MANIPAL UNIVERSITY

SECOND YEAR B.P.T./B.O.T. DEGREE EXAMINATION – JUNE 2008

SUBJECT: PATHOLOGY AND MICROBIOLOGY
(COMMON FOR BOTH OLD & NEW REGULATION)
Monday, June 09, 2008

Time: 3 Hrs.   Max. Marks: 80

✍ Answer section A and section B in TWO separate answer books.
✍ Draw labelled diagrams wherever appropriate.

SECTION 'A': PATHOLOGY: 40 MARKS

1. Define myocardial infarction. Enumerate the risk factors and clinical features of myocardial infarction.

(1+4+3 = 8 marks)

2. Define shock. What are the types of shock? Describe the pathogenesis of septic shock.

(1+2+4 = 7 marks)

3. Write short notes on:
3A. Hemolytic anemias
3B. Primary tuberculosis
3C. Chemotaxis
3D. Rheumatoid Arthritis
3E. Complications of Diabetes

(5×5 = 25 marks)

SECTION 'B': MICROBIOLOGY: 40 MARKS

4. Name the etiological agents causing sexually transmitted diseases. Describe the laboratory diagnosis of syphilis.

(2+6 = 8 marks)

5. Define and classify sterilization. Explain sterilization by dry heat method

(1+2+4 = 7 marks)

6. Write short notes on any FIVE of the following.
6A. Atopy
6B. Vaccines
6C. Laboratory diagnosis of HIV infection
6D. Leprosy
6E. Sources of infection.
6F. Gas gangrene.

(5×5 = 25 marks)

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SECOND YEAR B.P.T./B.O.T. DEGREE EXAMINATION – JUNE 2008

SUBJECT: PHARMACOLOGY
(COMMON FOR BOTH OLD & NEW REGULATIONS)
Tuesday, June 10, 2008

Time: 1½ Hrs.   Max. Marks: 40

1.   Name two oral antidiabetic drugs acting through different mechanisms and one adverse effect of each.

(3+1 = 4 marks)

2.   Mention the drug of choice for the following conditions:
2A. Organophosphorous poisoning
2B. Anaphylactic shock
2C. Status epilepticus
2D. Morphine poisoning
2E. Acute attack of angina

(1×5 = 5 marks)

3.   Name two local anaesthetics. Mention two methods of inducing local anaesthesia with a clinical condition for each.

(2+2+2 = 6 marks)

4.   Mention two uses of:
4A. Ciprofloxacin
4B. Enalapril
4C. Propranolol
4D. Ampicillin
4E. Prednisolone

(2×5 = 10 marks)

5.   Explain the pharmacological basis:
5A. Linctus codeine is contraindicated in productive cough.
5B. Multidrug therapy in tuberculosis.
5C. Low dose aspirin in post myocardial infarction patients.
5D. Combination of L-dopa and carbidopa in Parkinsonism.
5E. Frusemide in acute pulmonary edema.

(2×5 = 10 marks)

6A. Name the two drugs present in the combined oral contraceptive pill preparation.
6B. Mention two uses of sodium valproate and one adverse effect.

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

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SECOND YEAR B.O.T. DEGREE EXAMINATION – JUNE 2008

SUBJECT: DEVELOPMENTAL AND ORGANIZATIONAL PSYCHOLOGY

Wednesday, June 11, 2008

Time: 3 Hrs.   Max. Marks: 80

✍ **Answer ALL questions. All questions carry equal marks.**

1.   What are the emotions of childhood? Describe the emotional development of childhood.

2.   Define Organizational man. Discuss the assumptions about people held by management.

3.   Discuss theories of intellectual development. How does the environment contribute to the development of intelligence?

4.   Write short notes on:

4A.   Strategies for reducing conflicts in groups.

4B.   Development of behavior.

4C.   James-Lange Theory.

4D.   Likert's overlapping group model.

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SECOND YEAR B.O.T. DEGREE EXAMINATION – JUNE 2008

SUBJECT: OCCUPATIONAL THERAPY – II
(With Biomechanics and Kinesiology)

Thursday, June 12, 2008

Time: 3 Hrs.   Max. Marks: 80

✍ **Answer ALL the questions.**

1. What are the principles of range of motion? Discuss the clinical significance of active and passive range of motion. Describe various methods of range of motion measurement.

(8+2+5 = 15 marks)

2. Explain the components of basic activity of daily living and in detail its assessment.

(8+7 = 15 marks)

3. Define and classify power grip. Analysis any four type of power grip in context with joint positions and muscle activity.

(3+12 = 15 marks)

4. Define base of support and discuss the different force acting on body.

(3+12 = 15 marks)

5. Short notes:
5A. Moberg's pick-up test.
5B. Box and block test.
5C. Common trick movements seen in upper limb.
5D. Disdiadochokinesia.

(5×4 = 20 marks)

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SECOND YEAR B.O.T. DEGREE EXAMINATION – JUNE 2008
SUBJECT: RESEARCH METHODOLOGY AND STATISTICS

Friday, June 13, 2008

Time: 3 Hrs.   Max. Marks: 80

1.   Define:
1A.   Epidemiology.
1B.   Descriptive epidemiology.
1C.   Case report design.
1D.   Case series design.
1E.   Cross sectional design.

                                                                   ($2\times5 = 10$ marks)

2.   What is probability sampling? Explain stratified random sampling and systematic random sampling with merits and demerits of each method.

                                                                            (10 marks)

3.   Enumerate the different measures of dispersion. Find any two measures of dispersion for the following data.
      Systolic BP (mm Hg) : 120, 134, 126, 140, 128, 132, 136, 122, 124, 137

                                                                      ($4+6 = 10$ marks)

4.   Define Rate, Ratio and Proportion. During 1982, there were 426 deaths in town 'Á' and 504 deaths in town 'B'. The estimated mid-year populations for 1982 for towns A & B were 34080 and 42711 respectively. Calculate the crude death rates for both the towns.

                                                                      ($6+4 = 10$ marks)

5.   Distinguish between validity and reliability.

                                                                             (5 marks)

6.   Explain with examples qualitative and quantitative variables.

                                                                             (5 marks)

7.   What is Biostatistics? Enumerate three uses of biostatistics in health science research.

                                                                             (5 marks)

8.   A study on the fasting blood glucose levels of patients gave a mean of 156 gm/dl and a standard deviation of 12 gm/dl. Assuming normal distribution, what is the probability that any given individual will have a fasting blood glucose level?
      i)   Between 132 and 168 mg/dl   ii)   Less than 168 mg/dl

                                                                             (5 marks)

9. Write short notes on:

9A. Correlation

9B. Health information system and its uses

9C. Measurement scales

(5×3 = 15 marks)

10. Prepare a frequency distribution table with equal class intervals 20-24, 25-29, 30-34 etc. for the following data on still birth rates per 1000 live births reported by 30 towns in India during 1997-1998.

27, 37, 40, 32, 30, 36, 25, 39, 30, 29, 26, 30, 20, 35, 32, 28, 23, 29, 27, 30, 30, 32, 33, 27, 29, 36, 37, 29, 22, 42

(5 marks)