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MANIPAL UNIVERSITY FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2016

SUBJECT: MEDICINE (COMMON FOR 2011, 2009 AND OLD REGULATION)

Friday, June 03, 2016

Time: 10:00 – 13:00 Hrs

Maximum Marks: 80

- 1. Discuss the etiology, clinical features, investigations and management of pulmonary tuberculosis.
- 2. Define chronic obstructive pulmonary disease. Discuss the clinical features, complications, investigations and management of emphysema.
- 3. Classify anemia. Discuss the clinical features, investigations and management of Vitamin B12 deficiency.
- 4. Discuss the etiology, clinical features and management of congestive heart failure.

 $(15 \text{ marks} \times 3 = 45 \text{ marks})$

5. Answer ALL the following questions:

- 5A. Protein energy malnutrition
- 5B. Complications and management of acute renal failure
- 5C. Hyperthyroidism
- 5D. General precautionary measures in ICU
- 5E. Cardiac arrest
- 5F. Complications of diabetes mellitus
- 5G. Signs of liver cell failure

 $(5 \text{ marks} \times 7 = 35 \text{ marks})$

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FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2016

SUBJECT: SURGERY (COMMON FOR 2011, 2009 AND OLD REGULATION)

Monday, June 06, 2016

Time: 10:00 -13:00 Hrs.

Maximum Marks: 80

SECTION A: CARDIOVASCULAR AND THORACIC SURGERY (40 MARKS)

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

(10 marks)

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

(10 marks)

- 3. Write short notes on any TWO:
- 3A. Write a short note on lung abscess
- 3B. Describe Fallot's tetralogy
- 3C. Describe video assisted thoracoscopic surgery

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

SECTION B: GENERAL SURGERY (40 MARKS)

1. Describe indications and types of tracheostomy. Discuss post-operative care and complications of tracheostomy.

(10 marks)

2. Describe clinical features of carcinoma breast. Discuss surgical management and complications of carcinoma breast.

(10 marks)

- 3. Write short notes on any FOUR:
- 3A. Discuss types of Regional anaesthesia
- 3B. Describe types of flaps in plastic surgery
- 3C. Discuss Parotitis
- 3D. Discuss Keratitis
- 3E. Discuss management of carcinoma oesophagus

 $(5 \text{ marks} \times 4 = 20 \text{ marks})$

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FOURTH YEAR B.P.T. DEGREE EXAMINATION - JUNE 2016

SUBJECT: EXERCISE PHYSIOLOGY AND ELECTRODIAGNOSIS (COMMON FOR OLD AND 2009 REGULATION)

Wednesday, June 08, 2016

Time: 10:00-13.00 Hrs

Maximum Marks: 80

- Answer ALL questions.

SECTION A - EXERCISE PHYSIOLOGY

- 1. Describe the different methods of measurement of energy expenditure during exercise.

(10 marks)

- 2. Short notes:
- 2A. Anaerobic energy system
- 2B. What is fatigue? Briefly write about the management of fatigue
- 2C. Acute effects of exercise on pulmonary system
- 2D. Special considerations for exercise in adolescents

 $(5 \text{ marks} \times 4 = 20 \text{ marks})$

- 3. Brief notes:
- 3A. Define lactate threshold.
- 3B. Mention acute effect of exercise on adreno cortex hormone.
- 3C. Phospho-creatinine as an energy source.
- 3D. What is direct calorimetry?
- 3E. Write any two chronic effects of exercise on immune system.

 $(2 \text{ marks} \times 5 = 10 \text{ marks})$

SECTION B - ELECTRODIAGNOSIS

Essay:

4. What is "F" wave? Discuss in detail about "F" wave and also compare between "F" wave and H-Reflex?

(10 marks)

5. Short notes:

- 5A. Fibrillations and positive sharp waves
- 5B. Blink response studies
- 5C. Signal averaging
- 5D. General factors affecting nerve conduction studies

 $(5 \text{ marks} \times 4 = 20 \text{ marks})$

6. Brief notes:

- 6A. Define sensitivity and give an example for the same
- 6B. Define EMG Biofeedback.
- 6C. Normal CV values for ulnar motor nerve conductions study.
- 6D. Any four conditions which produces reduced or absence of needle insertional activity.
- 6E. Mention any two neuromuscular functions disorders and also mention any two electrophysiological test for the same.

 $(2 \text{ marks} \times 5 = 10 \text{ marks})$



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FOURTH YEAR B.P.T. DEGREE EXAMINATION - JUNE 2016

SUBJECT: EXERCISE PHYSIOLOGY (2011 REGULATION)

Wednesday, June 08, 2016

Time: 10:00-11.30 Hrs Maximum Marks: 40

- 1. Describe the different methods of measurement of energy expenditure during exercise.

(10 marks)

- 2. Short notes:
- 2A. Anaerobic energy system.
- 2B. What is fatigue? Briefly write about the management of fatigue.
- 2C. Acute effects of exercise on pulmonary system.
- 2D. Special considerations for exercise in adolescents.

 $(5 \text{ marks} \times 4 = 20 \text{ marks})$

- 3. Brief notes:
- 3A. Define lactate threshold.
- 3B. Mention acute effect of exercise on adreno cortex hormone.
- 3C. Phospho-creatinine as an energy source.
- 3D. What is direct calorimetry?
- 3E. Write any two chronic effects of exercise on immune system.

 $(2 \text{ marks} \times 5 = 10 \text{ marks})$

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FOURTH YEAR B.P.T. DEGREE EXAMINATION - JUNE 2016

SUBJECT: PHYSIOTHERAPY IN CARDIOPULMONARY AND GENERAL CONDITIONS (COMMON FOR 2011, 2009 AND OLD REGULATION)

Friday, June 10, 2016

Time: 10:00-13:00 Hrs

Maximum Marks: 80

Answer ALL questions.

1. Essay questions:

- 1A. Write in detail the pulmonary rehabilitation for a patient with Bronchiectasis.
- 1B. Discuss the acute and long term physiotherapy management for patients with acute head injury.

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

2. Short notes:

- 2A. Discuss the central regulation of respiration
- 2B. Define and describe the steps in Autogenic drainage
- 2C. Discuss respiratory home care
- 2D. Define ARDS. Write the clinical features and the medical management for ARDS.
- 2E. Discuss the indication, contraindications for postural drainage. Add a note on postural drainage for left lower lobe segment
- 2F. Discuss the difference in obstructive and restrictive pulmonary function test
- 2G. Discuss about the indication and the delivery system for oxygen therapy
- 2H. Physiotherapy management for adherent scar

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

3. Brief notes:

- 3A. Define auto PEEP
- 3B. Define asthma
- 3C. Mention collateral channels in adult lung
- 3D. What is IPPB? Write its uses
- 3E. Mention the different PNF technique for facilitating breathing
- 3F. Define myocardial infarction
- 3G. What is silhouette sign?
- 3H. Mention four radiological features of COPD
- 31. Mention the phases of coughing
- 3J. Mention the modes of mechanical ventilator

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

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FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2016

SUBJECT: COMMUNITY MEDICINE & SOCIOLOGY (OLD REGULATION)

Monday, June 13, 2016

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

∠ Long question:

1. Discuss the levels of prevention of diseases with suitable examples. Add a note on the rehabilitation measures in leprosy.

(6+4 = 10 marks)

- 2. Write short notes:
- 2A. Measures to prevent Iron deficiency anaemia

(5 marks)

2B. Cold chain maintenance at the primary care level

(5 marks)

2C. Enumerate five advantages of case control studies

(5 marks)

2D. Enumerate household methods of purification of water

(5 marks)

2E. What is Aedes ageypti index? What is its public health importance?

(2+3 = 5 marks)

2F. Enumerate five early warning signs of cancer

(5 marks)

SECTION 'B': SOCIOLOGY: 40 MARKS

- 1. What is social planning? How does it helps in the improvement of health and rehabilitation? (2+8 = 10 marks)
- 2. What is socialization? Explain the social factors which influence personality.

(2+8 = 10 marks)

3. Define social groups. Explain the influence of formal and informal groups on health and sickness.

(2+8 = 10 marks)

- 4. Short answers:
- 4A. Effects of sickness on family
- 4B. Social security measures to the disabled

 $(5 \text{ marks} \times 2 = 10 \text{ marks})$

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FOURTH YEAR B.P.T. DEGREE EXAMINATION – JUNE 2016

SUBJECT: COMMUNITY PHYSIOTHERAPY (2009 & 2011 REGULATION)

Monday, June 13, 2016

Time: 10:00-13:00 Hrs

Maximum Marks: 80

Answer ALL questions.

1. Essay questions:

1A. Describe the cardio-vascular changes associated with ageing. How exercise based interventions help in slowing down / reversing these changes.

(5+5 = 10 marks)

1B. Compare and contrast multi-disciplinary and interdisciplinary approaches. Elaborate the role of occupational therapist and vocational rehabilitation therapist in a multidisciplinary team.

(5+5 = 10 marks)

2. Short notes:

- 2A. Physiotherapy management for osteoporosis
- 2B. Describe the ESI act
- 2C. Conventional management of CTEV
- 2D. Explain any TWO theories of ageing.
- 2E. Physiotherapy management of incontinence
- 2F. Classify occupational hazards and explain briefly about each.
- 2G. Describe job demand analysis.
- 2H. Explain job simulation.

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

3. Brief answers:

- 3A. Write any four absolute contraindications to exercise in pregnancy.
- 3B. List any FOUR guidelines for handling children with osteogenesis Imperfecta.
- 3C. Mention the roles of case manager in industrial therapy.
- 3D. Mention any TWO age related changes in pulmonary system.
- 3E. Elaborate any ONE method of pelvic floor muscle strengthening.
- 3F. Define CBR.
- 3G. Mention the levels of intervention in health care.
- 3H. What is institution based rehabilitation.
- 3I. Write any FOUR chronic neuro muscular adaptations to exercise in elderly.
- 3J. What are cumulative trauma disorders?

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

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FOURTH YEAR B.P.T. DEGREE EXAMINATION - JUNE 2016

SUBJECT: ELECTRODIAGNOSIS (2011 REGULATION)

Wednesday, June 15, 2016

Time: 10:00-11.30 Hrs

Maximum Marks: 40

1. Explain in detail the right radial nerve motor nerve conduction study.

(10 marks)

- 2. Short Notes:
- 2A. EMG findings in degenerative myopathic disorders
- 2B. Filters
- 2C. H-reflex and clinical implications
- 2D. EMG Biofeedback in Neuro-rehabilitation

 $(5 \text{ marks} \times 4 = 20 \text{ marks})$

3. Brief Answers:

- 3A. What is the difference between gain and sensitivity?
- 3B. Mention any four abnormal potentials at rest.
- 3C. Mention any two conditions which produces increased needle inserational activities.
- 3D. What is Threshold detector?
- 3E. Normal "F" wave values of upper and lower extremities.

 $(2 \text{ marks} \times 5 = 10 \text{ marks})$