

# B.P.T. [2<sup>nd</sup> Prof.]

BF/2009/07

## Psychology

M.M. : 90

Time : 3 Hours

### SECTION - A

*All questions are compulsory. Answer to each question upto 5 lines in length. Each question carries 2 Marks.* [20]

**Explain the following terms:**

1. The Phi phenomenon.
2. Id, Ego & Superego.
3. Mnemonics.
4. Creating thinking.
5. Projection.
6. Reaction formation.
7. Differentiate between Illusion & Hallucination.
8. Geriatric psychology.
9. Behaviour modification.
10. Psychosomatic disorders.

### SECTION – B

*Attempt any 8 questions. Answer to each question upto 2 pages in length. Each questions carries 5 Marks.* [40]

1. What is an Experiment? With the help of an example, describe the main features of the experimental method.
2. What is the impact of nature-nurture controversy on the development of human intelligence.
3. Briefly describe Freud's views on the psychosexual stages of Personality development.
4. What are Projective techniques? Discuss the significance of TAT in the assessment of personality.
5. Define Attention and explain the factors that determine Attention.
6. Differentiate between Sensation and Perception. Elucidate the laws of Perceptual organisation.
7. Define Attitudes. How can we change Attitudes.
8. Distinguish Emotions from feelings and describe the psychological changes that occur during different emotions.
9. Differentiate between Verbal & Non verbal communication. Illustrate some of the specific communication techniques generally used.
10. Define Counselling. What are the principles used in Counselling?
11. What is Pediatric psychology? Discuss the psychological reaction and needs of pediatric patients.
12. What is Substance abuse? Discuss the psychological and social causes of substance abuse.

### SECTION – C

*Attempt any 2 questions. Answer to each question upto 5 pages in length. Each questions carries 15 Marks.* [30]

1. Define Intelligence. Explain the nature and Significance of WAIS in the measurement of Intelligence.
  2. Describe the Communication process. What are the barriers in communication. How can we make communication more effective.
  3. Briefly explain the Physiological and Psychological consequences of Stress.
  4. What do you mean by Personality styles. Explain the different Personality styles of patients.
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## Pharmacology

M.M. : 90

Time : 3 Hours

### SECTION - A

*All questions are compulsory. Answer to each question upto 5 lines in length. Each question carries 2 Marks.* [20]

#### **Explain why?**

1. Beta blockers are avoided for the treatment of hypertension associated with Bronchial asthma.
2. Tetracyclines should not be given to pregnant women.
3. Use of Streptomycin has declined for the treatment of Tuberculosis.
4. Mannitol, an osmotic diuretic, should not be used in Congestive heart failure.
5. Pyridoxine is given concurrently with isoniazid in the treatment of tuberculosis.
6. Insulin induced Hypoglycemia is prolonged with Propranolol in diabetes.
7. There is risk of conception with oral contraceptives in women taking Rifampicin.
8. Clavulanic acid is combined with Amoxycilin.
9. Alcohol should be avoided during the treatment of Amoebiasis with Metronidazole.
10. Long term iodide therapy is not practiced in Thyrotoxicosis patients.

### SECTION - B

*Attempt any 8 questions. Answer to each question upto 2 pages in length. Each questions carries 5 Marks.* [40]

1. Mention the rational for the use of Alteplase in Myocardial infarction.
2. Enumerate non-sedative antihistaminics.
3. Write a short note on ipratropium bromide.
4. Describe briefly memory enhancing drugs.
5. Uses and side effects of Fluoxetine.
6. Describe in short antianxiety drugs.
7. Uses of aspirine and commonest side effects.
8. Mention uses and adverse effects of Phenylephrine.
9. What are estrogen receptor antagonists.
10. What are main side effects of Furosemids.
11. Write uses and side effects of Metformin.
12. What is the treatment of osteoporosis.

### SECTION - C

*Attempt any 2 questions. Answer to each question upto 5 pages in length. Each questions carries 15 Marks.* [30]

1. Classify Antiamoebic drugs. Discuss briefly the uses and side effects of Metronidazole.
  2. What are coronary vasodilator agents. How will you treat acute Angina pectoris.
  3. Give drug management of Status epilepticus.
  4. What are Purgatives. Give their uses and side effects.
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## **Exercisetherapy-II**

**M.M. : 90**

**Time : 3 Hours**

### **SECTION - A**

*All questions are compulsory. Answer to each question upto 5 lines in length. Each question carries 2 Marks.* [20]

1. Contract relax.
2. Stride length.
3. Spasticity.
4. Spatial summation.
5. Centre of Gravity.
6. Hip strategy to maintain balance.
7. Pump handle movement in normal breathing.
8. Passive insufficiency.
9. Force velocity relationship.
10. Eccentric contraction.

### **SECTION – B**

*Attempt any 8 questions. Answer to each question upto 2 pages in length. Each questions carries 5 Marks.* [40]

1. Explain the advantages and disadvantages of Group therapy.
2. Normal breathing mechanism.
3. What are the indications and contraindications of manipulation.
4. Explain various grades of Joint mobilization.
5. Explain the technique for the use of a Tripod stick as a walking aid.
6. Trendlenberg's gait.
7. Lordotic posture and its compensations.
8. Frenkel's exercises.
9. Explain various techniques of strengthening exercises.
10. Techniques and indications of Assisted exercises.
11. Explain the advantages and disadvantages of exercises for a normal person.
12. Explain the technique and indications & contraindications of Diaphragmatic breathing.

### **SECTION – C**

*Attempt any 2 questions. Answer to each question upto 5 pages in length. Each questions carries 15 Marks.* [30]

1. Define Gait. Discuss the Sagittal plane analysis of Gait cycle.
2. Discuss various therapeutic uses of Hydrotherapy. Add a note on buoyancy assisted and resisted exercises.
3. What are the various techniques of Traction. Explain the indications, contraindications and techniques of Cervical traction.
4. Explain the principle of Proprioceptive neuromuscular facilitation. Describe in detail its technique of application.

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## Biomechanics

M.M. : 90

Time : 3 Hours

### SECTION - A

*All questions are compulsory. Answer to each question upto 5 lines in length. Each question carries 2 Marks.* [20]

1. Third order lever.
2. Angle of Pull.
3. Locking of the knee joint.
4. Location of C of G in human body.
5. Isometric exercise.
6. Passive insufficiency.
7. Heel strike.
8. Nutation.
9. Anterior translation of knee.
10. Function of Lumbricals in hand.

### SECTION – B

*Attempt any 8 questions. Answer to each question upto 2 pages in length. Each questions carries 5 Marks.* [40]

1. Describe the types of grips in the hand.
2. Write a note on ligaments of the hip joint.
3. Hand to knee gait.
4. Biomechanics of upper cervical spine.
5. Lumbo-Pelvic rhythm.
6. Write a note on Hinged joint.
7. Deviations of a normal posture.
8. What muscles are involved in lifting a briefcase in the hand by the side of the body.
9. Describe the functions and nutritional process of a Intravertebral disc.
10. High stepping gait.
11. Pelvis tilting
12. Draw and label a sketch of a Skeletal muscle.

### SECTION – C

*Attempt any 2 questions. Answer to each question upto 5 pages in length. Each questions carries 15 Marks.* [30]

1. Write in detail the biomechanics of Shoulder joint.
  2. Write a note on classification of Joints with example of each.
  3. Write a detailed note on Hand functions.
  4. Describe the biomechanics of Ankle and Subtalar joint.
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## Electrotherapy-II

M.M. : 90

Time : 3 Hours

### SECTION - A

*All questions are compulsory. Answer to each question upto 5 lines in length. Each question carries 2 Marks.* [20]

1. Importance of Coupling media.
2. Electron clouding.
3. Inductothermy.
4. "Lewis hunting reaction".
5. Diode valve.
6. Specific heat.
7. F-reflex.
8. Cold LASER.
9. Vapocoolent spray.
10. Space averaged intensity.

### SECTION - B

*Attempt any 8 questions. Answer to each question upto 2 pages in length. Each questions carries 5 Marks.* [40]

1. Write the effects of Heat gain by the human body.
2. Write patient preparation for LASER.
3. Write physiological effects of Medium Frequency current.
4. Write the ethical considerations in Electrotherapy.
5. Write the instrumentation of Electromyography.
6. Write a note on Intermittent Compression therapy.
7. Write the different applications of Ultrasound.
8. What is Phonophoresis? Write the effects of Phonophoresis in pain control.
9. What is action potential? Write in detail the manifestation of action potential during Medium frequency current therapy.
10. How wounds could be treated with Ultrasound.
11. Write a note on Biofeedback.
12. Difference between mechanism of heat production by Microwave Diathermy and Shortwave Diathermy.

### SECTION - C

*Attempt any 2 questions. Answer to each question upto 5 pages in length. Each questions carries 15 Marks.* [30]

1. Describe principles of LASER. Classify LASERs.
2. Write contraindications of Shortwave Diathermy, Microwave Diathermy, Ultrasound, LASER, Cold therapy and Pneumatic therapy.
3. Write physiological effects of Heat. Mention the effect of Heat in acute bacterial infection.
4. Write a long essay on Electrodiagnosis.

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## Pathology and Microbiology

M.M. : 90

Time : 3 Hours

### SECTION - A

*All questions are compulsory. Answer to each question upto 5 lines in length. Each question carries 2 Marks.* [20]

1. Degeneration.
2. Acute inflammation.
3. Cryptococcus.
4. Classify bone tumours.
5. Psoriasis.
6. B-Lymphocytes.
7. Macrophages.
8. Teratoma.
9. Bacterial motility.
10. Transudate.

### SECTION – B

*Attempt any 8 questions. Answer to each question upto 2 pages in length. Each questions carries 5 Marks.* [40]

1. Emphysema.
2. Lepromatous leprosy.
3. Enumerate antibacterial agents and their susceptibility tests.
4. Lab. diagnosis of Meningitis.
5. Iron deficiency anaemia.
6. Type III hypersensitivity reactions.
7. Cholera.
8. Etiopathogenesis of Rheumatic heart disease.
9. Volkmann's ischaemia.
10. Laboratory diagnosis of Hepatitis.
11. Discuss differences between Benign and Malignant tumours.
12. Septic arthritis.

### SECTION – C

*Attempt any 2 questions. Answer to each question upto 5 pages in length. Each questions carries 15 Marks.* [30]

1. Give the morphology, life cycle, pathogenecity and laboratory diagnosis of Echinococcus Granulosus.
2. Enumerate microorganisms causing Urinary Tract infection and discuss laboratory diagnosis of the same.
3. Define and Classify Necrosis. Discuss morphology of different type of Necrosis.
4. Enumerate diseases of Muscle and discuss etiopathogenesis and morphology of Poliomyelitis.

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