

**PARUL UNIVERSITY**  
**FACULTY OF HOMOEOPATHY**  
**BHMS, Examination October - 2017**

Year: 1

Subject Code: 04101103

Subject Name: Physiology &amp; Biochemistry Paper-I

Date: 07/10/2017

Time: 10:00 am to 01:00 pm

Total Marks: 100

**Instructions:**

1. Attempt all questions from each section
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Write section-A, section-B on separate answer sheets.
5. Draw diagrams wherever necessary.

**SECTION: A**

**Q.1** What is erythropoiesis? Describe in detail different stages & its regulation. (15)

**OR**

**Q.1** What is cardiac output? Enumerate various factors affecting it. (15)

**Q.2** Which are the different blood groups? How are they determined & what are the hazards of mismatched blood transfusion? (15)

**OR****Q.2 Write notes on:-**

a) Describe the functions of spleen (08)

b) Properties of cardiac muscle fibres (07)

**Q.3 Write short notes (any three)** (15)

a) Apex beat

b) Functions of WBC

c) Osmosis

d) Mitochondria

e) Anaemia

**Q.4 Write answer in short** (05)

a) Define Homeostasis

b) What is the normal Hb level in males?

c) Define diffusion

d) What is known as pacemaker of heart?

e) What is the life span of RBC?

**SECTION: B**

**Q.1** Describe transport of carbon dioxide from tissues to lungs. (15)

**OR**

**Q.1** Describe in detail Micturition reflex. (15)

**Q.2** Define GFR. Describe in detail factors affecting it. (15)

**OR****Q.2 Write notes on:-**

a) Oxygen dissociation curve (08)

b) JGA (07)

**Q.3 Write short notes (any three)** (15)

a) Surfactant

b) Functions of skin

c) Counter current mechanism

d) Simple muscle curve

e) Cyanosis

**Q.4 Write answer in short** (05)

a) Define Hypoxia

b) Which are different glands of skin?

c) Define Neurotransmitter

d) What is normal GFR?

e) Define vital capacity.