MANIPAL UNIVERSITY

FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2008

SUBJECT: GENERAL MEDICINE
(OLD REGULATION)

Wednesday, December 10, 2008

Time: 10.00-13.00 Hours   Maximum Marks: 80

✍ Answer **ALL** questions.

1. What is Acute myocardial infarction? Discuss aetiopathogenesis, clinical features, diagnosis and management of AMI.

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

2. What is pneumonia? Discuss aetiology, complications, clinical features and Management of pneumonia.

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

3. Write short notes on any **SIX** of the following:
3A. Diabetic Ketoacidosis.
3B. Cholera.
3C. Addison's disease.
3D. Acute glomerulonehritis.
3E. Snake bite.
3F. Hyperkalemia.
3G. Pleural effusion.
3H. Filariasis.

(5×6 = 30 marks)

4. Write short note on any **SIX** of the following.
4A. Mitral stenosis.
4B. Hemolytic anaemia.
4C. Metabolic acidosis.
4D. Alcoholic liver disease.
4E. Bronchiectasis.
4F. Nephrotic syndrome.
4G. Leprosy.
4H. Cardiopulmonary resuscitation (CPR).

(5×6 = 30 marks)

※※※※※

MANIPAL UNIVERSITY
FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2008
SUBJECT: MEDICINE
(NEW REGULATION)

Wednesday, December 10, 2008

Time: 10.00-13.00 Hours   Maximum Marks: 80

✍ Answer **ALL** questions.

1. What is Acute myocardial infarction? Discuss aetiopathogenesis, clinical features, diagnosis and management of AMI.

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

2. What is pneumonia? Discuss aetiology, complications, clinical features and Management of pneumonia.

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

3. Write short notes on any **SIX** of the following:
3A. Diabetic Ketoacidosis.
3B. Cholera.
3C. Addison's disease.
3D. Acute glomerulonehritis.
3E. Snake bite.
3F. Hyperkalemia.
3G. Pleural effusion.
3H. Filariasis.

    (5×6 = 30 marks)

4. Write short note on any **SIX** of the following.
4A. Mitral stenosis.
4B. Hemolytic anaemia.
4C. Metabolic acidosis.
4D. Alcoholic liver disease.
4E. Bronchiectasis.
4F. Nephrotic syndrome.
4G. Leprosy.
4H. Cardiopulmonary resuscitation (CPR).

    (5×6 = 30 marks)

〰〰〰〰〰

MANIPAL UNIVERSITY

FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2008

SUBJECT: SURGERY
(NEW REGULATION)

Thursday, December 11, 2008

Time: 10.00-13.00 Hours   Maximum Marks: 80

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

SECTION A: CARDIOVASCULAR AND THORACIC SURGERY : 40 MARKS

1. Describe segmental anatomy of lungs. Discuss the indications, types, complications and post-operative care of pulmonary resections.

    (10 marks)

2. Discuss the clinical features and investigation of peripheral vascular disease. Discuss endoscopic and surgical management options for peripheral vascular disease.

    (10 marks)

3. Write short notes on any **TWO**:
3A. Discuss various types of Diaphragmatic hernia.
3B. Discuss Ventricular septal defect.
3C. Discuss management of chest trauma.

    (10×2 = 20 marks)

SECTION B: GENERAL SURGERY : 40 MARKS

4. What are the clinical features of cholecystitits? Discuss surgical treatment and post-operative complications of cholecytistis.

    (10 marks)

5. Classify burns. Discuss management and complications of burns.

    (10 marks)

6. Write short notes on any **FOUR**:
6A. Discuss water intoxication.
6B. Discuss Hypokalaemia.
6C. Discuss surgical management of inguinal hernia.
6D. Describe types of flaps in plastic surgery.
6E. Discuss Glaucoma.

    (5×4 = 20 marks)

MANIPAL UNIVERSITY

FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2008

SUBJECT: COMMUNITY MEDICINE AND SOCIOLOGY
(NEW REGULATION)

Friday, December 12, 2008

Time: 10.00-13.00 Hours   Maximum Marks: 80

✍   Answer SECTION 'A' and SECTION 'B' in TWO separate answer books.

SECTION 'A': COMMUNITY MEDICINE – 40 MARKS

1A.   Classify immunizing agents with examples.

1B.   Enumerate the National immunization Schedule.

(5+5 = 10 marks)

2.   Write short notes on:

2A.   Epidemiology of Poliomyelitis.

2B.   Objectives of antenatal care.

2C.   Prevention of obesity.

2D.   Levels of disease prevention with examples.

2E.   ESI Act.

2F.   Universal work precautions.

(5×6 = 30 marks)

SECTION 'B': SOCIOLOGY – 40 MARKS

✍   Answer ALL questions.

3.   Explain the features of caste system and its trends.

(6+4 = 10 marks)

4.   Define socialization. Discuss the role of socialization in the rehabilitation of patients.

(2+8 = 10 marks)

5.   What is culture? What is the impact of culture on human behavior?

(2+8 = 10 marks)

6.   Write short notes on the following:

6A.   Prevention of Juvenile Delinquency.

6B.   Meaning of sub-culture with examples.

(5+5 = 10 marks)

✾✾✾✾✾

MANIPAL UNIVERSITY

FOURTH YEAR B.P.T DEGREE EXAMINATION – DECEMBER 2008

SUBJECT: RESEARCH METHODOLOGY AND BIOSTATISTICS
(NEW REGULATION)

Saturday, December 13, 2008

Time: 10.00-13.00 Hrs.   Max. Marks: 80

✍ **Answer all questions:**

1A. Define the various types of variables. Give one example for each of them.

1B. Classify the following into different scales of measurement.

   i)   Age   ii)   Severity of disease   iii) Number of tasks completed

   iv) Diagnosis   v)   Weight

                                                    (5+5 = 10 marks)

2A. What is meant by central tendency? Enumerate the different measures of central tendency. Explain briefly the advantages and disadvantages of each.

2B. The following is data collected from ten individuals on the time taken (in minutes) to complete a task to assess functional ability:

12, 14, 13, 15, 16, 18, 17, 14, 14, 15

Calculate the (i) range and (ii) standard deviation.

                                           ((1+2+6)+5 = 14 marks)

3. Differentiate between probability and non probability sampling. Describe briefly the simple random sampling and stratified random sampling with merits and demerits.

                                                 (3+4 = 7 marks)

4A. What are the characteristics of a good research hypothesis?

4B. Suppose it is known that the weight of a certain group of individuals are approximately normally distributed with a mean of 62Kgs and a standard deviation of 8 Kgs. What is the probability that a person picked up at random will weigh

   i)   Between 54 and 80 Kgs

   ii)   Less than 70 Kgs

   iii)   More than 46 Kgs

4C. With the help of diagrams explain the properties of correlation coefficient.

                                              (5+6+5 = 16 marks)

5. Thirty employees of a general hospital were asked to perform a certain task. The time in minutes required for each employee to complete the task were recorded. The results are as follows:

1.3,	1.5,	1.4,	1.5,	1.7
1.0,	1.3,	1.7,	1.2,	1.8
1.1,	1.0,	1.8,	1.6,	2.1
2.1,	1.1,	1.5,	1.8,	2.4
2.0,	1.3,	1.7,	1.9,	2.0
1.8,	2.3,	2.2,	1.4,	1.9

a) Make a frequency distribution table using intervals from 1.0 – 1.3, 1.4 – 1.7, etc.

b) Obtain the relative frequency.

c) What percentage of subjects completed the task before 1.7 minutes?

(8 marks)

6A. What is health information system? What are the requirements of health information system? Enumerate the sources of health information.

6B. Briefly discuss any four fertility indicators.

6C. In a village of population 80,000 it was observed that there were 1400 births during the year 2006. About 840 of these new born died before the completion of the age one year. What is the infant mortality rate for this village in 2006?

((2+4+3)+4+2 = 15 marks)

7. What is epidemiology? What are the aims of epidemiology? Briefly describe the descriptive epidemiological methods.

(1+3+6 = 10 marks)

꧁꧂꧁꧂꧁꧂

MANIPAL UNIVERSITY

FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2008

SUBJECT: ETHICS/ADMINISTRATION AND TEACHING SKILLS
(NEW REGULATION)

Monday, December 15, 2008

Time: 10.00-11.30 Hours   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 to get affiliation from IAP.

                                                          ($5\times4 = 20$ marks)

3.   **Brief answers:**

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.

                                                          ($2\times5 = 10$ marks)

Reg. No.											

MANIPAL UNIVERSITY

FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2008

SUBJECT: PHYSIOTHERAPY IN GENERAL CONDITIONS
(OLD REGULATION)

Tuesday, December 16, 2008

Time: 10.00-13.00 Hours

Maximum Marks: 80

✍ **Answer ALL questions**

1. **Essay Questions:**

1A. Describe the pathogenesis/pathophysiology of Restrictive pulmonary conditions. Describe the physiotherapy management of Interstitial Lung Disease with rationale.

1B. Define Cardiac Rehabilitation. Discuss in detail the Phase II cardiac rehabilitation for patient with coronary artery bypass graft.

(10×2 = 20 marks)

2. **Short Notes:**

2A. Strength training in COPD patients.

2B. Active Cycle of Breathing Technique.

2C. Six minute walk test.

2D. Indications and contraindication for Tracheotomy.

2E. Modes of mechanical ventilator.

2F. Respiratory Acidosis.

2G. Exercise prescription for peripheral artery disease.

2H. Physiotherapy modalities for venous ulcer.

(5×8 = 40 marks)

3. **Brief Notes:**

3A. Two PFT finding in Obstructive conditions.

3B. Silhouettes sign.

3C. Two characteristic of Bronchial breath sound.

3D. PEEP.

3E. Define pulmonary rehabilitation.

3F. Body mass Index.

3G. Two radiological features of Pleural effusion.

3H. Postural drainage for Right upper lobe apical segment.

3I. Define autogenic drainage.

3J. Two pulmonary complication of upper abdominal surgery.

(2×10 = 20 marks)

MANIPAL UNIVERSITY

FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2008

SUBJECT: PHYSIOTHERAPY IN CARDIOPULMONARY AND GENERAL CONDITIONS
(NEW REGULATION)

Tuesday, December 16, 2008

Time: 10.00-13.00 Hours   Maximum Marks: 80

✎ **Answer ALL questions**

1.   **Essay Questions:**

1A. Describe the pathogenesis/pathophysiology of Restrictive pulmonary conditions. Describe the physiotherapy management of Interstitial Lung Disease with rationale.

1B. Define Cardiac Rehabilitation. Discuss in detail the Phase II cardiac rehabilitation for patient with coronary artery bypass graft.

(10×2 = 20 marks)

2.   **Short Notes:**

2A. Strength training in COPD patients.

2B. Active Cycle of Breathing Technique.

2C. Six minute walk test.

2D. Indications and contraindication for Tracheotomy.

2E. Modes of mechanical ventilator.

2F. Respiratory Acidosis.

2G. Exercise prescription for peripheral artery disease.

2H. Physiotherapy modalities for venous ulcer.

(5×8 = 40 marks)

3.   **Brief Notes:**

3A. Two PFT finding in Obstructive conditions.

3B. Silhouettes sign.

3C. Two characteristic of Bronchial breath sound.

3D. PEEP.

3E. Define pulmonary rehabilitation.

3F. Body mass Index.

3G. Two radiological features of Pleural effusion.

3H. Postural drainage for Right upper lobe apical segment.

3I. Define autogenic drainage.

3J. Two pulmonary complication of upper abdominal surgery.

(2×10 = 20 marks)

𝕏𝕆𝕏𝕆𝕏

MANIPAL UNIVERSITY

FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2008

SUBJECT: PHYSIOTHERAPY IN COMMUNITY
(OLD REGULATION)

Wednesday, December 17, 2008

Time: 10.00-13.00 Hours   Maximum Marks: 80

✍ **Answer ALL questions**

1. **Essay questions.**

1A. Role of physiotherapy in Diabetes Mellitus.

1B. Preventive measures for low backache in industrial workers.

(10×2 = 20 marks)

2. **Short Notes:**

2A. Role of social worker in community based rehabilitation.

2B. Thermal influence on sports performance.

2C. Barrier modification for wheel chair bound paraplegic.

2D. Physiotherapy in stress incontinence.

2E. Work hardening.

2F. P. T management in tennis elbow for a cricket player.

2G. Percentage calculation in disability for upper and lower limb.

2H. Aging on musculoskeletal system.

(5×8 = 40 marks)

3. **Brief Answers:**

3A. Normal value of Body Mass Index.

3B. Name any two theories of aging.

3C. Mention any two benefits for visually handicapped in India.

3D. Mention any two hazards of air pollution.

3E. Name any four complications during pregnancy.

3F. Physiotherapy treatment of choice for pelvic inflammatory disease.

3G. Mention any four rationales for the necessity of exercise in post menopausal women.

3H. Name any four agencies involved in CBR for physically handicapped.

3I. Mention four roles of occupational therapist in CBR.

3J. Mention four merits of CBR over institution based rehabilitation.

(2×10 = 20 marks)

☙❧

MANIPAL UNIVERSITY

FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2008

SUBJECT: COMMUNITY BASED REHABILITATION
(NEW REGULATION)

Wednesday, December 17, 2008

Time: 10.00-13.00 Hours   Maximum Marks: 80

✍ **Answer ALL questions**

1.   **Essay questions.**

1A.   Role of physiotherapy in Diabetes Mellitus.
1B.   Preventive measures for low backache in industrial workers.

(10×2 = 20 marks)

2.   **Short Notes:**

2A.   Role of social worker in community based rehabilitation.
2B.   Thermal influence on sports performance.
2C.   Barrier modification for wheel chair bound paraplegic.
2D.   Physiotherapy in stress incontinence.
2E.   Work hardening.
2F.   P. T management in tennis elbow for a cricket player.
2G.   Percentage calculation in disability for upper and lower limb.
2H.   Aging on musculoskeletal system.

(5×8 = 40 marks)

3.   **Brief Answers:**

3A.   Normal value of Body Mass Index.
3B.   Name any two theories of aging.
3C.   Mention any two benefits for visually handicapped in India.
3D.   Mention any two hazards of air pollution.
3E.   Name any four complications during pregnancy.
3F.   Physiotherapy treatment of choice for pelvic inflammatory disease.
3G.   Mention any four rationales for the necessity of exercise in post menopausal women.
3H.   Name any four agencies involved in CBR for physically handicapped.
3I.   Mention four roles of occupational therapist in CBR.
3J.   Mention four merits of CBR over institution based rehabilitation.

(2×10 = 20 marks)

MANIPAL UNIVERSITY
FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2008
SUBJECT: EXERCISE PHYSIOLOGY AND ELECTRODIAGNOSIS
(NEW REGULATION)
Thursday, December 18, 2008

Time: 10.00-13.00 Hours   Maximum Marks: 80

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

SECTION – A

1. **Essay question:**
   Define Electromyography. Explain the normal and abnormal potentials during minimal volitional activity of EMG.

   (2+5+3 = 10 marks)

2. **Short notes:**
2A. Factors affecting the nerve conduction studies.
2B. F wave.
2C. Electrodiagnostic difference between neuropraxia and axonotmesis.
2D. Threshold detector and its implication in physiotherapy.

   (5×4 = 20 marks)

3. **Brief Answers:**
3A. Insertional activity.
3B. What is gain and sweep speed?
3C. Mention any two indications for H reflex study.
3D. Mention any four needle electrodes used in EMG.
3E. What is chronaxie?

   (2×5 = 10 marks)

SECTION – B

4. **Essay question:**
   Define fatigue. Explain the causes and management of the same.

   (2+4+4 = 10 marks)

5. **Short notes:**
5A. Chronic neurological adaptations following exercise.
5B. Ergogenic aids.
5C. Exercise in high altitude.
5D. Measurement techniques of energy expenditure.

   (5×4 = 20 marks)

6. **Brief Answers:**
6A. Define sedentary individual.
6B. Define VO_2 Max.
6C. Mention any two complications of prolonged immobilization.
6D. Define microgravity.
6E. Define periodization.

   (2×5 = 10 marks)