

# B.Sc. [ Medical (Part-II) ]

BF/2008/11

## Anatomy

M.M. : 100

Time : 3 Hours

*Note: Attempt all questions.*

1. Describe type, formation, ligaments, movements, blood supply and nerve supply of Shoulder Joint. [16]
  2. **Enumerate:** [5x3=15]
    - a. Muscles of forearm having common flexor origin.
    - b. Branches of thoracic aorta.
    - c. Structures in posterior mediastinum.
    - d. Groups of axillary lymph nodes.
    - e. Branches of deep palmar arch.
  3. **Draw labeled histological diagrams of:** [4x5=20]
    - a. Cardiac muscle.
    - b. Trachea.
    - c. Vermiform appendix.
    - d. Uterine tube.
  4. **Write briefly:** [3x7=21]
    - a. Derivatives of paramesonephric ducts in females.
    - b. Development of second part of duodenum.
    - c. Derivatives of ureteric bud.
  5. **Write briefly:** [2x7=14]
    - a. Dupuytren's contracture.
    - b. Carpel tunnel syndrome.
  6. **Write short notes on:** [2x7=14]
    - a. Arch of aorta.
    - b. Conducting system of Heart.
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## Physiology

M.M. : 100

Time : 3 Hours

*Note: Attempt any FIVE questions. Illustrate your answers with suitable diagrams.*

1. Describe the neural regulation of Respiration. [20]
  2. Discuss the events of excitation contraction coupling. [20]
  3. **Draw labeled diagrams of the following:** [10+10]
    - a. Growth curves of various body organs after birth.
    - b. Action potentials of Cardiac muscle.
  4. **Write short notes on:**
    - a. Acclimatization, [7]
    - b. Wallerian degeneration. [7]
    - c. Apoptosis. [6]
  5. **Write in brief on:**
    - a. Coronary circulation. [7]
    - b. Surfactant. [7]
    - c. Dietary fibres. [6]
  6. **Write briefly on:**
    - a. Antioxidants. [7]
    - b. Resting membrane potential. [7]
    - c. Starling Law of heart. [6]
  7. **Write short notes on:**
    - a. Vitamin K. [7]
    - b. Hormonal regulation of BP. [7]
    - c. Dead space. [6]
  8. Describe protein calorie malnutrition. Enumerate the main factors which precipitate it. How it can be prevented. [20]
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## Biochemistry

M.M. : 100

Time : 3 Hours

*Note: Attempt any FIVE questions.*

- 1a. Describe the process of Glycolysis in detail with its energetics. [10]  
1b. Give an account of biological significance of Cholesterol. [10]
- 2a. Discuss Diabetes Mellitus. [10]  
2b. Discuss metabolic functions of growth hormone. [10]
- 3a. **Write short notes on:** [5+5]  
i) Fluoride.  
ii) Zinc.
- 3b. Biological importance of Phenylalanine. [10]
- 4a. Discuss synthesis of Thyroid hormone. [10]  
4b. Give source of Carbon and Nitrogen in Purines and Pyrimidines. [10]
- 5a. Discuss  $\beta$  - oxidation (of fats) with its energetics. [10]  
5b. Discuss Atherosclerosis in detail. [10]
- 6a. **Write short notes on:** [5+5]  
i) Phenylketonuria.  
ii) Acromegaly.
- 6b. Discuss biochemical actions of epinephrine. [10]
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