**B.P.T. [2nd Prof.]**

# BF/2015/09

# Pathology & Microbiology

**[New Scheme w.e.f. 2009]**

Time : 3 Hours Max Marks : 80

 **USE SEPARATE ANSWER SHEET FOR EACH SECTION.**

##  SECTION - A [40 Marks]

 **[Pathology]**

*1.* ***Answer the following Short Notes upto 5 lines in length.*** [5x3=15]

(a) Coagulative Necrosis.

(b) Vitamin A deficiency.

 (c) Neoplasia.

 (d) Osteomyelitis.

 *(e)* Scleroderma.

2. **Answer the following question upto 3 pages in length.** *[10]*

Discuss various pathways of spread of Malignant tumours.

3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]

(a) Define Granulomatous inflammation. Discuss pathogenesis, gross and microscopic features of Pulmonary Tuberculosis.

 **OR**

1. Define Pneumonia. Classify Pneumonia. Discuss pathogenesis, clinical features, gross and microscopic features of Lobar Pneumonia in detail.

 **SECTION – B [40 Marks]**

[Microbiology]

1. ***Answer the following Short Notes upto 5 lines in length.*** [5x3=15]

(a) Louis Pasteur.

(b) Bacterial growth curve.

 (c) Viral markers for Hepatitis B virus.

(d) Anaerobic culture methods.

 (e) Enumerate the micro-organisms causing meningitis.

2. **Answer the following question which is Compulsory.**

 (a) Type I hypersensitivity. [5]

 (b) Clinical features and laboratory diagnosis of Leprosy. [5]

3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]

(a) Laboratory diagnosis of diarrhoea.

**OR**

(b) Clinical features and Laboratory diagnosis of Rabies.

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**B.P.T. [2nd Prof.]**

# BF/2015/09

# Pharmacology

**[New Scheme w.e.f. 2009]**

**Time : 1½ Hours Max Marks : 40**

*1.* ***Answer the following Short Notes upto 5 lines in length.*** [5x3=15]

 Attempt all the questions with suitable examples, if any.

 a. Zero order kinetics.

 b. Teratogenecity.

 c. Synergism.

 d. Drug antagonism.

 e. Placebo.

2. **Answer the following question upto 3 pages in length.** *[10]*

Describe drug therapy of Myasthenia gravis.

3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]

(a) Write down the side effect of α- blockers and their therapeutic indication and absolute C/I.

 **OR**

(b) Discuss the pharmacological actions, therapeutic uses and side effects of Atropine.

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**B.P.T. [2nd Prof.]**

# BF/2015/09

# Sociology & Psychology

**[New Scheme w.e.f. 2009]**

Time : 3 Hours Max Marks : 80

 USE SEPARATE ANSWER SHEET FOR EACH SECTION.

##  SECTION - A [40 Marks]

 [Sociology]

*1.* ***Answer the following Short Notes upto 5 lines in length.*** [5x3=15]

 (a) Explain the concept of Community?

 (b) Mention the factors responsible for bringing out change in Caste System.

 (c) Define Sub- culture of medical workers.

 (d) Is Alcoholism a disease?

 (e) Explain the relationship between Family and Nutrition.

2. **Answer the following question upto 3 pages in length.** *[10]*

Explain the meaning of Social Control. How can various means of social control regulate human behaviour, deviance and disease.

3. **Attempt any ONE question out of the following two questions and**

 **Answer should be upto 5 pages in length.** [15]

(a) Explain the meaning of Socialization. What type of socialization practices are required for rehabilitation of drug addict patients ?

 **OR**

(b) In what way family influences the personality of an individual ? What are the effects of sickness on family.

 **SECTION – B [40 Marks]**

[Psychology]

1. ***Answer the following Short Notes upto 5 lines in length.*** [5x3=15]

(a) What is the difference between Abnormal and Clinical Psychology ?

(b) What do you mean by Psychosomatic Disorders ?.

 (c) Explain the difference between Anger and Hostility.

 (d) How Palsy is different from Paralysis ?

 (e) What is the difference between Illusions & Delusions ?.

2. **Answer the following question upto 3 pages in length.** *[10]*

Explain the different Principles of Learning used to modify the behaviour of the Patient.

3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]

(a) Explain the physiological and psychological effects of Stress along with its mechanism.

 **OR**

(b) Explain the basic concepts of Freud and their relevance in Physiotherapy.

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**B.P.T. [2nd Prof.]**

# BF/2015/09

# Electro Therapy – II

**[New Scheme w.e.f. 2009]**

Time : 3 Hours Max Marks : 80

 USE SEPARATE ANSWER SHEET FOR EACH SECTION.

##  SECTION - A [40 Marks]

*1.* ***Answer the following Short Notes upto 5 lines in length.*** [5x3=15]

 a. Dipole method.

 b. Triode.

 c. Magnetic field.

 d. Axonotmesis.

 e. Lewis Hunting Reaction.

2. **Answer the following question upto 3 pages in length.** *[10]*

Explain Biofeedback.

3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]

a. Explain components of EMG and parameters of MUAP.

**OR**

b. Explain various techniques for application of cryotherapy. **SECTION – B [40 Marks]**

1. ***Answer the following Short Notes upto 5 lines in length.*** [5x3=15]

a. Contra planar method.

 b. Heliotherapy.

 c. Faradism under tension.

 d. Neuropraxia.

 e. Standing waves.

2. **Answer the following question upto 3 pages in length.** *[10]*

Describe physical effects of Heat.

3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.**  [15]

a. Explain the production, technique of application, therapeutic effects and contraindications of US therapy.

**OR**

b. Explain the properties, production and technique of application of LASERS.

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**B.P.T. [2nd Prof.]**

# BF/2015/09

# Exercise Therapy – II

**[New Scheme w.e.f. 2009]**

Time : 3 Hours Max Marks : 80

 USE SEPARATE ANSWER SHEET FOR EACH SECTION.

##  SECTION - A [40 Marks]

*1. All questions are compulsory.* ***Answer upto 5 lines in length.*** [5x3=15]

 a. Buoyancy.

 b. Frenkle exercises.

 c. Spasticity.

 d. Thera bands.

 e. Limb length.

2. **Answer the following question upto 3 pages in length.** *[10]*

Explain Auxillary and gutter crutches.

3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]

a. Explain various breathing exercises.

**OR**

b. Explain any three pathological gait patterns with respect to distance and time variables.

 **SECTION – B [40 Marks]**

1. *All questions are compulsory.* ***Answer upto 5 lines in length.*** [5x3=15]

a. Breathing.

 b. Muscle strength.

 c. Concave convex rule.

 d. Joint mobility.

 e. Mat exercises.

2. **Answer the following question upto 3 pages in length.** *[10]*

 Explain the technique for increasing range of motion for right knee flexion and extension.

3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.**  [15]

a. Explain the posture assessment in standing of a normal person.

**OR**

b. Explain the principles and techniques of mechanical traction.

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**B.P.T. [2nd Prof.]**

# BF/2015/09

# Biomechanics

**[New Scheme w.e.f. 2009]**

Time : 3 Hours Max Marks : 80

 **USE SEPARATE ANSWER SHEET FOR EACH SECTION.**

##  SECTION - A [40 Marks]

*1. All questions are compulsory.* ***Answer upto 5 lines in length.*** [5x3=15]

(a) Stress-strain curve.

 (b) Ground Reaction Force (GRF).

 (c) Cartilagenous Joints.

 (d) Line of gravity.

 (e) Equilibrium.

2. **Answer the following question upto 3 pages in length.** *[10]*

Classify levers. Give suitable examples of lever in human body.

3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.**  [15]

(a) Explain Newton’s laws with suitable examples in human body.

 **OR**

(b) Explain in detail about saggital plane gait analysis with reference to RLA system.

 **SECTION – B [40 Marks]**

1. *All questions are compulsory.* ***Answer upto 5 lines in length.*** [5x3=15]

(a) Spurt & shunt muscles.

 (b) Genu varum.

 (c) Force of friction.

 (d) Open-kineomatic chain.

 (e) Gluteus maximus gait.

2. **Answer the following question upto 3 pages in length.** *[10]*

 Discuss in detail muscle contraction mechanism.

3. **Attempt any ONE question out of the following two questions and Answer**

 **should be upto 5 pages in length.**  [15]

(a) Discuss in detail the effect of immobilization and aging on joint.

 **OR**

(b) Describe the role of foot arches and how biomechanics can help to improve weight distribution in foot.

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