MANIPAL UNIVERSITY

SECOND YEAR M.Sc. (RESPIRATORY THERAPY) DEGREE EXAMINATION – JUNE 2015

SUBJECT: ADVANCED RESPIRATORY SCIENCE – II
(SPECIALIZATION: ADULT CARDIO RESPIRATORY CARE)
(2013 REGULATION)

Monday, June 01, 2015

Time: 10:00 – 13:00 Hrs.   Max. Marks: 80

✍   **Draw diagram wherever necessary.**

1. Indications of pulmonary function testing. Discuss the interpretation of pulmonary function test report.

(8+8 = 16 marks)

2. Discuss the goals of long term ventilation, also include the indications for patient selection and equipment selection.

(8+4+4 = 16 marks)

3. **Write short notes:**

3A. Heliox therapy

3B. High frequency oscillatory ventilation

3C. Common alarm situation

3D. Pressure regulated volume control

3E. Airway Pressure Release Ventilation

3F. Aerosol Therapy during Non-Invasive ventilation

(8 marks × 6 = 48 marks)

MANIPAL UNIVERSITY

SECOND YEAR M.Sc. (RESPIRATORY THERAPY) DEGREE EXAMINATION– JUNE 2015

SUBJECT: EMERGENCY MEDICAL SERVICES
(SPECIALTY: ADULT CARDIO RESPIRATORY CARE)
(2013 REGULATION)

Wednesday, June 03, 2015

Time: 10:00 – 13:00 Hrs.   Max. Marks: 80

✍   **Draw diagrams wherever necessary.**

1.   A 56 year old man came to casualty with complains of dizziness and shortness of breath. On examination the patient's heart rate is 40 beats per minute; respiratory rate of 25 breaths per minute, blood pressure of 90/60 mmHg. Discuss on causes and treatment of Bradycardia.

(16 marks)

2.   How will you manage a patient with cervical head injury at the site of an accident scenario?

(16 marks)

3.   **Short notes:**

3A. Discuss the mechanism of action, indications, dosage and their precautions of epinephrine and calcium gluconate

3B. List 5 h's and 5 t's

3C. Adult Chain of survival

3D. Discuss on defibrillator

3E. Discuss on the algorithm of a paediatric basic life support

3F. Causes of cardiac arrhythmias

(8 marks × 6 = 48 marks)

1. Describe etiology, pathophysiology, clinical features and diagnosis and management of spinal cord injuries.

(2+2+2+4+6 = 16 marks)

2. Patient selection for renal transplantation. Describe Pre and postoperative ICU management of renal transplant patients.

(4+6+6 = 16 marks)

3. **Write short notes on**:

3A. Management of severe Hyperkalemia
3B. Brain specific therapy in severe head injury
3C. Acute upper GI bleeding
3D. Hypertensive crisis
3E. Hypoxic encephalopathy
3F. Cardiac Pacemaker

(8 marks × 6 = 48 marks)

MANIPAL UNIVERSITY

SECOND YEAR M.Sc. (RESPIRATORY THERAPY) DEGREE EXAMINATION – JUNE 2015
SUBJECT: ADVANCED PULMONARY REHABILITATION INCLUDING POLYSOMNOGRAPHY
(SPECIALIZATION: ADULT CARDIO RESPIRATORY CARE)
(2013 REGULATION)

Monday, June 08, 2015

Time: 10:00 – 13:00 Hrs.   Max. Marks: 80

✍ **Long notes:**

1. Describe Patient goals, Program goals, Philosophy, Code of ethics for the pulmonary rehabilitation specialist.

(16 marks)

2. Describe guidelines of 6 minutes' walk test and emergency procedures during walk test.

(16 marks)

3. **Short notes:**

3A. Domains of outcome measurement

3B. Lung volume reduction surgery

3C. Six minute walk test

3D. Dyspnea assessment and management

3E. Nutrition assessment and support

3F. Home mechanical ventilation

(8 marks × 6 = 48 marks)

MANIPAL UNIVERSITY

SECOND YEAR M.Sc. (RESPIRATORY THERAPY) DEGREE EXAMINATION– JUNE 2015

SUBJECT: MANAGEMENT IN RESPIRATORY CARE
(SPECIALTY: ADULT CARDIO RESPIRATORY CARE)
(2013 REGULATION)

Wednesday, June 10, 2015

Time: 10:00 – 11:30 Hrs.

Max. Marks: 40

1. Critically examine the management principles of Henry Fayol and F.W. Taylor.

(8 marks)

2. Discuss the various methods of performance appraisal. What are the major errors that should be avoided for fair appraisal?

(6+6 = 12 marks)

3. **Short notes:**

3A. Manpower planning

3B. Functions of Attitude

3C. Key points to consider with regard to maintenance of equipment in an intensive care unit

3D. Methods used to evaluate the effectiveness of a training programme

(5 marks × 4 = 20 marks)