

ANAESTHESIOLOGY

PAPER – I

Time : 3 hours
Max. Marks : 100

ANS/D/12/01/I

Attempt all questions in order.
Each question carries 10 marks.

1. How will you evaluate a three year old child with systolic murmur scheduled for surgery? Briefly discuss the anaesthetic implications. 6+4
2. Describe briefly the intra-operative considerations for bariatric surgery? 10
3. Describe the differential diagnosis of intra-operative bronchospasm. Write down its management. 5+5
4. Draw a labeled diagram of labor pain pathway. Describe method, advantages and disadvantages of preferred technique of labor analgesia. 4+(2+2+2)
5. What are the factors that predispose trauma patients to increased anaesthetic risks? Briefly mention their management. 4+6
6. How will you calculate the energy requirements in an ICU patient? What are the advantages and disadvantages of parenteral Vs enteral nutrition? 4+6
7. What are the predictors of cardiac risk in cardiac patients undergoing non-cardiac surgery? Describe briefly the anaesthetic consideration in a patient with coronary artery disease with ejection fraction of 40% for laparoscopic cholecystectomy. 5+5
8. Describe the preoperative evaluation, anaesthetic management and intra-operative monitoring of a patient scheduled for carotid endarterectomy. 4+4+2
9. Describe briefly the diagnosis, pathophysiology and treatment of hepato-renal-syndrome in a case of advanced liver cirrhosis. 2+4+4
10. Discuss the role of anesthesiologist in organ donation. 10

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PAPER – II

Time : 3 hours
Max. Marks : 100

ANS/D/12/01/II

Attempt all questions in order.
Each question carries 10 marks.

1. What are the indications for renal replacement therapy? Describe its role in multiple organ dysfunction syndrome. 4+6
2. Describe the etiology, clinical features and treatment of malignant hyperthermia. 3+3+4
3. What are the anaesthetic concerns in the management of a patient with myasthenia gravis scheduled for thoracoscopic thymectomy. 10
4. What are the indications for intracranial pressure (ICP) monitoring in patients with head injury? Describe the ICU management strategies of a patient with severe head injury? 4+6
5. How will you diagnose and manage a case of venous air embolism during spine surgery? 4+6
6. Enumerate the agents implicated in allergic reactions during anaesthesia. How would you manage a patient with anaphylaxis during anaesthesia? 4+6
7. Write down the algorithm for resuscitation of a newborn. 10
8. What is anion gap? Describe the causes and management of metabolic acidosis from low cardiac output. 3+7
9. Write an algorithm for the management of early hemorrhagic shock. What are the goals in early resuscitation during active bleeding? 5+5
10. Describe the commonly encountered problems following cardio-pulmonary bypass in the post bypass period. 10

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PAPER – III

Time : 3 hours
Max. Marks : 100

ANS/D/12/01/III

Attempt all questions in order.
Each question carries 10 marks.

1. What are the clinical features of organophosphorous poisoning? How will you manage a patient of organophosphorous poisoning in an ICU? 5+5
2. What are the ingredients of professional negligence? Write a note on "Informed Consent"? 4+6
3. What is IASP (International Association for Study of Pain) definition of pain? How do you classify pain? Briefly describe the interdisciplinary management of chronic pain. 1+2+7
4. An 8 years old child who underwent tonsillectomy 4 hours ago returns to the Operating Table with bleeding from tonsillar site. Describe preparation, preoperative assessment and anaesthetic management of this case. 4+4+2
5. What are the hazards and limitations of providing anaesthesia in the MRI suite? Describe the anaesthetic management of a 6 months old child with hydrocephalus scheduled for MRI. 5+5
6. What are the causes of intra-operative hypotension during total hip replacement? Outline the treatment strategies. 3+7
7. Enumerate the major concerns for anaesthesiologist in hypertrophic pyloric stenosis in a newborn. Write down the anaesthetic management of such a case. 4+6
8. Enumerate age-related changes in cardiovascular, pulmonary, nervous and renal systems in geriatric patient which can affect anaesthetic management. How do the changes in renal functions affect anaesthetic management? 7+3
9. Describe the preoperative evaluation and anaesthetic management of a four year old child with perforating eye injury scheduled for repair under general anaesthesia. 4+6
10. What is Chronic Obstructive Pulmonary Disease (COPD)? How will you manage oxygenation and pain in post-operative period of a case of COPD undergoing upper abdominal surgery? 4+(3+3)

ANAESTHESIOLOGY

PAPER – IV

Time : 3 hours
Max. Marks : 100

ANS/D/12/01/IV

Attempt all questions in order.
Each question carries 10 marks.

1. Briefly discuss the management of a patient with severe sepsis as per "Surviving Sepsis Guidelines". 10
2. What is the significance of autonomic neuropathy in diabetes mellitus? How can it be assessed? 5+5
3. Describe the innervation of larynx and the palsies following nerve injury with the help of diagram(s). 5+5
4. What are the factors leading to arterial hypoxaemia in the Post Anaesthesia Care Unit? Discuss the differential diagnosis. 5+5
5. Describe the causes and management of "Acute Dilutional Hyponatremia" in the immediate postoperative period. 10
6. Describe the algorithm of the evaluation and initial therapy of a patient with suspected peri-operative coagulopathy. 10
7. What is relative and absolute humidity? What are active and passive humidifiers? What are their advantages and disadvantages? 4+4+2
8. What is scavenging in OT? What are the five basic parts of a scavenging system? What are the hazards of a scavenging system? 2+3+5
9. Describe the mechanism by which Intra-Aortic Balloon Pump (IABP) augments coronary perfusion. What are the indications and contra-indications for the use of IABP? 2+(4+4)
10. What is Hospice? When should you begin hospice care? How does hospice serve patients and families? 2+4+4
