

Reg. No.

**MANIPAL UNIVERSITY**  
**FIRST TERM B.P.T. (BRIDGE PROGRAM) EXAMINATION – JULY 2011**

**SUBJECT: BIOCHEMISTRY**

Tuesday, July 05, 2011

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ **Answer ALL questions:**

✍ **Draw diagrams and flow charts wherever appropriate.**

1. Write in detail the reactions of anaerobic glycolysis.

(8 marks)

2. Discuss vitamin A under following headings:

2A. Sources and RDA

2B. Biochemical functions

2C. Deficiency manifestations

(1+2+3 = 6 marks)

3. **Write short notes on:**

3A. Metabolic alkalosis.

3B. Classification of lipids with examples.

3C. Nitrogen balance.

3D. Dietary fibres.

(4×4 = 16 marks)

4. **Answer the following:**

4A. List four differences between kwashiorkor and marasmus.

4B. Name two important compounds each derived from phenylalanine and tryptophan.

4C. Name the key enzymes of gluconeogenesis.

4D. Name two glycogen storage disorders with their defect.

4E. Define oxidative phosphorylation and name two inhibitors.

(2×5 = 10 marks)



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## MANIPAL UNIVERSITY

FIRST TERM B.P.T. (BRIDGE PROGRAM) EXAMINATION – JULY 2011

SUBJECT: SOCIAL SCIENCE AND PREVENTIVE MEDICINE

Thursday, July 07, 2011

Time: 10:00 - 13:00 Hrs.

Max. Marks: 80

✍ Answer SECTION 'A' and SECTION 'B' in TWO separate answer books.

### SECTION 'A': PREVENTIVE MEDICINE : 40 MARKS

#### 1. Essay:

Describe the epidemiological features of Leprosy. Write a note on the deformities occurring in leprosy.

(10 marks)

#### 2. Short Notes:

- 2A. Prevention of hypertension.
- 2B. Primary eye care as a method of intervention to prevent blindness.
- 2C. Community based rehabilitation.
- 2D. Disaster preparedness.

(5×4 = 20 marks)

#### 3. Brief Notes:

- 3A. What is Cold chain? Name any four cold chain equipments.
- 3B. Classification of epidemiological studies.
- 3C. Hazards of obesity.
- 3D. Vehicle-borne transmission of diseases.
- 3E. Prevention of nutritional anaemia.

(2×5 = 10 marks)

### SECTION 'B': SOCIAL SCIENCE : 40 MARKS

4. Define Sociology. Explain its importance in Physiotherapy.

(2+8 = 10 marks)

5. What is Health? Discuss the social factors affecting health status.

(2+8 = 10 marks)

6. What is family? Explain the influence of family on individual's health.

(2+8 = 10 marks)

#### 7. Write Short notes on the following:

- 7A. The role of Medical Social Workers.
- 7B. List the consequences and remedies for alcoholism.

(5+5 = 10 marks)



# MANIPAL UNIVERSITY

## FIRST TERM B.P.T. (BRIDGE PROGRAM) EXAMINATION – JULY 2011

### SUBJECT: RESEARCH FOR PHYSIOTHERAPISTS

Saturday, July 09, 2011

Time: 10:00-13:00 Hrs.

Max. Marks: 80

- 1A. Enumerate the different steps in a research process.
- 1B. What do you mean by a hypothesis? What are the characteristics of a good hypothesis?  
(5+5 = 10 marks)
- 2A. Discuss qualitative and quantitative variables with the help of suitable examples.
- 2B. Define a random sample. Briefly explain simple random sampling method.  
(5+(1+4) = 10 marks)
- 3A. The duration of time from first exposure to HIV infection to AIDS diagnosis is called the *incubation period*. The incubation periods of a random sample of 10 HIV infected individuals is given below (in years):  
12.0, 10.5, 9.5, 6.3, 13.5, 12.5, 7.2, 6.3, 4.5, 11.6  
Calculate the mean, median and mode of incubation period.
- 3B. The following data gives age of 30 patients admitted in the ICU in a hospital in one week. Prepare a frequency distribution table with equal class intervals 20-24, 25-29, 30-34, etc. for this data.  
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+5 = 10 marks)
- 4A. Define the different measures of dispersion.
- 4B. Enumerate the uses of epidemiology.  
(5+5 = 10 marks)
- 5A. The estimated mid-year population for a city in the year 2000 was 979,389. During the year, the total new cases of malaria reported from this city were 615 and the total cases of malaria reported during the year were 2300. Calculate the incidence rate and period prevalence rate for malaria in the year 2000.
- 5B. Define any five measures of mortality.  
(5+5 = 10 marks)
- 6. Write short notes on:**
- 6A. Non probability sampling methods.
- 6B. Normal distribution.
- 6C. Correlation and its properties.
- 6D. Cross sectional study design.
- 6E. Measurement scales.
- 6F. Health information system and its requirements.  
(5×6 = 30 marks)



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## MANIPAL UNIVERSITY

FIRST TERM B.P.T. (BRIDGE PROGRAM) EXAMINATION – JULY 2011

SUBJECT: ETHICS/ADMINISTRATION AND TEACHING SKILLS

Monday, July 11, 2011

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ Answer all questions.

✍ Essay Questions:

1. Discuss in detail under the following headings:

1A. Planning a physiotherapy department for a 1000 bedded tertiary hospital.

1B. Staff-patient ratio and charging.

(5+5 = 10 marks)

2. Short Notes:

2A. Issues related to home visits.

2B. Administration of a teaching institution.

2C. Documentation of patient information.

2D. Ethical issues with regard to interdisciplinary communication.

(5×4 = 20 marks)

3. Briefly answer the questions:

3A. Any two legal issues with respect to disgruntled patient.

3B. Any two advantages of maintaining confidentiality of the patient.

3C. Any two ethical issues with regard to terminally ill patients.

3D. Any two methods by which you maintain ethics in research.

3E. Any two methods of poor patient funding.

(2×5 = 10 marks)

