

CARDIO VASCULAR & THORACIC SURGERY (PART-II/FINAL)

PAPER-II

Time: 3 hours
Max. Marks:100

CVTS/D/20/04/II

Important Instructions:

- **You are provided with 5 answer sheet booklets. Each individual answer sheet booklet consists of 10 pages excluding the covering jackets.**
- **Answers to all the questions must be attempted within these 5 answer sheet booklets which must be later tagged together at the end of the exam.**
- **No additional supplementary answer sheet booklet will be provided.**
- Attempt all questions in order.
- Each question carries 10 marks.
- Read the question carefully and answer to the point neatly and legibly.
- Do not leave any blank pages between two answers.
- Indicate the question number correctly for the answer in the margin space.
- Answer all the parts of a single question together.
- Start the answer to a question on a fresh page or leave adequate space between two answers.
- Draw table/diagrams/flowcharts wherever appropriate.

Write short notes on:

1. What are the anatomical changes in TOF? How do they change the hemodynamics? What are the usual angiographic findings? Describe the pathophysiologic basis of classical cyanotic spell. How do you manage a baby brought at OPD suddenly developing cyanotic spell? 3+2+3+2
2. How would you define and describe the mitral valve apparatus? What are the structures circumferentially related to the mitral valve annulus? What are the principle indications of managing regurgitation? What anticoagulant regime is post-operatively followed and what are the agents used? 3+3+2+2
3. What are the surgical causes of hypertension? What is coarctation of aorta and what are the pathophysiological types? What are the methods of repair and describe in short, the aortoplasty techniques? What are the important perioperative precautions required in adult perioperative post-coarctation repair? 3+2+3+2
4. You are called to see a cyanotic baby at birth. How will you proceed to evaluate, diagnose and manage the baby? A baby born with a normal APGAR score, gradually turn dusky (cyanosis) soon after and becomes hemodynamically unstable. What is your diagnosis in this case? Enumerate the steps in the 3 stages of Norwood procedure. 2+3+5
5. Describe the lymphatic drainage of the lung. What is the lymphatic sump of Borrie and its significance? What are the indications and principle of lung resection in bronchogenic carcinoma? 3+3+4
6. Describe the evolution of Coronary Artery Bypass Surgery and its inception highlighting the present strategies. What are the conduits used in artery bypass and enumerate their properties? What is your strategy in doing coronary revascularization in a patient with grossly calcified aorta? 3+2+3+2

P.T.O.

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7. What are the indications of prosthetic valve replacement in aortic valve stenosis? What is low flow low gradient situation? How would you proceed to manage such a condition? From the perfusionist and anesthetist stand point, what are the situational differences when managing a patient either with aortic stenosis or aortic regurgitation? 4+2+2+2
8. What is subclavian steal syndrome? What are its disadvantages? How do you manage a case of subclavian steal after coronary bypass surgery? 3+3+4
9. Describe the lung function test. How does a result of lung function test influence the decisions of respective lung surgery? What are the principles of lung reduction surgery? 5+3+2
10. Enumerate the methods of spinal cord protection in a patient while undergoing post-subclavian descending thoraco-abdominal aneurysm surgery. Classify aortic aneurysm. How would you manage the celiac, superior mesenteric and renal arteries during the surgical management of thoraco-abdominal aneurysm? 4+2+4
