Q.P CODE: 1201

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

Post Graduate Degree Examination – April / May 2011

Time: 3 Hrs.

[Max. Marks : 100]

M.D. PHYSIOLOGY

PAPER - I

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary. Answer all questions



LONG ESSAY

 $2 \times 20 = 40 \text{ Marks}$

- 1. Discuss the Ionic Fluxes seen in Action Potential in a Myelinated nerve.
- 2. Describe the role of various feedback mechanisms in maintenance of milieu interior in human body.

SHORT ESSAY

6X 10 = 60 Marks

- 3. Intercellular connections
- 4. Human genome
- 5. Poiseuille- Hagen formula
- 6. Describe the structural and functional differences between amphibian and mammalian hearts
- 7. Contribution of Starling to Physiology
- 8. Glucose Transporters in mammals

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Q.P CODE: 1202

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH (A DEEMED TO BE UNIVERSITY)

Post Graduate Degree Examination – April / May 2011

Time: 3 Hrs.

[Max. Marks: 100]

M.D. PHYSIOLOGY

PAPER - II

Your answers should be specific to the questions asked. Draw neat labelled diagrams wherever necessary. Answer all questions



LONG ESSAY

 $2 \times 20 = 40 \text{ Marks}$

- 1. Describe in detail the regulation of heart rate.
- 2. Discuss in detail the various types of anaemia with suitable examples.

SHORT ESSAY

 $6X\ 10 = 60 \text{ Marks}$

- 3. Mucosal barrier
- 4. Kidney as an endocrine gland
- 5. Hypoxic hypoxia
- 6. Mountain sickness
- 7. Transfusion reactions and their physiological basis
- 8. Oxygen debt

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Q.P CODE: 1203

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH (A DEEMED TO BE UNIVERSITY)

Post Graduate Degree Examination – April / May 2011

Time: 3 Hrs.

[Max. Marks: 100]

M.D. PHYSIOLOGY

PAPER - III

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary. Answer all questions



LONG ESSAY

 $2 \times 20 = 40 \text{ Marks}$

- 1. Describe in detail the role of hormones in growth
- 2. Describe in detail the role of cerebellum and basal ganglia in the control of movement

SHORT ESSAY

6X 10 = 60 Marks

- 3. Non metabolic functions of cortisol
- 4. Physiological basis of polyphagia, polydipsia and polyuria in diabetes mellitus
- 5. Compare the skeletal muscle contraction with that of the smooth muscle
- 6. Saturday night palsy
- 7. Slow wave sleep
- 8. Aphasia



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[Max. Marks: 100]

M.D. PHYSIOLOGY

PAPER - IV

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary. Answer all questions



LONG ESSAY

 $2 \times 20 = 40 \text{ Marks}$

- 1. Describe the neural circuits in olfactory bulb. Trace the olfactory pathway. Add a note on abnormalities of smell sensation.
- 2. Describe how lactation is initiated and maintained. Add a note on Gynaecomastia

SHORT ESSAY

 $6X\ 10 = 60\ Marks$

- 3. Mechanism of action of photoreceptor in rods
- 4. Discuss the control of onset of puberty in male. Add a note on delayed puberty in female.
- 5. Oral Contraceptive pill
- 6. Abnormalities of sex chromosomes
- 7. Describe the effect of ageing on audition and vision
- 8. Describe the influence of pranayama on respiratory functions

