

MANIPAL ACADEMY OF HIGHER EDUCATION

**THIRD YEAR B.Sc. R.R.T. & D.T./ B.Sc. M.R.T/B.Sc. R.T./B.Sc. C.V.T
FOURTH YEAR B.O.T./B.P.T. DEGREE EXAMINATION – JUNE 2018**

**SUBJECT: BIostatISTICS & RESEARCH METHODOLOGY/RESEARCH
METHODOLOGY & STATISTICS/BASIC BIostatISTICS & RESEARCH
METHODOLOGY/RESEARCH METHODOLOGY AND BIostatISTICS /
BIostatISTICS & RESEARCH METHODOLOGY**

Friday, June 01, 2018

Time: 10:00-13:00 Hrs.

Max. Marks: 80

Answer ALL the questions.

1. Define statistics and enumerate its applications in health sciences. (5 marks)

2. Form a frequency table along with relative frequencies for the ages of 40 patients given below. (Class intervals: 0 – 15, 15 – 30, 30 – 45, so on)

57	37	43	43	30	39	53	47	64	31
40	22	40	29	15	65	39	43	54	40
24	46	17	38	50	30	34	25	36	39
36	62	30	07	47	32	36	42	42	47

(5 marks)

3. Define discrete and continuous variables with examples. (4 marks)

4. **State true or false:**

4A. Mode may or may not exist.

4B. Standard normal curve is either leptokurtic or platykurtic.

(2 marks)

5. Construct a bar diagram for the following data on socioeconomic status of 120 HIV infected subjects.

Socioeconomic Status	No. of subjects
High	55
Middle	25
Low	40

(4 marks)

6. Erythrocyte Sedimentation Rate (ESR) readings (in mm) of 10 tuberculosis patients are given below. Calculate coefficient of variation.

11 9 8 14 10 8 7 12 8 9

(10 marks)

7. Obtain median and interquartile range for the data regarding number of post operative days until diagnosis of infection for each subject experiencing an infection.

7 4 15 8 16 14 8 9 12 11

(8 marks)

8. **Define the following:**

- 8A. Crude death rate
- 8B. Total fertility rate
- 8C. Maternal mortality rate

(2 marks \times 3 = 6 marks)

9. Given the weight of new born babies is approximately normally distributed with a mean of 3000 gms and a standard deviation of 300 gms, obtain the proportion of new born babies with weight

- 9A. More than 3300 gms
- 9B. Between 3000 and 3600 gms

(3 marks \times 2 = 6 marks)

10. **Write short notes on:**

- 10A. Scatter diagram
- 10B. Probability sampling
- 10C. Case series study
- 10D. Health information system
- 10E. Disease registries
- 10F. Scales of measurement

(5 marks \times 6 = 30 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION
FOURTH YEAR B.O.T. DEGREE EXAMINATION – JUNE 2018

SUBJECT: GENERAL MEDICINE
(2011 SCHEME)

Monday, June 04, 2018

Time: 10:00-13:00 Hrs.

Max. Marks: 80

1. **Answer any THREE of the following:**

- 1A. Discuss the etiology, clinical features, investigations and management of iron deficiency anemia.
- 1B. Discuss the etiopathogenesis, clinical features, investigation and management of rheumatic heart disease.
- 1C. Discuss the causes, clinical features, complications and management of chronic renal failure.
- 1D. Discuss the clinical features, complications, investigations and treatment of pulmonary tuberculosis.

(15 marks × 3 = 45 marks)

2. **Write short notes on:**

- 2A. Hemophilia A
- 2B. Management of diabetes mellitus
- 2C. Type 1 and type 2 respiratory failure
- 2D. Management of hypertension
- 2E. Protein energy malnutrition
- 2F. Management of needle stick injury
- 2G. Cardiac arrest

(5 marks × 7 = 35 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION
FOURTH YEAR B.O.T. DEGREE EXAMINATION – JUNE 2018

SUBJECT: GENERAL SURGERY
(2011 SCHEME)

Wednesday, June 06, 2018

Time: 10:00-13:00 Hrs.

Max. Marks: 80

1. Answer ALL questions:

- 1A. Discuss the indications for bronchoscopy and lung biopsy. Discuss the precautions to be taken, the procedure and complications associated with the same.
- 1B. Discuss about etiology and management of septic shock.
- 1C. What are the congenital cyanotic heart diseases? Discuss its clinical features, management and the principles of the surgery for Tetralogy of Fallots.
- 1D. Mention different types of mastectomies and discuss indications and the procedural principles of modified radical mastectomy.
- 1E. Discuss the physiological responses of the body to surgical stress.

(10 marks × 5 = 50 marks)

2. Short Answers:

- 2A. Define hemorrhage. Classify types of hemorrhages with suitable examples.
- 2B. Early complications of burns
- 2C. Colostomy and colostomy care
- 2D. Benign paroxysmal positional vertigo
- 2E. Venous ulcer
- 2F. Hyponatremia

(5 marks × 6 = 30 marks)



Reg. No.									
----------	--	--	--	--	--	--	--	--	--

MANIPAL ACADEMY OF HIGHER EDUCATION
FOURTH YEAR B.O.T. DEGREE EXAMINATION – JUNE 2018
SUBJECT: OCCUPATIONAL THERAPY PRACTICE ISSUES
(2011 SCHEME)

Friday, June 08, 2018

Time: 10:00-11:30 Hrs.

Max. Marks: 40

 **Answer ALL the questions.**

 **Long questions:**

1. What is professional reasoning? Describe any four aspects of professional reasoning used by occupational therapists.

(2+8 = 10 marks)

2. Explain performance problems of an occupational therapist in a work setting and strategies by the supervisor to manage them.

(10 marks)

3. **Write short notes on:**

3A. Therapist barriers in client-centered practice

3B. Benefits of Continuing Professional Development to the individual

3C. Strategies for efficient gathering of evidence

3D. Ethical resources

(5 marks × 4 = 20 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION
FOURTH YEAR B.O.T. DEGREE EXAMINATION – JUNE 2018
SUBJECT: PSYCHIATRY AND CLINICAL PSYCHOLOGY
(2011 SCHEME)

Monday, June 11, 2018

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ **Answer ALL questions**

SECTION – A (CLINICAL PSYCHOLOGY)

1. **Write Essay on:**

- 1A. What are the different perspectives of abnormality and normality? Explain with examples.
1B. Define stress and explain different types of coping.

(10 marks × 2 = 20 marks)

2. **Write short notes on the following:**

- 2A. Any two behavior therapy techniques with examples.
2B. Counselling
2C. Types of Mental Retardation
2D. Stages of crisis reaction.

(5 marks × 4 = 20 marks)

SECTION – B (CLINICAL PSYCHIATRY)

3. **Essay:**

- 3A. Describe the etiology, clinical features, course and treatment of Generalized Anxiety disorder.
3B. Describe clinical features of Nicotine dependence syndrome and its non-pharmacological management.

(10 marks × 2 = 20 marks)

4. **Short notes:**

- 4A. Types of Hallucination
4B. Assessment of Judgment and abstract thinking in mental status examination
4C. Dissociative disorders
4D. ICD-10 criteria for Adjustment disorder

(5 marks × 4 = 20 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION
FOURTH YEAR B.O.T. DEGREE EXAMINATION – JUNE 2018

SUBJECT: OCCUPATIONAL THERAPY IN PEDIATRICS AND DEVELOPMENTAL DISABILITIES
(2011 SCHEME)

Wednesday, June 13, 2018

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ **Answer ALL the questions.**

1. Explain the types, clinical features of Spina Bifida and the occupational therapy management for children with spina bifida.

(4+4+12 = 20 marks)

2. Discuss the assumptions, dysfunctions and intervention of the Sensory Integration frame of reference with suitable examples.

(5+7+8 = 20 marks)

3. **Short Notes:**
 - 3A. Methods of evaluation in pediatric occupational therapy

(10 marks)

 - 3B. General motor problems that affect hand skills

(10 marks)

 - 3C. Characteristics of slow-to-warm up child and its clinical significance

(10 marks)

 - 3D. Characteristics of Attention Deficit Hyperactivity Disorder and occupational therapy management for the same

(4+6 = 10 marks)



Reg. No.

--	--	--	--	--	--	--	--	--	--	--

MANIPAL ACADEMY OF HIGHER EDUCATION
FOURTH YEAR B.O.T. DEGREE EXAMINATION – JUNE 2018
SUBJECT: OCCUPATIONAL THERAPY IN MENTAL HEALTH
(2011 SCHEME)

Friday, June 15, 2018

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ **Answer ALL the Questions**

Long Questions:

1. Discuss the impact of undifferentiated schizophrenia on an individual's functioning and describe role of occupational therapy in management of the same.

(8+12 = 20 marks)

2. Describe 'therapeutic use of self'. Explain any eight qualities of an effective therapist and strategies to develop the same.

(4+8+8 = 20 marks)

3. **Short Notes:**

3A. Any four techniques used in behavior management

3B. Explain A-B-C theory with examples

3C. Explain any five safety techniques to be followed by a therapist working in mental health

3D. Styles of leadership in occupational therapy groups

(10 marks × 4 = 40 marks)



Reg. No.									
----------	--	--	--	--	--	--	--	--	--

MANIPAL ACADEMY OF HIGHER EDUCATION
FOURTH YEAR B.O.T. DEGREE EXAMINATION – JUNE 2018
SUBJECT: OCCUPATIONAL THERAPY IN COMMUNITY PRACTICE
(2011 SCHEME)

Tuesday, June 19, 2018

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ **Answer ALL the questions.**

Long Questions

1. Explain any two steps involved in planning a community based program. Provide an example.
(8+2 = 10 marks)

2. Describe the theory of occupational adaptation in relation to community practice, with an example.
(8+2 = 10 marks)

3. **Short Notes:**

3A. Enumerate any five aims of community based rehabilitation
(5 marks)

3B. Define 'health' and 'community based practice'
(2½ + 2½ = 5 marks)

3C. Describe any two stages of paradigm shift
(2½ marks × 2 = 5 marks)

3D. **Explain the terms:**

i) Occupational Imbalance ii) Occupational Alienation
(2½ marks × 2 = 5 marks)

