

MANIPAL UNIVERSITY**FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2009****SUBJECT: MEDICINE
(NEW REGULATION)**

Thursday, December 10, 2009

Time: 10:00-13:00 Hrs

Maximum Marks: 80

1. Write the causes, clinical features and complications of chronic renal failure.
(2+4+4 = 10 marks)

2. Write short notes on any **SIX** of the following:
 - 2A. Acromegaly.
 - 2B. Management of Congestive cardiac failure.
 - 2C. List causes of pleural effusion and discuss the features of left sided pleural effusion.
 - 2D. Clinical features of Hodgkin's disease.
 - 2E. Discuss the treatment and complications of Peptic ulcer.
 - 2F. Outline the management of diabetic ketoacidosis.
 - 2G. Rubella.
 - 2H. Hypocalcemia.(5×6 = 30 marks)

3. Name the types of Obesity. Write the etiologies and how do you evaluate a patient with obesity?
(2+2+6 = 10 marks)

4. Write short notes on any **SIX** of the following:
 - 4A. Complications of systemic hypertension.
 - 4B. Cholera.
 - 4C. Describe the clinical features and treatment of Cobra snake bite.
 - 4D. Chronic myeloid leukaemia.
 - 4E. Pulmonary tuberculosis.
 - 4F. Spontaneous bacterial peritonitis.
 - 4G. Metabolic acidosis.
 - 4H. Name the types, predisposing factors and write the infective endocarditis prophylaxis prior to the oral surgery.(5×6 = 30 marks)



MANIPAL UNIVERSITY
FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2009

SUBJECT: SURGERY
(NEW REGULATION)

Friday, December 11, 2009

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. Describe the risk factors of coronary artery disease. Discuss in detail coronary artery bypass graft.

(10 marks)
2. Discuss the anatomy of lungs and pleura. Discuss the indications, types, complications and post-operative care of pulmonary resections.

(10 marks)
3. Write short notes on any **TWO**:
 - 3A. Discuss various types of Diaphragmatic hernia.
 - 3B. Discuss causes of lung abscess, its diagnosis and management.
 - 3C. Describe Fallot's tetralogy.

(10×2 = 20 marks)

SECTION "B" : GENERAL SURGERY : 40 MARKS

4. Describe types of skin grafts and flaps.

(10 marks)
5. Describe clinical features of carcinoma breast. Discuss surgical management and complications of carcinoma breast.

(10 marks)
6. Write short notes on any **FOUR**:
 - 6A. Discuss blood fractions used for transfusion.
 - 6B. Discuss water intoxication.
 - 6C. Discuss sinus and fistula.
 - 6D. Describe types of hernia.
 - 6E. Discuss testing of visual field and refraction.

(5×4 = 20 marks)



MANIPAL UNIVERSITY**FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2009****SUBJECT: COMMUNITY MEDICINE AND SOCIOLOGY
(NEW REGULATION)**

Saturday, December 12, 2009

Time: 10:00-13:00 Hrs

Maximum Marks: 80

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

- 1A. Define health.
- 1B. Enumerate the various dimensions of health.
- 1C. Discuss web of causation of any disease.

(1+4+5 = 10 marks)

2. Write short notes on:

- 2A. Epidemiology of Tuberculosis.
- 2B. Early warning signs of cancers.
- 2C. Methods of hospital waste management.
- 2D. Activities during a disaster response.
- 2E. ESI Act.
- 2F. Balanced diet.

(5×6 = 30 marks)

SECTION 'B': SOCIOLOGY : 40 MARKS**Answer ALL questions.**

3. Define community. What are the health problems of rural and urban communities?

(2+8 = 10 marks)

4. Mention the factors of social change. Explain any two.

(2+8 = 10 marks)

5. Explain the meaning and agencies of socialization.

(2+8 = 10 marks)

6. Write short notes on the following:

- 6A. Social security measures for the disabled.
- 6B. Mention the consequences and remedies for beggary.

(5+5 = 10 marks)



MANIPAL UNIVERSITY
FOURTH YEAR B.P.T DEGREE EXAMINATION – DECEMBER 2009
SUBJECT: RESEARCH METHODOLOGY AND BIostatISTICS
(NEW REGULATION)

Monday, December 14, 2009

Time: 10:00-13:00 Hrs.

Max. Marks: 80

- 1A. State the functions and limitations of statistics.
 1B. Explain discrete and continuous variables with example. (5+5 = 10 marks)
- 2A. Differentiate nominal and ordinal scales of measurement with example.
 2B. Explain stratified random sampling with example. State its advantages over simple random sampling. (5+5 = 10 marks)
3. Following are the height distribution of 30 students of a class.

Height in inches of 30 students of a class				
60	71	67	68	69
72	61	60	65	70
66	65	64	69	68
60	63	70	67	69
62	63	67	68	67
70	73	65	69	74

- i) Prepare a frequency table with class intervals 60-63, 63-66, 66-69,
 ii) Represent the data by a histogram. (5+5 = 10 marks)
- 4A. Calculate median and standard deviation for the following data:
 Sys. B.P (mmHg): 121, 128, 125, 119, 122, 125, 118, 126,
 4B. Define and explain the use of Coefficient of Variation. (6+5 = 11 marks)
- 5A. Explain the interpretation of correlation coefficient.
 5B. Given the mean and standard deviation of weight of new born babies are 3 Kg and 0.5 Kg respectively. Assuming Normality estimate the percentage of newborns with weight
 i) more than 2.5 Kgs ii) between 2.5 and 3.5 Kgs (4+5 = 9 marks)
- 6A. Discuss Sample registration system as a source of health information system.
 6B. Explain the terms rate and ratio with example. (5+5 = 10 marks)
- 7A. Differentiate Reliability and Validity with example.
 7B. Define Crude death rate. What are its uses and limitations? (5+5 = 10 marks)
- 8A. Enumerate the uses of descriptive epidemiology.
 8B. Write short note on Cross-sectional studies. (5+5 = 10 marks)



MANIPAL UNIVERSITY**FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2009****SUBJECT: PHYSIOTHERAPY IN CARDIOPULMONARY AND GENERAL CONDITIONS
(NEW REGULATION)**

Tuesday, December 15, 2009

Time: 10:00-13:00 Hrs

Maximum Marks: 80

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

1A. Classify restrictive lung diseases. Write in detail the physiotherapy management of Atelectasis.

(3+7 = 10 marks)

1B. Discuss in detail the phase one cardiac rehabilitation of a patient who underwent coronary artery bypass grafting.

(10 marks)

2. Write short notes on:

2A. Active cycles of breathing technique.

2B. Two rescuer basic life support.

2C. Ventilatory muscle training.

2D. Pulmonary function test changes in obstructive and restrictive lung diseases.

2E. Physiotherapy management of complications after radical mastectomy.

2F. Post-operative physiotherapy treatment of pneumonectomy.

2G. Physiotherapy assessment of peripheral vascular disease.

2H. Pre-operative physiotherapy management of abdominal surgeries.

(5×8 = 40 marks)

3. Brief Answers:

3A. Mention two bronchodilators used in inhalation therapy.

3B. What is respiratory acidosis?

3C. Mention any four modes of mechanical ventilator.

3D. What is Heimlich maneuver?

3E. What is PUVA therapy?

3F. Describe the types of respiratory failure.

3G. Mention any four modifiable risk factors of ischemic heart disease.

3H. Mention any four complications of burns.

3I. Mention any two indications of incentive spirometry.

3J. What is Bernoulli's principle?

(2×10 = 20 marks)



MANIPAL UNIVERSITY
FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2009
SUBJECT: COMMUNITY BASED REHABILITATION
(NEW REGULATION)

Wednesday, December 16, 2009

Time: 10:00-13:00 Hrs

Maximum Marks: 80

✍ Answer ALL questions.

1. Essay Questions:

- 1A. What are the changes in musculoskeletal system and nervous system with ageing?
(5+5 = 10 marks)
- 1B. Define disability. Explain the principles of disability evaluation.
(2+8 = 10 marks)

2. Short notes:

- 2A. Define community based rehabilitation. Discuss its aims.
- 2B. Discuss musculoskeletal problems during pregnancy.
- 2C. Role of early intervention in high risk infant.
- 2D. Principles of sports rehabilitation.
- 2E. Discuss the concepts of VO_{2max} .
- 2F. Explain five theories of ageing.
- 2G. Explain the principles of safe manual material handling.
- 2H. Explain types of occupational hazards.
(5×8 = 40 marks)

3. Brief answer:

- 3A. What is eclampsia?
- 3B. Stress incontinence.
- 3C. Enumerate four features of appropriate chair design for computer users.
- 3D. Mention two agencies involved in CBR and one role of each.
- 3E. What is anaerobic threshold?
- 3F. Enumerate four aims of ergonomics.
- 3G. Define Institutionalization.
- 3H. Four causes of weight loss in elderly.
- 3I. List four barriers of rehabilitation.
- 3J. What is Doping?
(2×10 = 20 marks)



MANIPAL UNIVERSITY
FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2009
SUBJECT: EXERCISE PHYSIOLOGY AND ELECTRODIAGNOSIS
(NEW REGULATION)

Thursday, December 17, 2009

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

1. Essay:

Classify ergogenic aids and explain in brief the potential benefits and adverse effects of any four ergogenic aid.

(2+8 = 10 marks)

2. Short Notes:

- 2A. Potential hazards of hyperbaric environment.
- 2B. Classify exercise testing and discuss the advantages and disadvantages of the same.
- 2C. Metabolic adaptations to training.
- 2D. Physiological basis of oxygen deficit and debt.

(5×4 = 20 marks)

3. Brief answers:

- 3A. What is cross training.
- 3B. Name the oxidative enzymes that were found to increase with endurance training.
- 3C. What is respiratory exchange ratio.
- 3D. Define agility.
- 3E. What is aerobic exercise?

(2×5 = 10 marks)

SECTION – B

4. Essay questions:

Define EMG. Mention the stages of EMG activity. Explain the difference between EMG and NCV.

(2+4+4 = 10 marks)

5. Short Notes:

- 5A. Difference between H reflex and F wave.
- 5B. Principles of procedure for sensory nerve conduction studies.
- 5C. Classification of nerve lesions based on electro diagnostic studies.
- 5D. EMG Biofeedback.

(5×4 = 20 marks)

6. Brief Answers:

- 6A. Action potential.
- 6B. Rise time.
- 6C. Blink reflex.
- 6D. FG test.
- 6E. Mention any two physiological properties of nerve and muscle.

(2×5 = 10 marks)



MANIPAL UNIVERSITY**FOURTH YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2009****SUBJECT: ETHICS/ADMINISTRATION AND TEACHING SKILLS
(NEW REGULATION)**

Friday, December 18, 2009

Time: 10:00-11.30 Hrs

Maximum Marks: 40

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

Loyalty to the employer and service to the society – debate.

(10 marks)

2. Short notes:

- 2A. What is conflict of interest in clinical practice and give an example to illustrate the same?
2B. Helsinki II Declaration.
2C. Safety issues while planning a department.
2D. Aims and objectives of IAP.

(5×4 = 20 marks)

3. Brief answers:

- 3A. What is beneficence?
3B. What is the preferred Physiotherapist patient ratio?
3C. What is vicarious liability?
3D. What is referee fee?
3E. What is confidentiality?

(2×5 = 10 marks)

