

**Rajiv Gandhi University of Health Sciences, Karnataka**  
**I Year B.Sc. Optometry Degree Examination - 20-Nov-2024**

**Time: Three Hours**

**Max. Marks: 100 Marks**

**GENERAL ANATOMY AND GENERAL PHYSIOLOGY (RS-4)**

**Section B: GENERAL PHYSIOLOGY– (50 Marks)**

**Q.P. CODE: 3342**

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

**(Note: Both QP Codes 3341 and 3342 are to be answered within total duration of 3 hours)**

**LONG ESSAYS (First Question Choice)**

**1 x 10 = 10 Marks**

1. Define Erythropoiesis. Discuss the stages and factors affecting erythropoiesis.

**Or**

What are functions of three types of muscle? Write a brief note on physiology of muscle contraction in skeletal muscle.

**SHORT ESSAYS (Question No 5 choice)**

**5 x 5 = 25 Marks**

2. Functions of liver.
3. Define cardiac output. Mention the factors regulating it.
4. What is excretion? Describe the process of urine formation with diagram of nephron.
5. Synthesis, action and functions of thyroid hormones.

**Or**

Zones of adrenal cortex-hormones and functions.

6. Mechanism of respiration.

**SHORT ANSWER (Question No. 10 choice)**

**5 x 3 = 15 Marks**

7. What is fertilization, ovulation and gametogenesis.
8. Islet cell of langerhans and its function.
9. Functions of large intestine.
10. Define Synapse and its types.

**Or**

Define Neuron and its types.

11. Heart sounds.

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