# First Year MBBS

Physiology I

# Summer 2015

1. **Section B: SAQ (6 x 4 = 24)**

**Short answer questions (Any six out of seven):**

1. What are peripheral chemoreceptors? Enumerate their characteristics and functions.
2. Draw and label a normal ECG trace as seen in Lead II. Mark the various intervals that are measured on the ECG.
3. What is the CNS ischaemic response? Mention its clinical significance.
4. Enumerate the characteristics of the Pulmonary circulation.
5. Enumerate the indicators of ovulation in a woman. What is its clinical significance?
6. Enumerate the physiological changes that constitute acclimatisation to high altitude. What is the significance of these changes?
7. **Section C: (LAQ) (2 x 8 = 16)**

**Long answer question (Any two out of three):**

1. With the help of a neat labelled diagram, enumerate the steps in the synthesis and release of Thyroid Hormone. What is the physiological basis of action of anti-thyroid drugs?
2. Describe the transport of carbon dioxide in the body. Explain the Haldane effect and its significance to carbon dioxide transport.
3. Define cardiac cycle. With the help of a neat labelled diagram, illustrate the pressure and volume changes that occur in the Left Ventricle during a cardiac cycle. What is responsible for the third and fourth heart sounds?