

Reg. No.

MANIPAL UNIVERSITY
FIRST TERM B.P.T. (BRIDGE PROGRAM) EXAMINATION – JULY 2010

SUBJECT: BIOCHEMISTRY

Monday, July 05, 2010

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. Draw and label the normal serum lipoprotein electrophoresis pattern. Write one function of each lipoprotein.

(2+4 = 6 marks)

3. Answer the following:

3A. Describe ketolysis.

3B. Write four differences between marasmus and kwashiorkor.

3C. Classify monosaccharides with examples.

3D. Describe the sequence of electron carriers in the electron transport chain (ETC) and name two inhibitors.

(4×4 = 16 marks)

4. Answer the following:

4A. List four factors affecting basal metabolic rate (BMR).

4B. Define limiting aminoacid with an example.

4C. List four functions of calcium.

4D. Name two fat soluble vitamins and give one deficiency manifestation of each.

4E. Enumerate four functions of dietary fibres.

(2×5 = 10 marks)



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FIRST TERM B.P.T. (BRIDGE PROGRAM) EXAMINATION – JULY 2010

SUBJECT: SOCIAL SCIENCE AND PREVENTIVE MEDICINE

Tuesday, July 06, 2010

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

- 1A. Define "epidemic".
1B. Enumerate the modes of transmission of Communicable diseases with suitable examples.
1C. Explain the preventive and control measures of Communicable diseases.
(1+4+5 = 10 marks)

2. Write short notes on:

- 2A. Uses of epidemiology.
2B. Control of Leprosy.
2C. Prevention and control of Xerophthalmia
2D. Hazards of obesity.
2E. Vision 2020: The Right to Sight.
2F. Disaster preparedness.
(5×6 = 30 marks)

SECTION 'B': SOCIAL SCIENCE : 40 MARKS

3. Is Sociology is a Science? What are the uses of studying sociology?
(5+5 = 10 marks)
4. Define Community? What are the problems of rural and urban community?
(2+4+4 = 10 marks)
5. What is Social change? Explain the positive and negative effect of it on health.
(2+8 = 10 marks)
6. Write Short notes on the following:
- 6A. Family and nutrition.
6B. Socialisation in hospital.
(5+5 = 10 marks)



MANIPAL UNIVERSITY
FIRST TERM B.P.T. (BRIDGE PROGRAM) EXAMINATION – JULY 2010
SUBJECT: RESEARCH FOR PHYSIOTHERAPISTS

Wednesday, July 07, 2010

Time: 10:00-13:00 Hrs.

Max. Marks: 80

- 1A. Define range, inter quartile range, variance, standard deviation and coefficient of variation.
- 1B. 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 7 HIV infected individuals is given below (in years):
 12.0, 10.5, 9.5, 6.3, 13.5, 12.5, 7.2
 Calculate the mean, median and standard deviation of incubation period.
(5+5 = 10 marks)
- 2A. Explain the various scales of measurements.
- 2B. Enumerate the role of statistics in health care delivery system.
(5+5 = 10 marks)
3. Discuss stratified and systematic random sampling methods with an example.
(10 marks)
- 4A. Explain correlation and its properties with the help of scatter diagrams.
- 4B. Present the following data on percentage of children benefited by polio immunization in a country from 2002-2006, by a **simple bar diagram**.
- | Year | 2002 | 2003 | 2004 | 2005 | 2006 |
|-----------|------|------|------|------|------|
| Polio (%) | 79 | 84 | 89 | 92 | 97 |
- (5+5 = 10 marks)
5. Enumerate at least five uses of epidemiology. Discuss case report* and case series study designs.
(5+5 = 10 marks)
6. From the following data of a city during the year 2005, Calculate:
- i) Infant mortality rate
 - ii) Post Neo-natal Mortality Rate
 - iii) Crude birth rate
 - iv) Maternal mortality rate
 - v) Peri-natal Mortality Rate

Data:

Mid-year population for the year 2005	440,000
Late fetal deaths	29
No. of live births	5200
No. of infant deaths	423
No. of maternal deaths	89
No. of infants deaths in the 1 st month of life	168
No. of infants deaths within 7 days of age	83

(10 marks)

7. Write short notes on:

- 7A. Validity.
- 7B. Quantitative variables with examples.
- 7C. Health information system and its uses.
- 7D. Normal distribution and its properties.

(5×4 = 20 marks)



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MANIPAL UNIVERSITY
FIRST TERM B.P.T. (BRIDGE PROGRAM) EXAMINATION – JULY 2010
SUBJECT: ETHICS/ADMINISTRATION AND TEACHING SKILLS

Thursday, July 08, 2010

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ **Answer ALL questions.**

PART – I

✍ **Essay Questions:**

1. Discuss the following:
 - 1A. Principles of bioethics.
 - 1B. Ethical issues in running an independent physiotherapy clinic.

(5+5 = 10 marks)

PART – II

2. Short Notes:

- 2A. Consumer protection act.
- 2B. Funding for poor patients.
- 2C. Budgeting the physiotherapy department in a large hospital.
- 2D. Time management in physiotherapy practice.

(5×4 = 20 marks)

PART – III

3. Briefly answer the questions:

- 3A. Any two rules of ethics according to WCPT.
- 3B. Any two methods of documentation.
- 3C. Any two ethical issues in academics.
- 3D. Ideal staff: patient ratio.
- 3E. Vicarious liability with example.

(2×5 = 10 marks)

