

MANIPAL UNIVERSITY

FIRST MBBS DEGREE EXAMINATION – AUGUST 2011

SUBJECT: PHYSIOLOGY– PAPER I (ESSAY)

Friday, August 12, 2011

Time: 10:20 – 13:00 Hrs.

Maximum Marks: 40

- ✍ **All questions are compulsory. Write brief, clear and legible answers.**
- ✍ **Illustrate your answers with diagrams and flow charts wherever appropriate.**

1. Name pain receptor. Trace the pathways of pain sensation from face, trunk and extremities. Explain the mechanism of referred pain. (1+5+4 = 10 marks)

2. Describe the manifestations of:
 - i) deficiency of parathyroid hormone
 - ii) excessive secretion of parathyroid hormone(3+3 = 6 marks)

3. Name all the refractive media of the eye ball and specify the role of each in image formation in eye. What is the defect in presbyopia and astigmatism? How do you correct them? (3+2+1 = 6 marks)

- 4A. Explain how nerve degeneration and regeneration occurs after it is cut. (1½+1½ = 3 marks)
- 4B. Mention any two indicators of ovulation. Describe any one of them. (1+2 = 3 marks)
- 4C. Enumerate four clinical features of Parkinson's disease. Explain any one. (2+1 = 3 marks)
- 4D. Name three features of Cushing's syndrome. Explain their basis. (1½+1½ = 3 marks)
- 4E. Explain the physiological basis of oral contraceptive pills. (3 marks)
- 4F. Draw a diagram showing taste pathway from the anterior 2/3 of the tongue. Explain the meaning of the term "ageusia and dysgeusia". (3 marks)



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SUBJECT: PHYSIOLOGY– PAPER II (ESSAY)

Saturday, August 13, 2011

Time: 10:20 – 13:00 Hrs.

Maximum Marks: 40

- ✍ All questions are compulsory. Write brief, clear and legible answers.
✍ Illustrate your answers with diagrams and flow charts wherever appropriate.

1. Describe the origin and spread of cardiac impulse. Explain with the diagram the effect of parasympathetic stimulation on pace maker activity and heart rate.
(5+5 = 10 marks)
 2. Describe the functions of Thrombocytes. Mention a test to assess thrombocyte function.
(5+1 = 6 marks)
 3. Describe the role of bile in digestion and absorption of fat.
(3+3 = 6 marks)
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- 4A. What is timed vital capacity? Give its importance as a lung function test.
(2+1 = 3 marks)
 - 4B. Outline the role of skin in body temperature regulation in a cold environment.
(3 marks)
 - 4C. Draw and describe cystometrogram.
(1½+1½ = 3 marks)
 - 4D. Define dyspnea and apnea. Give one example for each.
(½+½+1+1 = 3 marks)
 - 4E. Draw a normal limb lead to ECG and what is cause of the 1st positive wave.
(2+1 = 3 marks)
 - 4F. What is apex beat? Mention its clinical significance.
(3 marks)

