

Q.P.CODE:112-NR

DR YSR UNIVERSITY OF HEALTH SCIENCES:: AP :: VIJAYAWADA

M.D. DEGREE EXAMINATION – JUNE, 2023

ANAESTHESIOLOGY

Paper-I : Basic Sciences in relation to Anaesthesiology

Max. Marks:100

Time: 3 Hours

Note : Answer all questions

All questions carry equal marks. Draw diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Informed consent in Anaesthesia and its medicolegal importance
2. Clinical tests for evaluation of functioning of autonomic nervous system
3. Discuss how Intra Cranial Pressure (ICP) is maintained. Discuss the monitoring techniques of ICP
4. Discuss the application of Gas laws in Anaesthesia practice
5. Discuss context sensitivity half life and its application in Anaesthesia
6. Various modes of Neuromuscular monitoring and their applications
7. Define functional residual capacity and its importance in Anaesthesia
8. What is coronary perfusion pressure. Discuss the factors affecting coronary perfusion pressure
9. Henry Edmund Gaskin Boyle
10. Anatomy of lumbar and caudal epidural space

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DR YSR UNIVERSITY OF HEALTH SCIENCES :: AP :: VIJAYAWADA
M.D. DEGREE EXAMINATION – JUNE, 2023
ANAESTHESIOLOGY

Paper-II : Clinical Sciences in relation to Anaesthesiology
including recent advances

Time: 3 Hours

Max. Marks:100

Note : Answer all questions

All questions carry equal marks. Draw diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Gas laws relevant to inhalational Anaesthesia
2. What are the determinants of cardiac output. Describe cardiac output monitoring by thermos dilution technique
3. Ventilatory management of a patient with ARDS(Acute Respiratory Distress Syndrome)
4. Hypoxic pulmonary vasoconstriction
5. Diagnosis and management of Metabolic acidosis
6. Hepato renal syndrome
7. Double Bohr effect
8. I-Gel
9. Total parenteral nutrition
10. Lung ultrasound and its application in critical care

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DR YSR UNIVERSITY OF HEALTH SCIENCES :: AP :: VIJAYAWADA

M.D. DEGREE EXAMINATION – JUNE, 2023

ANAESTHESIOLOGY

Paper-III : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note : Answer all questions

All questions carry equal marks. Draw diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Management of intra operative hypertension
2. Intraoperative ventricular arrhythmias and management
3. Anaesthesia management of bronchopleural fistula
4. Consequences of chronic cigarette smoking
5. Critical care management of head injury patients
6. Anaesthesia goals during management of a case of hydrocephalus posted for ventriculoperitoneal shunt
7. Haematological consequences in chronic renal failure patients and their management
8. Preoperative evaluation risk stratification of a patient with cirrhosis of liver posted for incidental surgery
9. Rapid sequence induction
10. Induced hypotension

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DR YSR UNIVERSITY OF HEALTH SCIENCES :: AP :: VIJAYAWADA
M.D. DEGREE EXAMINATION – JUNE, 2023
ANAESTHESIOLOGY

Paper-IV : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note : Answer all questions

All questions carry equal marks. Draw diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Anesthetic management of problems during squint surgery
2. Anesthetic management of post tonsillectomy bleeding
3. Problems during micro laryngeal laser surgery
4. HELLP syndrome
5. Describe fetal circulation and changes in circulation that occur immediately after birth
6. Field block for hernia repair
7. Discharge criteria after day care surgery
8. Problems encountered while providing Anesthesia services in MRI suite
9. Management of Post Operative Nausea Vomiting (PONV)
10. Manifestations and management of a case of Organophosphorus poisoning

Q.P.CODE:112-NR

DR NTRUNIVERSITY OF HEALTH SCIENCES:: AP :: VIJAYAWADA

M.D. DEGREE EXAMINATION – JULY, 2021

ANAESTHESIOLOGY

Paper-I : Basic Sciences in relation to Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Describe the anatomy of bronchopulmonary segments
2. Discuss the uptake, Distribution and elimination of Anaesthetic agents
3. Double burst stimulation
4. Draw a labeled diagram of sympathetic nervous system. Discuss assessment for autonomic neuropathy.
5. Fospropofol
6. Indian contribution to anaesthesia
7. Informed consent
8. Bainbridge reflex
9. Heat and moisture exchanger
10. Anaesthetic implications of prone position

Q.P.CODE:113-NR

DR NTR UNIVERSITY OF HEALTH SCIENCES:: AP :: VIJAYAWADA
M.D. DEGREE EXAMINATION – JULY, 2021
ANAESTHESIOLOGY

Paper-II : Clinical Sciences in relation to Anaesthesiology
including recent advances

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

1. Discuss the anaesthetic management of female patient with eclampsia posted for emergency caesarian section
2. Describe the anaesthetic management of 2day old baby scheduled for exploratory laparotomy in view of intestinal obstruction
3. Describe anatomy of paravertabral space and describe one method of establishing paravertebral block
4. Define massive blood transfusion ,what are the risks of transfusion of blood and blood products
5. What are the anaesthetic considerations in a 27 year old lady with 28 weeks of pregnancy posted for laparoscopic appendicectomy?
6. Anaesthetic management of a case of pituitary adenoma posted for Transsphenoidal hypophysectomy
7. Dexmedetomidine versus Clonidine
8. Pace makers and Defibrillators
9. Sugammadex
10. Difficult airway algorithm

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DR NTR UNIVERSITY OF HEALTH SCIENCES:: AP :: VIJAYAWADA

M.D. DEGREE EXAMINATION – JULY, 2021

ANAESTHESIOLOGY

Paper-III : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Enumerate anticipated problems in an adult patient with scoliosis at thoracic level
2. What are the physiological changes in geriatric patients relevant to anaesthesiologist? What modifications are required for regional anaesthesia in comparison to adults
3. Treatment of intraoperative myocardial ischemia
4. Compare and contrast Buska mask and LMA
5. A 30 year old lady with huge thyroid presenting with thyrotoxicosis posted for subtotal thyroidectomy .Discuss the preparation and anaesthetic management
6. What are the pathophysiological insults which exacerbate the primary brain injury following Head trauma?How can these effects be reduced?
7. Describe the effects of smoking and its anaesthetic implications?
8. Caudal Anaesthesia
9. How to assess and manage a patient of parkinsonism for cataract surgery?Discuss the postoperative care and drug interactions.
10. Describe the tumescent technique for local anaesthesia in a patient undergoing liposuction and abdominoplasty?

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DR NTR UNIVERSITY OF HEALTH SCIENCES:: AP :: VIJAYAWADA

M.D. DEGREE EXAMINATION – JULY, 2021

ANAESTHESIOLOGY

Paper-IV : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Anaesthetic implications of procedures under LASER
2. Perioperative management in a case of liver resection
3. Describe the interfaces used with non invasive ventilation. What is NIV protocol. Describe the current definitive indications of NIV
4. Modified Aldrete scoring system
5. Indications, techniques and complications of percutaneous dilatational tracheostomy
6. Discuss the monitored anaesthesia care for the radio diagnostic investigations
7. Define Ventilator acquired pneumonia(VAP). What are the guidelines for antimicrobial treatment for VAP. What are common microbes responsible for VAP. How can it be prevented ?
8. Pathophysiology, signs and symptoms and management of cyanide poisoning
9. What is hyperalgesia? Briefly describe peripheral mechanisms associated with it. Discuss opioid induced hyperalgesia
10. Role of corticosteroids in the management of covid-19

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Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – AUGUST, 2020

ANAESTHESIOLOGY

Paper-I : Basic Sciences in relation to Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Explain the anatomy of the larynx. Differentiate between the adult and child larynx. Add a note on vocal cord palsy.
2. Classification of Breathing systems and add a note on co-axial anesthetic systems
3. Discuss cardiovascular reflexes
4. Write a note on the gas laws and its applications
5. Discuss oxygen cascade and its implications in anesthesia
6. Discuss Haemoglobin A
7. Describe Sterilization methods used in Operation Theatre
8. Discuss lung volumes and capacities
9. Explain laryngeal mask airway
10. Write a note on William Thomas Green Morton

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Dr. NTR University of Health Sciences::Vijayawada-520 008
M.D. DEGREE EXAMINATION – AUGUST, 2020
ANAESTHESIOLOGY

Paper-II : Clinical Sciences in relation to Anaesthesiology
including recent advances

Time: 3 Hours

Max. Marks:100

Note: Answer all questions
All questions carry equal marks
Draw neat diagrams wherever necessary

1. Describe the anaesthetic management of a 4 year old child coming for bronchoscopy for removal of foreign body.
2. Discuss the management of a road traffic accident victim admitted in ICU with head injury
3. Explain the indications, techniques and complications of stellate ganglion block.
4. Write a note on clinical features and management of post-dural puncture headache
5. Discuss the anesthesia for off pump coronary artery bypass surgery.
6. Explain palliative care and pain relief in cancer patients
7. Explain percutaneous dilatational tracheostomy
8. Discuss hepatorenal syndrome.
9. Give a note on endorphins, opioid receptors and their role in post-operative pain relief
10. Write a note on blood transfusion reactions.

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Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – AUGUST, 2020

ANAESTHESIOLOGY

Paper-III : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. A 10 year old child with Tetralogy of Fallot is diagnosed to have brain abscess. Describe pre-operative evaluation, preparation and anaesthetic management for drainage of brain abscess.
2. Explain the anaesthetic management of abdominal aortic aneurysm surgery
3. Describe attenuation of intubation response during laryngoscopy.
4. Discuss the pre-anaesthetic evaluation, preparation and anaesthetic management of a patient with thyrotoxicosis complicated by atrial fibrillation.
5. Explain cerebral protection
6. Compare adrenaline and vasopressin
7. Discuss respiratory acidosis
8. Discuss pharmacodynamics and pharmacokinetics of Etomidate
9. Explain the management of post operative shivering
10. Discuss in detail the role of intra-operative beta blockers

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Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – AUGUST, 2020

ANAESTHESIOLOGY

Paper-IV : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. A 30 year old woman has sustained 40% burns in face, neck and lower limbs. How do you manage acute burns? She comes after two years with contracture of neck. How do you prepare and anaesthetise for the release of contracture Neck. How do you manage the post-operative pain in this case?
2. Discuss role of an anaesthetist in resuscitation of a case of hanging in a hospital setup.
3. Discuss the management of TRALI.
4. Explain multi-organ dysfunction syndrome
5. Explain the WHO ladder for providing pain relief for chronic cancer pain
6. Describe the clinical features and discuss the management of a young adult presenting with organophosphate compound poisoning
7. Discuss intra-aortic balloon pump
8. Write a note on autologous blood transfusion
9. Discuss Positive end-expiratory pressure (PEEP)
10. Enumerate various blood components. Briefly mention the indications for administering each of them.

OCTOBER-2019

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Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – OCTOBER, 2019

ANAESTHESIOLOGY

Paper-I : Basic Sciences in relation to Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Hypothermia
2. Principles of vaporizers and classification of vaporizers
3. Total intravenous anesthesia
4. Innervation of foot and describe ankle block
5. Pulmonary function tests
6. Diagnosis and management of intraoperative bronchospasm
7. Jet ventilation
8. Physiology of neuro muscular junction.
9. Minimum alveolar concentration
10. Functional residual capacity: Definition, measurement and anesthetic implications

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Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – OCTOBER, 2019

ANAESTHESIOLOGY

Paper-II : Clinical Sciences in relation to Anaesthesiology
including recent advances

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

1. Discuss the anesthetic management of Ruptured Ectopic Pregnancy
2. Management of raised intracranial pressure
3. Thromboelastogram
4. Non invasive ventilation
5. Describe the causes of acute pulmonary edema and its management
6. Intra operative cardiac arrhythmias
7. Bispectral index
8. "HELLP" Syndrome
9. Regional anesthesia for cataract surgeries
10. Discuss failed intubation drill in obstetrics

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Dr. NTR University of Health Sciences::Vijayawada-520 008
M.D. DEGREE EXAMINATION – OCTOBER, 2019

ANAESTHESIOLOGY

Paper-III : Principles and Practice of Anaesthesiology

Max. Marks:100

Time: 3 Hours

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Hepatorenal syndrome
2. Total parenteral Nutrition
3. Post anesthesia care unit
4. Diagnosis of Brain death
5. Thyroid storm
6. Transverse abdominis plane block.
7. Describe the prevention and management of TURP syndrome
8. Anesthetic implications and management of a neonate with congenital diaphragmatic hernia
9. Post tonsillectomy bleeding
10. Anticoagulants and central neuraxial block

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Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – OCTOBER, 2019

ANAESTHESIOLOGY

Paper-IV : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Clinical features and management of septic shock
2. Describe in detail Glasgow coma score
3. Describe the recent concepts of massive intraoperative blood loss and its management
4. Describe absolute humidity, relative humidity and how to humidify the patient on ventilator
5. Anesthetic management of day care surgeries
6. Describe the various positions for anesthesia and surgery and its advantages and disadvantages
7. Describe defibrillation.
8. Define metabolic acidosis and its management
9. Anesthetic management in high altitude
10. Discuss in detail rapid sequence intubation

APRIL 2019

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Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – APRIL, 2019

ANAESTHESIOLOGY

Paper-I : Basic Sciences in relation to Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Describe the anatomy of the posterior triangle of the neck
 2. Discuss the mechanics of human respiration. What are the factors controlling respiration?
 3. Explain Hagen-Poiseuille Equation
 4. Describe Volume of Distribution
 5. Write short notes on Capnography
 6. Write a note on the endocrine functions of kidney
 7. Discuss Prothrombin time
 8. What is mean body temperature? Discuss the relevance of interthreshold range in reference to general anaesthesia.
 9. Write a note on Ethylene oxide sterilization
 10. Write a note on August Bier.
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Dr. NTR University of Health Sciences::Vijayawada-520 008
M.D. DEGREE EXAMINATION – APRIL, 2019
ANAESTHESIOLOGY

Paper-II : Clinical Sciences in relation to Anaesthesiology
including recent advances

Time: 3 Hours

Max. Marks:100

Note: Answer all questions
All questions carry equal marks
Draw neat diagrams wherever necessary

1. Discuss the physiological changes in pregnancy and its relevance to anaesthesia
2. Describe the anaesthetic management of craniotomy for posterior cranial fossa tumor
3. Discuss indications, technique and complications of inter-scalene brachial plexus block
4. Write a note on Xenon
5. What are the anaesthetic challenges in penetrating eye injuries?
6. Describe the various techniques used in management of post-operative pain relief.
7. Discuss Modified Electroconvulsive Therapy
8. Describe the criteria for weaning off the patient on ventilator support.
9. Explain the techniques and complications of internal jugular venous cannulation
10. Write a note on Hydroxy Ethyl Starch.

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Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – APRIL, 2019

ANAESTHESIOLOGY

Paper-III : Principles and Practice of Anaesthesiology

Max. Marks:100

Time: 3 Hours

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Discuss the pre-op evaluation, preparation and peri-operative anaesthetic management of a 45 year old female, a known case of bronchial asthma posted for elective laparoscopic cholecystectomy.
2. Describe the anaesthetic management of an Ischemic heart disease patient posted for Total Gastrectomy.
3. Discuss recognition and management of difficult airway.
4. How would you evaluate and manage a 70 years old male with rheumatoid arthritis scheduled for total hip replacement?
5. Describe course of intercostal nerve, technique of blocking it and associated common complications.
6. Describe cardioversion and defibrillation.
7. Discuss cerebral autoregulation.
8. Briefly describe the pharmacodynamics and pharmacokinetics of magnesium sulphate. Add a note on its role in clinical practice and its anaesthetic implication.
9. Write a note on Blood Component Therapy.
10. Discuss pharmacodynamics and pharmacokinetics of Flumazenil.

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Q.P.CODE:115-NR

Dr. NTR University of Health Sciences::Vijayawada-520 008
M.D. DEGREE EXAMINATION – **APRIL, 2019**

ANAESTHESIOLOGY

Paper-IV : Principles and Practice of Anaesthesiology

Max. Marks:100

Time: 3 Hours

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Discuss in detail the pre-operative evaluation, preparation and peri-operative management of a 50 year old insulin-dependent diabetic posted for elective cholecystectomy.
2. How is neuromuscular monitoring setup in a patient? Explain its clinical utility in the assessment of neuromuscular block
3. Outline the criteria for establishing diagnosis of brain death
4. Describe the mechanism by which epidurally / intrathecally administered opioids produce analgesia and other effects in a surgical patient. What are the various routes of administration of morphine? Discuss the pharmacodynamics and pharmacokinetics of epidural morphine.
5. Outline ventricular fibrillation algorithm
6. Discuss the management of intraoperative pulmonary oedema
7. Explain the occupational hazards to an anesthesiologist
8. Classify anti-arrhythmic drugs
9. Write a note on inverse ratio ventilation
10. Add a note on MAO inhibitors

APRIL-2018

Q.P.CODE:112-NR

Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – APRIL, 2018

ANAESTHESIOLOGY

Paper-I : Basic Sciences in relation to Anaesthesiology

Max. Marks:100

Time: 3 Hours

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Describe neuromuscular monitoring and its clinical uses in the assessment of recovery from neuromuscular block
2. Describe venturi effect and its application in clinical practice.
3. Describe functional residual capacity (F.R.C). Explain the importance of F.R.C in normal respiratory function.
4. Describe in detail the vocal cord palsies following thyroid surgery
5. Describe Cardiovascular and respiratory effects of halothane and isoflurane.
6. Describe the postdural puncture headache and its prevention during spinal anesthesia
7. Describe the anatomy of coronary circulation and the factors controlling coronary circulation
8. What is the clinical application of oxygen dissociation curve (ODC)?
9. Describe the opioid receptors
10. Describe anatomy of celiac plexus. Indications for its block and complications

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Dr. NTR University of Health Sciences::Vijayawada-520 008
M.D. DEGREE EXAMINATION – APRIL, 2018
ANAESTHESIOLOGY

**Paper-II : Clinical Sciences in relation to Anaesthesiology
including recent advances**

Time: 3 Hours

Max. Marks:100

**Note: Answer all questions
All questions carry equal marks
Draw neat diagrams wherever necessary**

1. Anaesthetic management of 69 year old patient posted for emergency laparotomy in view of possible intestinal perforation
2. Discuss the problems and management of a patient posted for neuro surgery in sitting position.
3. What are causes and management of postoperative shivering?
4. Describe the effects of smoking and its anesthetic implication.
5. Discuss the anesthetic management of strangulated inguinal hernia in a patient with history of recent M.I
6. Describe the anesthetic management options available for cervical cerclage
7. What are Anesthetic management of 68 years old patient with I.H.D and diabetes posted for cataract extraction
8. Describe Anesthetic management of patient with mitral stenosis posted for non cardiac surgery.
9. Describe monitored anesthesia care
10. Describe the anesthetic management of a 4 years old child posted for circumcision

Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – APRIL, 2018

ANAESTHESIOLOGY

Paper-III : Principles and Practice of Anaesthesiology

Max. Marks:100

Time: 3 Hours

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Anesthetic management of full term pregnant lady posted for emergency caesarian section
2. Anesthetic management of a young adult patient posted for extradural hematoma evacuation
3. Describe the preoperative evaluation, optimization, intraoperative and postoperative management of 45 year old man with thyroid malignancy posted for total thyroidectomy.
4. Anesthetic management of new born baby with congenital diaphragmatic hernia posted for emergency surgery
5. Describe the various blood components therapy
6. Anaesthetic management of a patient with carcinoma larynx posted for total laryngectomy
7. Preoperative evaluation, preparation and anesthetic management of 45 year old patient posted for emergency laparotomy
8. Discuss the preoperative assessment and management of a patient with TM joint Ankylosis posted for release.
9. Describe the various techniques to block sciatic nerve and describe any one technique in detail with associated complications
10. Anaesthetic management of BPH (Benign Prostatic Hyperplasia)

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M.D. DEGREE EXAMINATION – APRIL, 2018

ANAESTHESIOLOGY

Paper-IV : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

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WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Management of a head injury patient in critical care unit. Describe the modalities that are available to reduce intracranial pressure.
2. How do you assess autonomic neuropathy in a diabetic patient. Enumerate the various methods available for intra operative glycemic control.
3. Describe the various blood substitutes available for clinical use.
4. Describe patient controlled analgesia for chronic pain relief.
5. Describe the diagnosis of ventricular fibrillation and pulseless ventricular tachycardia and its management.
6. Indication and use of amiodarone in clinical practice.
7. Enumerate the causes of epidural hematoma, its prevention and management
8. Describe the pharmacodynamics of sevoflurane
9. Describe the various methods of endotracheal suction in an adult patient on I.C.U Ventilator
10. What is eutectic mixture of local anesthetic and its uses?

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Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – **DECEMBER**, 2017

ANAESTHESIOLOGY

Paper-I : Basic Sciences in relation to Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Discuss the role of Venturi principle in anesthetic practice
2. Describe the anatomy of tracheobronchial tree. Discuss positions for postural drainage and their significance in pre and postoperative care.
3. Write a short note on Phase II blockade by neuromuscular blockers.
4. Rocuronium
5. Write short note on Capnography.
6. Describe pain pathways and discuss various modalities for control of chronic pain in geriatric patients.
7. What are alpha 2 agonists? Discuss pharmacodynamic properties of alpha 2 agonists and their uses in anaesthesia
8. Differentiate between parametric and non parametric tests of significance.
9. Describe the mechanical and electrical events during cardiac cycle
10. Classify Beta blockers. Discuss their use in anaesthesia

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Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – **DECEMBER**, 2017

ANAESTHESIOLOGY

Paper-II : Clinical Sciences in relation to Anaesthesiology
including recent advances

Time: 3 Hours

Max. Marks:100

Note: Answer all questions
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Draw neat diagrams wherever necessary

1. Discuss the current concepts and guidelines of cardio cerebral resuscitation
2. Describe the causes of acute pulmonary edema and its management
3. Anesthetic considerations in a patient scheduled for knee arthroscopy
4. Anaesthetic management of a patient with multiple fibroid uterus posted for myomectomy
5. Describe the anesthetic management of a hemodynamically unstable patient with fracture Pelvis for emergency traction.
6. Anaesthetic management of a patient with bronchopleural fistula
7. Management of intraoperative myocardial ischemia in a patient undergoing non cardiac surgery.
8. Clinical uses of APGAR scoring
9. Anaesthetic management of a patient posted for posterior fossa surgery
10. Preoperative evaluation and anesthetic management of obese patient posted for incisional hernia

Q.P.CODE:114-NR

Dr. NTR University of Health Sciences::Vijayawada-520 008
M.D. DEGREE EXAMINATION – **DECEMBER**, 2017

ANAESTHESIOLOGY

Paper-III : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

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Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Anesthetic management of 80 years old man undergoing surgery for fracture neck of femur
2. Describe the characteristic of ideal fluid for T.U.R.P and methods of monitoring patient undergoing T.U.R.P
3. Describe the various methods to conserve blood during surgery
4. Anesthetic management of myasthenia gravis patient posted for thymectomy
5. Anesthesia management of liver transplantation
6. Anaesthetic considerations for laparoscopic surgery
7. Describe the causes and management of disseminated intravascular clotting
8. Anesthetic management for extra ocular surgery
9. Describe hypoxic pulmonary vasoconstriction.
10. What is day care surgery? How do you plan for out patient Anesthesia?

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M.D. DEGREE EXAMINATION – **DECEMBER**, 2017

ANAESTHESIOLOGY

Paper-IV : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

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WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Describe the various positions for anesthesia and surgery and its advantages and disadvantages
2. Describe in detail about hypotension anesthesia and the various methods to achieve it.
3. Describe the clinical uses of esmolol
4. What is adult respiratory distress syndrome? Describe its management in ICU.
5. Describe the applied physiology of I.P.P.V (Intermittent positive pressure ventilation)
6. Describe the various methods of weaning off the patient from ventilator in I.C.U setup.
7. Describe the clinical signs and symptoms of septic shock, its diagnosis and management in ICU
8. Methods of assessment of pain and management of chronic cancer pain.
9. Discuss high frequency positive pressure ventilation
10. Diagnosis of brain death and its medico legal implication

MAY-2017

Q.P.CODE:112-NR

DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA
M.D. DEGREE EXAMINATION – MAY, 2017

ANAESTHESIOLOGY

Paper-I : Basic Sciences in relation to Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Classify local Anaesthetics. Describe the adverse effects of local Anaesthetics.
2. Indications and contraindications for succinylcholine use in anesthesia.
3. Pathophysiology of cardiac and hematologic dysfunction in liver cirrhosis
4. Describe the mechanism of normal thermoregulation
5. Enumerate the factors affecting the uptake and distribution of volatile anesthetic agent
6. Describe anatomy of Cerebral Circulation
7. Describe the physiology of neuromuscular junction and what is the mechanism of action of non-depolarizing muscle relaxants
8. Describe the anatomy of tracheobronchial tree. Discuss positions for postural drainage and their significance in pre and postoperative care.
9. First public demonstration of the anesthesia
10. Pathophysiology of negative pressure pulmonary edema

Dr. NTR University of Health Sciences::Vijayawada-520 008
M.D. DEGREE EXAMINATION – MAY, 2017

ANAESTHESIOLOGY

Paper-II : Clinical Sciences in relation to Anaesthesiology
including recent advances

Time: 3 Hours

Max. Marks:100

Note: Answer all questions
All questions carry equal marks
Draw neat diagrams wherever necessary

1. Describe the preoperative preparation and anaesthetic management of a patient with carcinoma of right lung posted for right pneumonectomy.
2. Describe anesthetic management of obstructed inguinal hernia
3. Describe local anaesthetic technique for intraocular surgery
4. Anesthetic management of Ruptured Ectopic pregnancy
5. Timing of Surgery and Anesthetic challenges in Cleft lip and Palate
6. Enumerate the effects of smoking and its anesthetic importance
7. Causes and management of postoperative shivering
8. Describe axillary brachial plexus block
9. Discuss failed intubation drill in obstetrics
10. Describe the management of raised intracranial pressure

Q.P.CODE:114-NR

Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – MAY, 2017

ANAESTHESIOLOGY

Paper-III : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Preanesthetic evaluation, preparations, intraoperative and postoperative management adult patient with obstructive jaundice posted for Whipple's procedure.
2. Describe the Anaesthetic management of a neonate posted for ileal atresia
3. Describe the modern trends in obstetric analgesia
4. Management of mismatched blood transfusion reaction under general anesthesia
5. Describe the prevention and management of T.U.R.P syndrome
6. Options for postoperative analgesia for an elderly patient who has undergone total hip replacement
7. What are the nerves involved three-in-one block? Describe how you perform three-in-one block.
8. Describe predisposing factors, diagnosis and treatment of thyroid storm
9. Describe how you perform interscalene brachial plexus block.
10. Discharge criteria for day care surgery

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Q.P.CODE:115-NR

Dr. NTR University of Health Sciences::Vijayawada-520 008

M.D. DEGREE EXAMINATION – MAY, 2017

ANAESTHESIOLOGY

Paper-IV : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Compare the merits and demerits of regional blocks and opioids for pain relief in advanced cancer
2. Describe the management of near drowning victim found unconscious on sea beach brought to your intensive care unit
3. What are the signs of anaphylaxis in a patient under general anesthesia describe the tests performed to confirm anaphylaxis and its management
4. Fibre optic intubation
5. How does the burn pain differ from acute postoperative pain? Describe the anesthetic management during adult burns dressing in the surgical ward.
6. Describe the management of road traffic accident victims admitted in I.C.U with head injury
7. Describe the role of corticosteroids in medicine
8. Describe the anesthetic techniques for day care anesthesia. What is positive end expiratory pressure?
9. Anesthetic management for robotic surgery.
10. Describe the visual analogue scale (V.A.S)

DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA
M.D. DEGREE EXAMINATION – MAY, 2016

ANAESTHESIOLOGY

Paper-I : Basic Sciences in relation to Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Write the causes of Hospital Acquired Infections (HAI). How will you plan for prevention of HAI in ICU?
2. Define cardiac output. Describe the factors affecting cardiac output.
3. Discuss muscles of respiration and describe the mechanism of respiration.
4. Discuss the medicolegal aspects of anaesthesia practice.
5. Write a note on James Young Simpson
6. Briefly describe thermoregulation in the human body. Discuss the impact of perioperative hypothermia
7. What are the functions of liver? Describe the anaesthetic implication of ascites and its management.
8. Classify local anaesthetics. Discuss their mode of action. How will you treat lignocaine toxicity?
9. What is Dead Space? Define Minute Ventilation. Under what conditions is minute ventilation increased?
10. What are the different types of carbon-dioxide absorbents? Describe their composition, advantages and disadvantages of each.

Dr. NTR University of Health Sciences::Vijayawada-520 008
M.D. DEGREE EXAMINATION – MAY, 2016

ANAESTHESIOLOGY

Paper-II : Clinical Sciences in relation to Anaesthesiology
including recent advances

Time: 3 Hours

Max. Marks:100

Note: Answer all questions
All questions carry equal marks
Draw neat diagrams wherever necessary

1. Describe the pulmonary and cardiac function changes following central neuraxial block
2. Describe the criteria for weaning off patient on ventilator support
3. Write short notes on Xenon.
4. What are the various causes of intraoperative desaturation? Write a troubleshooting plan for managing a patient who has developed intraoperative desaturation.
5. Describe various methods of detection of venous air embolism and its management
6. Discuss the problems and management of anaesthesia for an elderly patient with compromised Left Ventricular Function.
7. Describe the role of Day care anaesthesia in pediatric surgical procedures. What are the special problems?
8. Discuss ankle block.
9. What are the causes and clinical features of hyperkalemia? Describe its management.
10. Discuss AIDS and anaesthesia

DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA

M.D. DEGREE EXAMINATION – MAY, 2016

ANAESTHESIOLOGY

Paper-III : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Discuss the preoperative evaluation and management of a 72 year old patient with history of hypertension and ischaemic heart disease posted for gastrectomy.
2. Causes of delayed recovery after anaesthesia and line of management
3. Discuss pharmacokinetics and pharmacodynamics of clonidine and its role in clinical practice.
4. Discuss hemodynamic and metabolic changes during aortic clamping and unclamping. Describe renal protective measures during aortic clamping.
5. Define hypokaliemia. What are the clinical manifestations of hypokaliemia? How would you treat hypokaliemia intraoperatively?
6. What is cerebral autoregulation? Discuss the implications of various inhalational anaesthetic agents on cerebral autoregulation.
7. What are the signs and symptoms of organophosphorus poisoning? Discuss its management.
8. Describe common intraoperative arrhythmias and their management.
9. Discuss pain management options in a patient with intractable pain related to carcinoma head of pancreas.
10. Define base excess. How do kidneys compensate for acid base imbalance?

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DR NTR UNIVERSITY OF HEALTH SCIENCES:: VIJAYAWADA

M.D. DEGREE EXAMINATION – MAY, 2016

ANAESTHESIOLOGY

Paper-IV : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. What is Total Parenteral Nutrition? Discuss composition, indications, contraindications, complications and management during Total Parenteral Nutrition.
2. An 82 year old man, Diabetic and Hypertensive is posted for transurethral resection of bladder tumour. Discuss the preoperative assessment, preparation and anaesthetic management and implications to anesthesiologist.
3. Write a note on fast tracking in ambulatory surgery.
4. Recent advances in CPR
5. Discuss preoperative assessment and anaesthetic management of a brain dead patient scheduled for organ harvesting.
6. What are the indications for one lung ventilation? How would you manage hypoxemia during one lung ventilation?
7. Discuss the role of Vasopressors and Vasodilators in Anaesthesia.
8. Enumerate the safety features of the model anaesthesia work station. Describe the features to prevent delivery of hypoxic gas mixtures.
9. Recent advances in the management of acute lung injury
10. Discuss the management of post tonsillectomy bleeding in a 6 year old child

M.D. DEGREE EXAMINATION – APRIL, 2015

ANAESTHESIOLOGY

Paper-I : Basic Sciences in relation to Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

WRITE SHORT ESSAYS ON THE FOLLOWING:

1. Describe the portal circulation. Mention the liver function tests and its implication to anaesthesia.
2. Draw the oxygen dissociation curve. Discuss the implications in anaesthesia.
3. Write a note on body temperature regulation.
4. Describe factors affecting spread of Local Anaesthetics and the causes of failed regional block.
5. What are the factors affecting the uptake of anaesthetic gases?
6. Describe Neuromuscular transmission and factors modifying neuromuscular blocking action of muscle relaxation.
7. Write a note on John Snow.
8. Write a note on Supraglottic airway devices.
9. Describe the types of needle used for central neuraxial blockade.
10. What are the electrical hazards and their precautions in the OT?

M.D. DEGREE EXAMINATION – APRIL, 2015

ANAESTHESIOLOGY

Paper-II : Clinical Sciences in relation to Anaesthesiology
including recent advances

Time: 3 Hours

Max. Marks:100

Note: Answer all questions
All questions carry equal marks
Draw neat diagrams wherever necessary

1. Detail the anaesthetic management in a patient aged 60 years posted for posterior cranial fossa tumor.
2. What are the anaesthetic implications in ophthalmic anaesthesia?
3. Write a note on outcome predictions in ICU patients.
4. Describe the pre-op evaluation and anaesthetic management of a one month old child with biliary atresia scheduled for laparotomy and repair.
5. Define Post Dural Puncture Headache. Describe its clinical features and management.
6. Describe the role of transesophageal echocardiography (TEE) in hemodynamic monitoring of a patient with coronary artery disease scheduled for surgery under general anaesthesia.
7. Enumerate the methods available for pain relief in patients with carcinoma pancreas. Describe coeliac plexus block with the help of a diagram
8. Briefly describe the pharmacokinetics and pharmacodynamics of dexmedetomidine. What is its role in clinical practice?
9. Describe the techniques and complications of internal jugular venous cannulation
10. Discuss indications, technique and complications of caudal epidural block in children.

M.D. DEGREE EXAMINATION – APRIL, 2015
ANAESTHESIOLOGY

Paper-III : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

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6. What is cerebral autoregulation? Discuss the implications of various inhalational anaesthetic agents on cerebral autoregulation.
7. What are the signs and symptoms of organophosphorus poisoning? Discuss its management.
8. Describe common intraoperative arrhythmias and their management.
9. Detail the anaesthetic management, complications and post operative management in a child aged 5 years presenting for correction of Strabismus
10. Define base excess. How do kidneys compensate for acid base imbalance?

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115-NR

M.D. DEGREE EXAMINATION – APRIL, 2015
ANAESTHESIOLOGY
Paper-IV : Principles and Practice of Anaesthesiology

Time: 3 Hours

Max. Marks:100

Note: Answer all questions

All questions carry equal marks

Draw neat diagrams wherever necessary

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3. Write a note on fast tracking in ambulatory surgery.
4. What are the methods of neuromuscular monitoring? Explain train of four stimulation
5. Discuss preoperative assessment and anaesthetic management of a brain dead patient scheduled for organ harvesting.
6. What are the indications for one lung ventilation? How would you manage hypoxemia during one lung ventilation?
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