**B.P.T. [1st Prof.]**

# BF/2015/09

# Anatomy

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

Time : 3 Hours Max Marks : 80

*Note : All questions are compulsory.*

 **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) Popliteus (b) Clavicle

 (c) Testis (d) Foot drop

 (e) Radial Nerve

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

*Describe in detail the Femoral Triangle.*

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

(a) Describe the Shoulder Joint under the following headings :

(i) Type (ii) Articular surfaces (iii) Ligaments (iv) Movement (v) Applied Anatomy

 **OR**

(b) Describe the Uterus under following headings :

(i) Structure and Parts (ii) Supports (iii) Relations (iv) Applied Anatomy

 **SECTION – B [40 Marks]**

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

 (a) Histology of Hyaline cartilage (b) Sartorius (c) Intervertebral disc

 (d) Arches of foot (e) Erb’s paralysis

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

 Describe in detail the Cubital Fossa.

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

(a) Describe the muscles of posterior compartment of thigh under the following headings :

(i) Enumerate the Muscles (ii) Attachments

(iii) Nerve Supply (iv) Actions

**OR**

(b) **Describe Tongue under the following headings** :

(i) Structure (ii) Intrinsic and extrinsic muscles (iii) Nerve supply (iv) Applied Anatomy

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**B.P.T. [1st Prof.]**

# BF/2015/09

# Physiology

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

**Time : 3 Hours Max Marks : 80**

*Note : All questions are compulsory.*

 **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) Thrombocytopenia.

 (b) Smooth muscle.

 (c) Diffusion of gases through respiratory membrane.

 (d) Action potential.

 (e) Pain.

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

Discuss bile, its secretion and role of bile in digestion?

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

(a) Discuss Glomerular filtration rate and factors affecting it ?

 **OR**

 (b) Discuss molecular basis of skeletal muscle contraction along with well labelled

 diagram ?

 **SECTION – B [40 Marks]**

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

 **Write short notes on *:***

 (a) Cardiac work out put.

 (b) Dilution of urine.

 (c) Hypothyroidism.

 (d) Transport maximum.

 (e) Hypoxia.

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

 Discuss layers of retina and its function ?

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

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

 (a) Draw well labled diagram of organ of corti and discuss its function ?

 **OR**

 (b) Discuss diabetes and its types along with its treatment ?

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**B.P.T. [1st Prof.]**

# BF/2015/09

# Biochemistry

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

**Time : 3 Hours Max Marks : 80**

*Note : All questions are compulsory.*

 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) Discuss clinical importance of enzymes.

 (b) Define proteins and classify with examples.

 (c) What are properties of Genetic code.

 (d) Explain essential fatty acids.

 (e) List different types of polysaccharides.

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

Discuss Citric Acid Cycle. Explain its regulation and role of different vitamins which are used as co enzymes in this cycle.

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

(a) Discuss metabolism of cholesterol, clinical significance and derivative of cholesterol.

  **OR**

(b) Explain different components of respiratory chain and its inhibitors.

 **SECTION – B [40 Marks]**

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

 (a) Write about Vitamin C.

 (b) Discuss different types of RNA.

 (c) Describe Ketone bodies.

 (d) Explain Starch and Glycogen.

 (e) Write about protein energy malnutrition.

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

What is glyconeogenesis ? Name the substrates for Gluconeogenesis. How is normal blood glucose regulated ?

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

(a) Discuss Urea formation, site of synthesis alongwith enzymes required and its regulation.

 **OR**

(b) Define and classify Vitamins. Describe biochemical role of one fat soluble and one water soluble vitamin with deficiency diseases.

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**B.P.T. [1st Prof.]**

# BF/2015/09

# Electrotherapy-I

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

**Time : 3 Hours Max Marks : 80**

*Note : All questions are compulsory.*

 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) Difference between Faradic and Galvanic current.

 (b) Dosimetry of UVR.

 (c) Therapeutic effects of Constant current.

 (d) Thermionic valve.

 (e) Voltmeter.

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

Explain type of nerve lesion and development of reaction of degeneration.

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

(a) Write a note on Magnetic field and electromagnetic induction.

 **OR**

(b) Write in detail about Step up and Step down Transformer.

 **SECTION – B [40 Marks]**

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

(a) Structure of Atom.

 (b) Potential difference.

 (c) Properties of Sound.

 (d) Dangers of Short circuits.

 (e) Transisters.

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

Physiological and therapeutic effects of Modified Direct Current.

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

(a) What is Moist heat, Explain its principle and methods of application in various parts of the body and emphasizing on precautions to be taken.

**OR**

(b) Write effects, uses precautions and indications of TENS.

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**B.P.T. [1st Prof.]**

# BF/2015/09

# Exercise Therapy – I

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

**Time : 3 Hours Max Marks : 80**

*Note : All questions are compulsory.*

 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) Enumerate the muscle and differentiate between length testing of one joint &

 two joint hip flexor muscle.

(b) Active insufficiency and Passive insufficiency

 (c) Illusterate two arrangement of pulley for strengthening of shoulder extensor.

(d) Physiological effects of vibration and shaking.

 (e) One dimension classification of skill.

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

Define active and passive ROM testing. Identify indications and goals of each.

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

(a) Classify group action of muscle. Explain group action of muscle while performing shoulder flexion.

 **OR**

(b) Explain the method of testing muscle strength of hamstrings with emphasis on trick movements while testing.

 **SECTION – B [40 Marks]**

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

 **(**a) Fatigue (b) Effects and uses of suspension

(c) Motor skill (d) Shoulder Wheel

 (e) Role of gravity in M.M.T.

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

 Explain the muscle work, advantages, disadvantages of knealing as a fundamental position. Give at least two derived position from it.

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

(a) Explain the testing position and procedure of R.O.M. measurement for shoulder external rotators.

**OR**

(b) Explain the testing position & procedure for grade 1 and grade 3 strength testing of elbow flexors.

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**B.P.T. [1st Prof.]**

# BF/2015/09

# English

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

**Time : 1 ½ Hours Max Marks : 40**

Note : Attempt all questions.

1. **a**. **Correct the following sentences** : [5]

 i. My father is in the teaching line.

 ii. I shall take your leave now.

 iii. Amritsar is farther from Delhi then Ambala.

 iv. Bread is made of flour.

v. I am forty years.

b. **Fill in the blanks from the words given in brackets** : [5]

 i. This novel \_\_\_\_\_\_\_\_\_\_\_\_\_\_ like hot cakes (is selling, was selling).

 ii. The baby \_\_\_\_\_\_\_\_\_ soundly in his cradle (was sleeping, is sleeping).

iii. She \_\_\_\_\_\_\_\_\_\_ beautiful hairs (has, have).

iv. The college \_\_\_\_\_\_\_\_ at 9:00 a.m. (opens, opened).

1. My brother \_\_\_\_\_\_\_\_ tomorrow (will arrive, shall arrive).

2. **Read the passage given below and make notes using suitable short forms :** [10]

 The quest for happiness is as old as world itself. Where and how to find happiness is a question which every generation keeps asking. Wealth does not necessarily bring it. Some of the most miserable and discontented people have been wealthiest. Some of the most happy people have been ordinary hardworking men and women whom none would describe as worldly success. What then is the crux of matter? It is that happiness in life depends not nearly so much on external circumstances as on you and the kind of person you are.

3. Write a letter to your father for money. [10]

 4. **Write a paragraph of about 100 words on any one of the following topics** : [10]

 a. A visit to a Hill Station.

 b. Environmental Pollution.

 c. The value of Games.

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