[LE 145] **APRIL 2014** **Sub. Code: 2040**

M.D. DEGREE EXAMINATION
BRANCH X –ANAESTHESIOLOGY
APPLIED BASIC SCIENCES RELATED TO ANAESTHESIA INCLUDING PHYSICS IN ANAESTHESIA, HISTORY OF ANAESTHESIA

Q.P. Code :202040

Time : Three Hours **Maximum : 100 marks**

I. Elaborate on: **(2X15=30)**

1. What are the indications of one lung ventilation. Discuss the pathophysiology of hypoxemia during one lung ventilation. Discuss the treatment of hypoxemia during one lung ventilation.

2. How do you do airway examination of an adult. Explain the American Society of Anaesthesiologist's difficult airway algorithm.

II. Write notes on: **(10X7=70)**

1. Draw and explain left ventricular pressure – volume loop.
2. Oxyhemoglobin dissociation curve.
3. Minimum alveolar concentration.
4. Describe the neuro muscular monitoring characteristics of non depolarising neuromuscular blocking drugs .
5. Discuss use of Fenoldopam and Dopamine in high risk renal dysfunction patients.
6. Hagen-Poiseuille equation and its anaesthetic implications.
7. W.T.G.Morton.
8. Anaesthetic implications of Angiotensin converting enzyme inhibitors drugs.
9. Describe the anatomy of coronary arterial blood supply.
10. Describe a single breath gas wash out curve of capnography.

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