

Rajiv Gandhi University of Health Sciences, Karnataka

Fellowship Examination - 16-Feb-2023

[Time: 3 Hours]**[Max. Marks: 100]****PAEDIATRIC CARDIAC SURGERY - PAPER – I****QP Code: 4203**

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary.

Answer All The Questions**10 X 10 = 100 Marks**

1. Highlight the differences between hemofiltration and hemodialysis. Discuss the role of hemofilter during CPB and various types of ultrafiltration. What are the techniques and advantages of performing modified ultrafiltration?
2. Discuss in detail the various biomaterials used in cardiac surgery. What are the novel tissue engineered materials developed for use?
3. What are the methods of blood conservation during cardiac surgery? What are the complication of massive blood transfusion? Discuss the management of post-operative bleeding in children.
4. What is cell based therapy to treat congenital cardiac disease. Discuss the findings of the PERSEUS study. What are novel bioengineered patches used in cardiac surgery.
5. Classification pulmonary hypertension – Types and Severity. What are the Health Edwards stages of PAH and what is its significance? What is the criteria for operability after acute vasoreactive testing for PAH?
6. Classify ventricular septal defects. Describe the anatomy of the conduction system with respect to each type of VSD. Discuss the strategies to avoid heart block during VSD closure.
7. Define cyanosis. Describe the pathophysiology, clinical features and complications of longstanding untreated cyanotic congenital heart disease.
8. Classify congenital coronary anomalies. Explain the pathophysiology, natural history and surgical techniques to manage ALCAPA.
9. Classify aorta-pulmonary window with illustrations. Discuss the clinical presentation, timing of intervention, surgical strategies and complications.
10. What are the types of congenital aortic stenosis? Discuss the clinical features, evaluation, surgical strategies and complications in the management of subvalvar aortic stenosis.

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