

First Year MASLP Degree Examinations - November 2013

**AUDITORY PHYSIOLOGY**

**Time: 3 Hours**

**Max Marks: 80**

- Answer all questions

**Essay**

**(5x16=80)**

- 1 Describe ear canal transfer function, resonance and head shadow effect. Add a note on the anatomy of the external ear and compare it with that of primates. Explain briefly the muscles, blood supply and innervations of the auricle. (6+5+5)
- 2 What is the role of acoustic reflex in hearing. What mechanism in the neuro-auditory pathway mediates reflex phenomenon. Describe the anatomy and physiology of the eustachian tube. (8+8)
- 3 Discuss cochlear potentials. Describe the mechanical transduction in outer hair cells (6+10)
- 4 How do you analyze the functioning of the efferent auditory pathway. Explain the course of the facial nerve and its importance in auditory physiology. (8+8)
- 5 Describe the role of neurotransmitters in precipitating disorders of the auditory system. Explain this with reference to noise induced hearing loss and tinnitus. (16)

\*\*\*\*\*