

# PHYSIOLOGY QUESTION BANK – BLOOD (TNMGRMU)

BPT / Allied Health Sciences | University Examination Pattern

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## 1. COMPOSITION AND FUNCTIONS OF BLOOD

### Very Short Answer (2 Marks – Knowledge)

1. Define blood.
2. List the components of blood.
3. Mention any two functions of blood.
4. What is plasma?

### Short Answer (5 Marks – Understanding)

1. Describe the composition of blood.
2. Explain the functions of plasma proteins.

### Long Answer (10 Marks – Analysis)

1. Describe in detail the composition and functions of blood.
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## 2. RED BLOOD CELLS (RBC)

### Very Short Answer (2 Marks – Knowledge)

1. Define erythrocyte.
2. State normal RBC count.
3. What is erythropoiesis?

### Short Answer (5 Marks – Understanding)

1. Describe the morphology of RBC.
2. Explain formation of RBC.
3. Write the functions of RBC.

### Long Answer (10 Marks – Analysis)

1. Describe morphology, formation, normal count and functions of RBC.
  2. Explain physiological and pathological variations in RBC count.
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## 3. WHITE BLOOD CELLS (WBC)

### Very Short Answer (2 Marks – Knowledge)

1. Define leukocyte.
2. State normal WBC count.
3. Name the types of WBC.

### Short Answer (5 Marks – Understanding)

1. Describe morphology of WBC.
2. Explain formation of WBC.
3. Write the functions of WBC.

### Long Answer (10 Marks – Analysis)

1. Describe morphology, formation, normal count and functions of WBC.
  2. Explain physiological and pathological variations of WBC count.
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## 4. BLOOD PLATELETS

### Very Short Answer (2 Marks – Knowledge)

1. Define platelets.
2. State normal platelet count.

### Short Answer (5 Marks – Understanding)

1. Describe morphology of platelets.
2. Explain formation of platelets.
3. Write functions of platelets.

### **Long Answer (10 Marks – Analysis)**

1. Describe morphology, formation, normal count and functions of platelets.
  2. Explain variations in platelet count.
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## **5. HEMOGLOBIN**

### **Very Short Answer (2 Marks – Knowledge)**

1. Define hemoglobin.
2. State normal hemoglobin level.

### **Short Answer (5 Marks – Understanding)**

1. Describe basic chemistry of hemoglobin.
2. Explain functions of hemoglobin.

### **Long Answer (10 Marks – Analysis)**

1. Describe structure, functions and fate of hemoglobin.
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## **6. BLOOD CLOTTING**

### **Very Short Answer (2 Marks – Knowledge)**

1. Define blood clotting.
2. Name any two clotting factors.

### **Short Answer (5 Marks – Understanding)**

1. List the clotting factors.
2. Explain intrinsic and extrinsic pathways of blood clotting.

### **Long Answer (10 Marks – Analysis)**

1. Describe theories and mechanism of blood clotting.

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## 7. BLOOD GROUPS

### Very Short Answer (2 Marks – Knowledge)

1. Define blood group.
2. List ABO blood groups.

### Short Answer (5 Marks – Understanding)

1. Explain ABO blood group system.
2. Describe Rh blood group system.

### Long Answer (10 Marks – Analysis)

1. Describe ABO and Rh blood group systems and their clinical importance.
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## 8. BLOOD VOLUME AND REGULATION

### Very Short Answer (2 Marks – Knowledge)

1. Define blood volume.
2. State normal blood volume.

### Short Answer (5 Marks – Understanding)

1. Explain regulation of blood volume.

### Long Answer (10 Marks – Analysis)

1. Describe blood volume and its regulation.
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## 9. BLOOD TRANSFUSION

### **Very Short Answer (2 Marks – Knowledge)**

1. Define blood transfusion.
2. Mention indications for blood transfusion.

### **Short Answer (5 Marks – Understanding)**

1. Explain cross-matching.
2. Write complications of blood transfusion.

### **Long Answer (10 Marks – Evaluation)**

1. Describe principles, indications, complications and precautions of blood transfusion.
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✓ **Strictly based on TNMGRMU syllabus**

✓ **University-oriented 2, 5 & 10 mark questions**

✓ **Suitable for BPT / Allied Health Sciences**