MANIPAL UNIVERSITY
FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2008
SUBJECT: GENERAL MEDICINE
(OLD REGULATION)

Monday, June 16, 2008

Time available: 3 Hours   Maximum Marks: 80

✍ Answer **ALL** questions.

1.   What is A.I.D.S.? Discuss opportunistic infection. Clinical features, diagnosis and management.

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

2.   What is Cirrhosis of liver? Discuss aetiopathogenesis. Clinical features complications and management.

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

3.   Write short note on any **SIX** of the following:
3A. Respiratory failure.
3B. Infective endocarditis.
3C. Megaloblastic anaemia.
3D. Leprosy.
3E. Cushings syndrome.
3F. Aortic regurgitation.
3G. Acute viral hepatitis.
3H. Hyperkalemia.

(5×6 = 30 marks)

4.   Write short note on any **SIX** of the following.
4A. Complications of obesity.
4B. Acute severe asthma.
4C. Organophoshorous comound poisoning.
4D. Nephrotic syndrome.
4E. Osteomalacia.
4F. Hypothyroidism.
4G. Multiple myeloma.
4H. Pyrexia of unknown origin (PUO).

(5×6 = 30 marks)

MANIPAL UNIVERSITY

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

SUBJECT: MEDICINE
(NEW REGULATION)

Monday, June 16, 2008

Time available: 3 Hours   Maximum Marks: 80

✍   Answer **ALL** questions.

1.   What is A.I.D.S? Discuss opportunistic infection, Clinical features and diagnosis and management.

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

2.   What is Cirrhosis of liver? Discuss aetiopathogenesis, Clinical features complications and management.

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

3.   Write short note on any **SIX** of the following:
3A.   Respiratory failure.
3B.   Infective endocarditis.
3C.   Megaloblastic anaemia.
3D.   Leprosy.
3E.   Cushings syndrome.
3F.   Aortic regurgitation.
3G.   Acute viral hepatitis.
3H.   Hyperkalemia.

$(5×6 = 30$ marks$)$

4.   Write short note on any **SIX** of the following.
4A.   Complications of obesity.
4B.   Acute severe asthma.
4C.   Organophosphorous comound poisoning.
4D.   Nephrotic syndrome.
4E.   Osteomalacia.
4F.   Hypothyroidism.
4G.   Multiple myeloma.
4H.   Pyrexia of unknown origin (PUO).

$(5×6 = 30$ marks$)$

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MANIPAL UNIVERSITY
FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2008
SUBJECT: SURGERY
(NEW REGULATION)
Tuesday, June 17, 2008

Time available: 3 Hours   Maximum Marks: 80

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

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

1. Discuss types of congenital heart disease. Describe types, clinical features and management of ventricular septal defect.

                                                                        (10 marks)

2. Discuss the types and clinical features of malignant tumours of lungs. Describe the evaluation, types of biopsy and management of tumours of lungs.

                                                                        (10 marks)

3. Write short notes on any **TWO**
3A. Discuss coronary artery bypass surgery.
3B. Discuss management of chest trauma.
3C. Discuss surgical management of peripheral vascular disease.

                                                                  (10×2 = 20 marks)

SECTION "B" : GENERAL SURGERY : 40 MARKS

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

                                                                        (10 marks)

5. Describe types of skin grafts and flaps.

                                                                        (10 marks)

6. Write short notes on any **FOUR**
6A. Discuss clinical features and management of incisional hernia.
6B. Discuss Benign prostatic hypertrophy.
6C. Discuss testing of visual field and refraction.
6D. Discuss Modified radical mastectomy.
6E. Discuss management of carcinoma oesophagus.

                                                                  (5×4 = 20 marks)

MANIPAL UNIVERSITY

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

SUBJECT: COMMUNITY MEDICINE AND SOCIOLOGY
(NEW REGULATION)

Wednesday, June 18, 2008

Time available: 3 Hours   Maximum Marks: 80

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

SECTION 'A': COMMUNITY MEDICINE : 40 MARKS

1A. What are the causes of Blindness?
1B. What are the possible occupational eye health services available?
1C. What are the rehabilitation measures you suggest for a patient with blindness?

(3+3+4 = 10 marks)

2. Discuss Acute Respiratory tract Infection under following heads:
2A. Epidemiology
2B. Prevention

(5+5 = 10 marks)

3. Write short notes on:
3A. Universal work precautions
3B. ESI Act
3C. Disaster cycle
3D. Uses of epidemiology

(5×4 = 20 marks)

SECTION 'B': SOCIOLOGY : 40 MARKS

✍ **Answer ALL questions.**

4. What is health? Discuss the social factors affecting health status.

(2+8 = 10 marks)

5. What are social groups? Discuss the influence of formal and informal groups on health sickness.

(2+8 = 10 marks)

6. Explain the causes and consequences of unemployment.

(5+5 = 10 marks)

7. Write short notes on the following:
7A. Effect of sickness on family.
7B. Problems of women at employment.

(5+5 = 10 marks)

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MANIPAL UNIVERSITY

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

SUBJECT: PHYSIOTHERAPY IN GENERAL CONDITIONS
(OLD REGULATION)

Thursday, June 19, 2008

Time available: 3 Hours   Maximum Marks: 80

✎   **Answer ALL questions.**

1.   **Essay questions:**
1A.   Write in detail about the components of pulmonary rehabilitation relevant to physiotherapy.
1B.   Explain the physiological changes associates with supine, prone and half lying positions.

(10×2 = 20 marks)

2.   **Short notes:**
2A.   What are the anatomic and physiological difference between an adult and pediatric respiratory system?
2B.   Write in brief about the various modes of mechanical ventilation.
2C.   Write in brief about the various modes of oxygen delivery and the physical principles governing each.
2D.   Classify and write in brief about the types of humidifiers.
2E.   Write in brief about all the methods employed to enhance lung expansion.
2F.   Enlist precautions while performing endotracheal suctioning.
2G.   Write in brief non invasive monitoring parameters relevant to Physiotherapists.
2H.   Write in brief about the assisted coughing techniques.

(5×8 = 40 marks)

3.   **Brief answers:**
3A.   What is Zone of Apposition?
3B.   What is isothermic saturation boundary?
3C.   What is haldane effect?
3D.   What is oxygen toxicity?
3E.   What is the criteria to diagnose respiratory failure?
3F.   What are the complications of radiation therapy relevant to physiotherapists?
3G.   What is an equal pressure point?
3H.   What are the phases of coughing?
3I.   What is an air bronchogram?
3J.   Classify adventitious breath sounds.

(2×10 = 20 marks)

MANIPAL UNIVERSITY

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

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

Thursday, June 19, 2008

Time available: 3 Hours   Maximum Marks: 80

✍ **Answer ALL questions.**

1.   **Essay questions:**

1A.   Write in detail about the components of pulmonary rehabilitation relevant to physiotherapy.

1B.   Explain the physiological changes associates with supine, prone and half lying positions.

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

2.   **Short notes:**

2A.   What are the anatomic and physiological difference between an adult and pediatric respiratory system?

2B.   Write in brief about the various modes of mechanical ventilation.

2C.   Write in brief about the various modes of oxygen delivery and the physical principles governing each.

2D.   Classify and write in brief about the types of humidifiers.

2E.   Write in brief about all the methods employed to enhance lung expansion.

2F.   Enlist precautions while performing endotracheal suctioning.

2G.   Write in brief non invasive monitoring parameters relevant to Physiotherapists.

2H.   Write in brief about the assisted coughing techniques.

$(5 \times 8 = 40 \text{ marks})$

3.   **Brief answers:**

3A.   What is Zone of Apposition?

3B.   What is isothermic saturation boundary?

3C.   What is haldane effect?

3D.   What is oxygen toxicity?

3E.   What is the criteria to diagnose respiratory failure?

3F.   What are the complications of radiation therapy relevant to physiotherapists?

3G.   What is an equal pressure point?

3H.   What are the phases of coughing?

3I.   What is an air bronchogram?

3J.   Classify adventitious breath sounds.

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

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MANIPAL UNIVERSITY
FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2008
SUBJECT: COMMUNITY BASED REHABILITATION
(NEW REGULATION)

Friday, June 20, 2008

Time available: 3 Hours   Maximum Marks: 80

✍ **Answer ALL questions**

1. **Essay questions:**

1A. What would be the role of a PT in a multidisciplinary community health team? Elucidate with the help of the example of a 25 year old T12-L1 paraplegic.

(10 marks)

1B. What is early intervention? What are the benefits of an early intervention approach? What are the challenges to the implementation of such a programme in rural India?

(2+3+5 = 10 marks)

2. **Short notes:**

2A. Discuss barriers.

2B. Legislative remedies available to PWD in India.

2C. Home modification for a housewife with RA.

2D. Theories of aging.

2E. Principles of work hardening.

2F. Advantages of antenatal exercises.

2G. Role of exercises in delaying aging.

2H. CTD in computer professionals.

(5×8 = 40 marks)

3. **Brief answers:**

3A. Diastasis recti.

3B. Stress incontinence.

3C. Define functional capacity evaluation.

3D. ICF classification.

3E. Role of NGOs in CBR.

3F. Cardiovascular changes with aging.

3G. Risk factors for falls in the elderly.

3H. Care of anaesthetic feet.

3I. PT role in dementia.

3J. Risk factors for osteoporosis.

(2×10 = 20 marks)

MANIPAL UNIVERSITY
FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2008
SUBJECT: PHYSIOTHERAPY IN COMMUNITY
(OLD REGULATION)

Friday, June 20, 2008

Time available: 3 Hours   Maximum Marks: 80

✍ **Answer ALL questions**

1. **Essay questions:**

1A. What would be the role of a PT in a multidisciplinary community health team? Elucidate with the help of the example of a 25 year old T12-L1 paraplegic.

(10 marks)

1B. What is early intervention? What are the benefits of an early intervention approach? What are the challenges to the implementation of such a programme in rural India?

(2+3+5 = 10 marks)

2. **Short notes:**

2A. Discuss barriers.

2B. Legislative remedies available to PWD in India.

2C. Home modification for a housewife with RA.

2D. Theories of aging.

2E. Principles of work hardening.

2F. Advantages of antenatal exercises.

2G. Role of exercises in delaying aging.

2H. CTD in computer professionals.

(5×8 = 40 marks)

3. **Brief answers:**

3A. Diastasis recti.

3B. Stress incontinence.

3C. Define functional capacity evaluation.

3D. ICF classification.

3E. Role of NGOs in CBR.

3F. Cardiovascular changes with aging.

3G. Risk factors for falls in the elderly.

3H. Care of anaesthetic feet.

3I. PT role in dementia.

3J. Risk factors for osteoporosis.

(2×10 = 20 marks)

MANIPAL UNIVERSITY
FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2008
SUBJECT: EXERCISE PHYSIOLOGY AND ELECTRODIAGNOSIS
(NEW REGULATION)
Saturday, June 21, 2008

Time available: 3 Hours   Maximum Marks: 80

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

✍ **Answer all questions.**

SECTION – A

✍ **Essay question:**

1. Define EMG. Explain the stages of EMG. Explain the difference between neurogenic and myogenic potentials.

$(2+4+4 = 10$ marks$)$

2. **Short notes.**
2A. H reflex.
2B. Procedure for motor nerve conduction study.
2C. Classification of nerve lesions.
2D. Motor unit.

$(5×4 = 20$ marks$)$

3. **Brief Answers.**
3A. Resting membrane potential.
3B. Sweep.
3C. Define F wave.
3D. Rheobase.
3E. Mention any two indications of EMG biofeedback.

$(2×5 = 10$ marks$)$

SECTION – B

✍ **Essay question.**

4. Explain the acute responses and adaptations in the cardio respiratory system with endurance training.

$(10$ marks$)$

5. **Short notes:**
5A. Immune responses to an acute bout of maximal exercise.
5B. Thermoregulatory control during exercise in cold environment.
5C. Potential hazards of exercising in hyperbaric environment.
5D. Tests of agility.

$(5×4 = 20$ marks$)$

6. **Brief Answers:**
6A. What is oxygen debt?
6B. What is ventilatory threshold?
6C. Any two complications from long term use of injecting testosterone as a performance enhancing drug.
6D. What is glycogen loading?
6E. What is respiratory exchange ratio?

$(2×5 = 10$ marks$)$

MANIPAL UNIVERSITY
FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2008
SUBJECT: PHYSIOTHERAPY IN FUNCTIONAL DIAGNOSIS
(OLD REGULATION)
Saturday, June 21, 2008

Time available: 3 Hours   Maximum Marks: 80

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

SECTION – A

✍   **Essay question:**
1.   Define EMG. Explain the stages of EMG. Explain the difference between neurogenic and myogenic potentials.

                                               (2+4+4 = 10 marks)

2.   **Short notes.**
2A.   H reflex.
2B.   Procedure for motor nerve conduction study.
2C.   Classification of nerve lesions.
2D.   Motor unit.

                                               (5×4 = 20 marks)

3.   **Brief Answers.**
3A.   Resting membrane potential.
3B.   Sweep.
3C.   Define F wave.
3D.   Rheobase.
3E.   Mention any two indications of EMG biofeedback.

                                               (2×5 = 10 marks)

SECTION – B

✍   **Essay question.**
4.   Explain the acute responses and adaptations in the cardio respiratory system with endurance training.

                                               (10 marks)

5.   **Short notes:**
5A.   Immune responses to an acute bout of maximal exercise.
5B.   Thermoregulatory control during exercise in cold environment.
5C.   Potential hazards of exercising in hyperbaric environment.
5D.   Tests of agility.

                                               (5×4 = 20 marks)

6.   **Brief Answers:**
6A.   What is oxygen debt?
6B.   What is ventilatory threshold?
6C.   Any two complications from long term use of injecting testosterone as a performance enhancing drug.
6D.   What is glycogen loading?
6E.   What is respiratory exchange ratio?

                                               (2×5 = 10 marks)

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MANIPAL UNIVERSITY

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

SUBJECT: RESEARCH METHODOLOGY AND BIOSTATISTICS
(NEW REGULATION)

Monday, June 23, 2008

Time: 3 Hrs.   Max. Marks: 80

✎ **Answer all questions:**

1A. Enumerate the applications of biostatistics in the field of allied health courses.

1B. Describe the various scales of measurement with an example each.

(5+5 = 10 marks)

2A. Differentiate between:
   i)   qualitative and quantitative variable   ii)   discrete and continuous variable

2B. Draw a histogram for the following data:

Age (in years):	5-9	10-14	15-19	20-24	25-29	30-34	35-39
Number of people:	8	15	18	30	16	12	6

(5+5 = 10 marks)

3. What is meant by sampling? What are the different methods of sampling? Explain two methods of sampling.

(1+2+7 = 10 marks)

4A. Distinguish between variance and coefficient of variation.

4B. Marks obtained in statistics by the students of allied health courses is as follows:
   41, 57, 38, 61, 36, 35, 71, 50, 40, 50
   Calculate mean and median.

4C. Following is data on systolic blood pressure (in mmHg) of 10 adults.
   115, 117, 121, 125, 116, 120, 118, 117, 119, 112
   Find the percentage of cases that lie outside the interval (mean - 1 Standard deviation, Mean + 1 Standard Deviation).

(5+5+5 = 15 marks)

5. Enumerate the sources of health information system. Describe any three of them briefly.

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

6A. What is hypothesis? How is the hypothesis formulated?

6B. In survey conducted at the beginning of a year it was observed that in a population of 40,000 there were 1600 with a specific disability. At the end of the year the total number of disabled in the same population was 1640. Calculate the incidence and prevalence of the disability.

6C. How do we study correlation between two continuous variables? Describe the properties of this measure using a neat diagram.

((1+4)+5+5 = 15 marks)

7. Enlist the descriptive epidemiological methods. Describe any two of them with uses.

(10 marks)

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MANIPAL UNIVERSITY

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

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

Tuesday, June 24, 2008

Time available: 1½ Hours   Maximum Marks: 40

✍   **Answer ALL questions.**

✍   **Essay:**

1.   A new 400 bedded multispeciality hospital recruits you and assigns the responsibility of setting up the Physiotherapy department. Plan the requirements in terms of space, staffing and equipment procurement.

(10 marks)

2.   **Short notes:**

2A.   Position statement of WCPT for community based rehabilitation.

2B.   What are the prerequisites that need to be met to get affiliation from IAP?

2C.   Explain the ethical and unethical issues in private practice.

2D.   What are the components of an informed consent form used in research?

(5×4 = 20 marks)

3.   **Brief answers:**

3A.   What is non- maleficence?

3B.   What is vicarious liability?

3C.   What is the Good Samaritan rule?

3D.   Expand SOAP.

3E.   Name two NGOs that help in funding poor patients.

(2×5 = 10 marks)