

Rajiv Gandhi University of Health Sciences, Karnataka

Fellowship Examination – 08-Sep-2023

Time: Three Hours**Max. Marks: 100 Marks****PAEDIATRIC INTENSIVE CARE - PAPER – II****QP Code: 4144**

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. You are the team leader on the cardiac arrest team. What are your roles and what are the priorities of cardiac arrest management which you must help implement?
2. Your intensive care unit has had a noticeable increase in the rate of ventilator – associated pneumonia (VAP). A number of cases involve multi – resistant organisms.
 - a. Outline the strategies you would recommend implementing in your unit in an effort to reduce the incidence of VAP.
 - b. Explain the rationale for each recommended quality improvement strategy in your answer.
3. Critically evaluate the role of vasopressin in septic shock.
4. With respect to positive end – expiratory pressure (PEEP) in a ventilated patient with acute respiratory distress syndrome (ARDS).
 - a. Describe the possible approaches to setting PEEP
 - b. List the disadvantages of excessive PEEP in this situation.
5. Outline the pathophysiology and clinical features of a smoke inhalation injury in a patient with major burns.
6. List the factors that result in failed resolution of sepsis despite antibiotic therapy.
7. Regarding to standardized mortality ratio:
 - a. What is a standardized mortality ratio (SMR) and how is it calculated?
 - b. The SMR in your ICU has increased from 0.95 to 10.5 in the past 12 months outline the possible causes.
8. Define tumour lysis syndrome. List the risk factors associated with its development outline measures to prevent it and provide a rationale for the use of each of those measures.
9. With respect to trans-pulmonary pressure (TPP).
 - a. Explain what is meant by the phrase "trans-pulmonary pressure (TPP)".
 - b. Describe the techniques of measurement, including any limitations.
 - c. Discuss the rationale for its clinical use
 - d. Briefly outline the evidence for its role in the management of patients with acute respiratory distress syndrome (ARDS).
10. What are the indications for decompressive Craniectomy? Briefly outline the complications of decompressive craniectomy. Comment briefly on the outcome from decompressive craniectomy.
