

# MD[ Physiology ]

BF/2009/05

## General Physiology [Paper-I]

**Time : 3 Hours**

**M.M.: 100**

*Note: Attempt all questions.*

1. Discuss the physiology of Human Genome. [30]
  
2. **Write short notes on the following:**
  - a. Intercellular communication. [10]
  - b. Radio immunoassay. [10]
  - c. Diffusion. [10]
  - d. Structure of cell membrane. [10]
  
3. Discuss G protein and disease related to it. [30]

-----

# MD[ Physiology ]

BF/2009/05

## Clinical sciences as related to Physiology

[Paper-II]

**Time : 3 Hours**

**M.M.: 100**

*Note: Attempt all questions.*

1. Discuss pathophysiology of Diabetes mellitus. Justify, it is more a "disease of disturbance in lipid metabolism" than of Carbohydrate metabolism. [34]
  2. **Write physiological basis of:** [3x11=33]
    - a. Aganglionic megacolon.
    - b. Cardiac arrhythmias.
    - c. Sleep apnoea.
  3. **Write short notes on:** [3x11=33]
    - a. Obesity.
    - b. Hyper Osmolar coma.
    - c. Oxygen toxicity.
-

# MD[ Physiology ]

BF/2009/05

## Biophysics, Biochemistry & Histology related to systemic physiology [Paper-III]

Time : 3 Hours

M.M.: 100

*Note: Attempt all questions.*

1. Discuss in detail, Arterial compliance may influence baro-reflex functions in Athletes and hypertensive. [30]
  
  2. Discuss the image-forming mechanism and its defects and correction. [30]
  
  3. **Write short notes on any TWO of the following:** [2x20=40]
    - a. Born-again-bone.
    - b. Genetic basis of dwarfism.
    - c. Types of Patch clamps.
-

# MD[ Physiology ]

BF/2009/05

## Systemic Physiology including recent advances [Paper-IV]

**Time : 3 Hours**

**M.M.: 100**

*Note: Attempt all questions.*

1. Discuss the role of Juxtaglomerular cell complex in regulation of renal salt excretion. [25]
  
  2. **Write notes on the following:** [3x15=45]
    - a. Pace maker potential.
    - b. Measurement of Coronary blood flow.
    - c. Carbon dioxide dissociation curve.
  
  3. **Discuss briefly:** [3x10=30]
    - a. Red cell fragility.
    - b. Hyperbaric Oxygen therapy.
    - c. Intestinal bacteria.
-