Symptoms of aortic stenosis include all of the following except:

- A. Pulsus parvus
- B. Malar flush
- C. Pulsus tardus
- D. Increased murmur with squatting

100. Not a feature of cardiac tamponade:

- A. Hypotension
- B. Distant heart sound
- C. Low voltage QRS complex
- D. Wide pulse pressure

Answer- D



# SUBJECT CTVS

1	C	21	C	41	B
2	C	22	A	42	C
3	D	23	C	43	D
4	B	24	D	44	C
5	D	25	C	45	B
6	A	26	B	46	A
7	D	27	B	47	D
8	C	28	D	48	C
9	C	29	A	49	D
10	A	30	C	50	C
11	B	31	D	51	D
12	B	32	A	52	D
13	C	33	B	53	D
14	A	34	C	54	D
15	D	35	A	55	D
16	B	36	C	56	B
17	B	37	A	57	A
18	D	38	C	58	C
19	B	39	C	59	B
20	B	40	D	60	B
61	D	81	D		
62	D	82	C		
63	D	83	D		
64	A	84	C		
65	D	85	A		
66	C	86	C		
67	D	87	D		
68	C	88	C		
69	D	89	A		
70	B	90	C		
71	D	91	B		
72	C	92	B		
73	D	93	B		
74	B	94	D		
75	A	95	D		
76	C	96	A		
77	D	97	C		
78	C	98	A		
79	C	99	B		
80	D	100	D		