

MANIPAL UNIVERSITY

SECOND YEAR B.P.T./B.O.T. DEGREE EXAMINATION – JUNE 2007

**SUBJECT: PATHOLOGY AND MICROBIOLOGY
(COMMON FOR BOTH OLD & NEW REGULATION)**

Thursday, June 07, 2007

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. Describe the cellular events in acute inflammation. (8 marks)

2. Define fracture. Describe the types of fracture. Describe in detail the process of fracture healing. (1+2+4 = 7 marks)

3. Write short notes on
 - 3A. Gastric ulcers.
 - 3B. Fate of a thrombus.
 - 3C. Bronchiectasis.
 - 3D. Idiopathic thrombocytopenic purpura.
 - 3E. Types of Aneurysms.(5×5 = 25 marks)

SECTION 'B': MICROBIOLOGY: 40 MARKS

4. Define and classify immunity. Describe in detail acquired immunity. (1+2+5 = 8 marks)

5. Mention the etiological agent of tuberculosis. Describe the pathogenesis and prophylaxis of pulmonary tuberculosis. (1+3+3 = 7 marks)

6. Write short notes on any **FIVE** of the following:
 - 6A. Prophylaxis of poliomyelitis
 - 6B. Bacterial filters
 - 6C. Clostridium perfringens
 - 6D. Candida albicans
 - 6E. Bacterial cell wall.
 - 6F. Robert Koch(5×5 = 25 marks)



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SECOND YEAR B.P.T./B.O.T. DEGREE EXAMINATION – JUNE 2007

SUBJECT: PHARMACOLOGY
(COMMON FOR BOTH OLD & NEW REGULATIONS)

Friday, June 08, 2007

Time: 1½ Hrs.

Max. Marks: 40

1. Answer the following:

- 1A. Explain three advantages of intravenous route of drug administration.
- 1B. Mention three groups of diuretics with one example for each.
- 1C. Name two uses of chloroquine and mention two adverse effects of chloroquine.
- 1D. Mention two bronchodilators and two adverse effects of any one.

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

2. Explain the following:

- 2A. Gastric irritation is less with celecoxib as compared with aspirin.
- 2B. Glyceryltrinitrate in the treatment of angina pectoris.
- 2C. Benzathine penicillin is given for prophylaxis of rheumatic fever.
- 2D. Morphine is not used for treatment of head ache.
- 2E. Clofazamine in the treatment of leprosy.

(2×5 = 10 marks)

3. Answer the following:

- 3A. Mention two corticosteroid preparations and explain two adverse effects.
- 3B. Name two uses of ciprofloxacin and explain why the patient on ciprofloxacin is advised not to go for jogging.
- 3C. Mention two drugs used in parkinsons disease and two side effects of any one drug.
- 3D. Name two types of histamine receptors and one blocker at each receptor.

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

4. Explain the pharmacological basis for:

- 4A. Atropine IV injection in organophosphorus poisoning.
- 4B. Counterirritants in muscle pain.
- 4C. Adrenaline in anaphylactic shock.
- 4D. ACE inhibitor is used in treatment of hypertension.
- 4E. Heparin in deep vein thrombosis.

(2×5 = 10 marks)



MANIPAL UNIVERSITY**SECOND YEAR B.O.T. DEGREE EXAMINATION – JUNE 2007****SUBJECT: DEVELOPMENTAL AND ORGANIZATIONAL PSYCHOLOGY**

Saturday, June 09, 2007

Time: 3 Hrs.

Max. Marks: 80

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

1. Define emotion. Discuss the characteristic features of emotional development during infancy and childhood.
2. Describe the motor development milestones during infancy. Discuss the scales used to assess and monitor motor development.
3. Define group and discuss the types of groups and their functions in an organization.
4. Write short notes on:
 - 4A. Factors affecting language development.
 - 4B. Assessment of social skills.
 - 4C. Self-actualizing man.
 - 4D. Organizational effectiveness.



MANIPAL UNIVERSITY

SECOND YEAR B.O.T. DEGREE EXAMINATION – JUNE 2007

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

Monday, June 11, 2007

Time: 3 Hrs.

Max. Marks: 80

✍ Answer ALL the questions.

1. Discuss the volar and dorsal musculature of wrist and analyse flexion-extension of wrist joint from biomechanical view point.
(5+10 = 15 marks)
2. Analyse the effect of normal human locomotion at ankle with respect to force and muscle in sagittal and frontal plane.
(15 marks)
3. Identify the motor planning disorder in a person having difficulty in copying, drawing and assembly task. Discuss in detail its assessment.
(5+10 = 15 marks)
4. Define activities of daily living and instrumental activities of daily living and discuss in detail about any two activities in each of the following: Self care skills, Mobility skills, Communication skills, Home management skills and Community skills.
(5+10 = 15 marks)
5. Short notes:
 - 5A. Briefly state endurance and method of assessment.
 - 5B. Explain with neat sketch diagram about feed forward and feed backward control system.
 - 5C. Common trick movements seen in upper limb.
 - 5D. Graphesthesia.

(5×4 = 20 marks)



MANIPAL UNIVERSITY

SECOND YEAR B.O.T. DEGREE EXAMINATION – JUNE 2007

SUBJECT: RESEARCH METHODOLOGY AND STATISTICS

Tuesday, June 12, 2007

Time: 3 Hrs.

Max. Marks: 80

Answer ALL the questions

- 1A. Discuss about the various scales of measurement.
1B. Describe Research Methodology. (5+5 = 10 marks)
- 2A. Discuss the different methods of random and non random sampling.
2B. Enumerate advantage of sampling over census. (6+4 = 10 marks)
- 3A. Blood serum cholesterol levels of 10 subjects are as under:
240 260 290 245 255 285 275 263 277 250
Calculate its mean and standard deviation.
3B. Discuss Skewness and Kurtosis. (6+4 = 10 marks)
- 4A. Enumerate the properties of Normal curve.
4B. Explain the various graphical presentation for quantitative data. (6+4 = 10 marks)
5. Write short essays on:
5A. Registration of health events.
5B. Bar charts.
5C. Scatter diagram.
5D. Quartiles and Percentiles.
5E. Vital indicators.
5F. Measures of dispersion.
5G. Null and Alternative hypothesis.
5H. Uses of epidemiology. (5×8 = 40 marks)

