**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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