

**MANIPAL UNIVERSITY**  
**FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2010**

**SUBJECT: MEDICINE**  
**(NEW REGULATION)**

Tuesday, June 08, 2010

Time: 10:00-13:00 Hrs

Maximum Marks: 80

1. Define and classify diabetes mellitus. Enumerate the acute and chronic complications of diabetes mellitus. Discuss the management of diabetic ketoacidosis.

(2+4+4 = 10 marks)

**2. Write short notes on any SIX of the following:**

- 2A. Clinical features of Mitral Regurgitation.
- 2B. Porto Systemic Encephalopathy [Hepatic Coma].
- 2C. Enumerate the Liver Function Tests.
- 2D. Clinical Features and Treatment of Acute Myeloid Leukemia.
- 2E. Opportunistic Infections in AIDS.
- 2F. Physical Effects of Alcohol.
- 2G. Clinical Features of Vitamin B12 Deficiency.
- 2H. Complications of Cirrhosis of Liver.

(5×6 = 30 marks)

3. Enumerate the causes of pleural effusion. Discuss the Clinical features, diagnosis and management of tubercular effusion.

(2+2+3+3 = 10 marks)

**4. Write short notes on any SIX of the following:**

- 4A. Pulmonary function tests.
- 4B. Pyrexia of unknown origin.
- 4C. Chronic hepatitis.
- 4D. Clinical features of chronic renal failure.
- 4E. Iron Deficiency anaemia.
- 4F. Clinical features of poisonous snake bite.
- 4G. Hyperkalemia.
- 4H. Cushing's disease.

(5×6 = 30 marks)



**MANIPAL UNIVERSITY**  
**FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2010**  
**SUBJECT: SURGERY**  
**(NEW REGULATION)**  
Thursday, June 10, 2010

Time: 10:00-13:00 Hrs

Maximum Marks: 80

✂ **Answer Section "A" and Section "B" in TWO Separate Answer Books.**

**SECTION "A" : CARDIOVASCULAR AND THORACIC SURGERY : 40 MARKS**

1. Discuss chest trauma with emphasis on life threatening injuries. Enumerate the indications and post-operative care of intercostal drainage.

(10 marks)
2. Describe the risk factors of coronary artery disease. Discuss in detail coronary artery bypass graft.

(10 marks)
3. **Write short notes on any TWO:**
  - 3A. Discuss pulmonary tuberculosis with an emphasis on surgical interventions required.
  - 3B. Discuss indications for surgery and surgical options in mitral valve disease.
  - 3C. Discuss surgical management of peripheral vascular disease.

(10×2 = 20 marks)

**SECTION "B" : GENERAL SURGERY : 40 MARKS**

4. Define and classify wounds. Discuss the process of wound healing. Describe the phases of scar formation and add a note on ideal scar.

(10 marks)
5. Define shock. Discuss various types of shock. Describe clinical monitoring and treatment of shock.

(10 marks)
6. **Write short notes on any FOUR:**
  - 6A. Discuss types of Regional anaesthesia
  - 6B. Discuss Systemic Inflammatory Response Syndrome (SIRS)?
  - 6C. Describe types of abdominal incisions.
  - 6D. Discuss management of anal incontinence.
  - 6E. Discuss Glaucoma.

(5×4 = 20 marks)



**MANIPAL UNIVERSITY****FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2010****SUBJECT: COMMUNITY MEDICINE AND SOCIOLOGY****(NEW REGULATION)**

Saturday, June 12, 2010

Time 10:00-13:00 Hours

Maximum Marks: 80

✗ **Answer ALL questions.**✗ **Answer SECTION 'A' and SECTION 'B' in TWO separate answer books.****SECTION 'A': COMMUNITY MEDICINE : 40 MARKS**

- 1A. Discuss epidemiology of Leprosy.  
1B. Mention the deformities in Leprosy.  
1C. Discuss the scope of rehabilitation in a leprosy patient.

(5+2+3 = 10 marks)

- 2A. Define pneumoconiosis.  
2B. Mention different pneumoconiosis, with their causative factors.  
2C. Describe engineering methods of prevention of them.

(1+4+5 = 10 marks)

**3. Write short notes on:**

- 3A. Different modes of disease prevention.  
3B. Enumerate nutritional deficiency disorders.  
3C. Write an overview of services provided to mothers in Reproductive and Child Health (RCH) Program.  
3D. Discuss briefly health care system in India.

(5×4 = 20 marks)

**SECTION 'B': SOCIOLOGY : 40 MARKS**

4. What are norms? Explain the importance of social norms.  
5. Name any four problems of Indian society. Discuss the causes and suggest remedies for any two.

(2+8 = 10 marks)

(2+4+4 = 10 marks)

6. The knowledge of culture is helpful in the treatment of patients- Discuss.

(10 marks)

**7. Write short notes on the following:**

- 7A. Life style and health.  
7B. List the legislations related to health of the workers and the disabled.

(5+5 = 10 marks)





# MANIPAL UNIVERSITY

## FOURTH YEAR B.P.T DEGREE EXAMINATION – JUNE 2010

### SUBJECT: RESEARCH METHODOLOGY AND BIostatISTICS (NEW REGULATION)

Tuesday, June 15, 2010

Time: 10:00-13:00 Hrs.

Max. Marks: 80

☞ **Answer ALL questions.**

1A. Explain the meaning of dependent and independent variable with example.

1B. Write briefly the steps involved in research process.

(5+5 = 10 marks)

2A. Describe Systematic random sampling.

2B. Enumerate the merits and demerits of systematic random sampling.

2C. List the advantages of sampling.

(4+(2+1)+3 = 10 marks)

3A. Blood serum cholesterol levels of 10 subjects are as under:

240    260    290    245    255    285    275    263    277    250

Calculate its Mean and standard deviation.

3B. Discuss the interpretation of Correlation Coefficient.

(6+4 = 10 marks)

4A. Explain the terms Incidence and prevalence.

4B. Describe the characteristics of case series and cross sectional studies.

(4+(3+3) = 10 marks)

5A. What do you mean by specific death rates? State their uses.

5B. Define health information system. List the uses of health information system.

(5+5 = 10 marks)

**6. Write short note on:**

6A. Scales of measurement.

6B. Skewness and Kurtosis.

6C. Normal distribution.

6D. Reliability and validity.

6E. Bar diagram and histogram.

6F. Sample registration system.

(5×6 = 30 marks)

**MANIPAL UNIVERSITY****FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2010****SUBJECT: PHYSIOTHERAPY IN CARDIOPULMONARY AND GENERAL CONDITIONS  
(NEW REGULATION)**

Thursday, June 17, 2010

Time: 10:00-13:00 Hrs

Maximum Marks: 80

**1. Long Answers:**

- 1A. Define cardiac rehabilitation. Write indications for cardiac rehabilitation. Discuss physiotherapy management for 10 year old girl who has undergone atrial septal defect closure
- 1B. Define Chronic Obstructive Pulmonary Disease. Discuss acute and long term rehabilitation of a patient with Chronic Obstructive Pulmonary Disease.

 $((2+8)+(2+8) = 20 \text{ marks})$ **2. Short Notes:**

- 2A. Write the causes, clinical features and physiotherapy management of bronchiectasis.
- 2B. Enumerate the types of mechanical ventilators and discuss the different modes of ventilation.
- 2C. Discuss the postoperative management of right upper lobectomy.
- 2D. Write on anatomical and biomechanical differences in respiratory system of neonate.
- 2E. Discuss indications for pulmonary function test and add a note on PFT changes in restrictive lung disease.
- 2F. Draw a neat diagram and position for the following segments:
- i) right posterior segment of upper lobe
- ii) left lower lobe posterior segment
- 2G. Discuss the postoperative physiotherapy management for abdominal surgery.
- 2H. Describe the indications, contraindications and complications of incentive spirometry.

 $(5 \times 8 = 40 \text{ marks})$ **3. Brief Notes:**

- 3A. Enumerate the reference values for arterial blood gas parameters.
- 3B. Write two hazards of smoking.
- 3C. What is ankle brachial index.
- 3D. ECG presentation in inferior wall myocardial infarction.
- 3E. How many number of joints and muscles are there in thorax and chest wall?
- 3F. Name two ways to deliver oxygen in neonates.
- 3G. Name the type of joint –manubriosternal and costovertebral joint.
- 3H. Name four sub maximal exercise testing protocols.
- 3I. Write four advantages of upright position.
- 3J. Write four contraindications postural drainage.

 $(2 \times 10 = 20 \text{ marks})$ 

# MANIPAL UNIVERSITY

## FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2010

### SUBJECT: COMMUNITY BASED REHABILITATION (NEW REGULATION)

Saturday, June 19, 2010

Time: 10:00-13:00 Hrs

Maximum Marks: 80

☞ **Answer ALL questions:**

**1. Long Answers:**

- 1A. Write the Physiotherapy care for patient with motor neuron disease. (10 marks)
- 1B. What is Repeated Stress Injury? Explain the role of Physiotherapy in its prevention and management. (2+8 = 10 marks)

**2. Brief Answers:**

- 2A. Epidemiology of the leprosy.
- 2B. Explain the details of ESI Act.
- 2C. Write in detail any TWO theories of aging.
- 2D. Describe the methods that can be undertaken for prevention of obesity.
- 2E. Describe the role of Non Government Organisations.
- 2F. Explain the role of postnatal care.
- 2G. Explain the management for CTEV.
- 2H. Explain the chronic adaptations to exercise in elderly. (5×8 = 40 marks)

**3. Short Answers:**

- 3A. Mention FOUR advantages of exercise in post-menopausal women.
- 3B. Mention FOUR roles of a social worker in community rehabilitation.
- 3C. Mention FOUR advantages of institution based rehabilitation.
- 3D. Mention principles of foot care in Diabetes.
- 3E. Differentiate between osteopenia and osteoporosis.
- 3F. Name the FOUR complications during labour.
- 3G. Name the levels of disease prevention.
- 3H. Define work hardening.
- 3I. Mention FOUR ergonomic advices for degenerative arthritis of the knee.
- 3J. Define incontinence. (2×10 = 20 marks)





# MANIPAL UNIVERSITY

## FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2010

### SUBJECT: EXERCISE PHYSIOLOGY AND ELECTRODIAGNOSIS (NEW REGULATION)

Monday, June 21, 2010

Time: 10:00-13.00 Hrs

Maximum Marks: 80

- ✍ **Answer both section – A and section – B in same answer book.**  
 ✍ **Answer all questions.**

### SECTION – A – EXERCISE PHYSIOLOGY

#### 1. Essay questions:

What are the chronic adaptations of the cardiovascular, respiratory and thermoregulatory systems to exercise?

(4+3+3 = 10 marks)

#### 2. Brief answers:

- 2A. Energy expenditure measurement.  
 2B. Management of chronic fatigue.  
 2C. Write the Bruce protocol.  
 2D. Ergogenic aids of sports performance.

(5×4 = 20 marks)

#### 3. Short answers:

- 3A. Define VO<sub>2</sub> max.  
 3B. Define anaerobic threshold.  
 3C. Define physical work capacity.  
 3D. Write any FOUR uses of water.  
 3E. Define Power.

(2×5 = 10 marks)

### SECTION –B - ELECTRODIAGNOSIS

#### 4. Essay questions:

Write the indications of Nerve conduction velocity studies and write the normal values.

(10 marks)

#### 5. Brief answers:

- 5A. Explain stages of EMG activity with types of abnormal potentials.  
 5B. Mechanism and procedure of EMG biofeedback.  
 5C. Write about H reflex.  
 5D. Write about blink reflex.

(5×4 = 20 marks)

#### 6. Short answers:

- 6A. Resting membrane potential.  
 6B. Define F wave.  
 6C. Define Neurotmesis.  
 6D. Define Chronaxie.  
 6E. Write any FOUR disadvantages of nerve conduction studies.

(2×5 = 10 marks)



**MANIPAL UNIVERSITY****FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2010****SUBJECT: ETHICS/ADMINISTRATION AND TEACHING SKILLS  
(NEW REGULATION)**

Wednesday, June 23, 2010

Time: 10:00-11.30 Hrs

Maximum Marks: 40

**✍ Answer ALL questions.****1. Essay:**

Write in detail the ethical principles declared by WCPT.

(10 marks)

**2. Short notes:**

2A. Basic principles of bioethics as postulated by Thomas Beauchamp.

2B. Consumer Protection Act.

2C. Needs of documentation.

2D. Requirements need to be met by an institution to get affiliation from IAP.

(5×4 = 20 marks)

**3. Brief answer:**

3A. What is autonomy?

3B. Name two organizations that fund research works.

3C. What is distributive justice?

3D. Various modes of documentation.

3E. Name the modes of public education.

(2×5 = 10 marks)

