

**B.P.T.[1<sup>st</sup> Prof.]**

BF/2021/03

**Anatomy**

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
 2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
 3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**  
 4.) **The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.**

**SECTION - A****[40 Marks]**

1. **Write short Notes up to 5 lines in length.** [5x3=15]  
 (a) Ulnar Nerve (b) Pectoralis Major  
 (c) Cephalic Vein (d) Coronary Sinus  
 (e) Gastrocnemius Muscle
2. **Answer the following question upto 3 pages in length.** [10]  
 Describe Shoulder joint for its type, articulation, movements and applied anatomy.
3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
 (a) Describe nerve supply of Face with well labelled diagram.
- OR**
- (b) Classify Bones with examples. Draw a diagram of each type.

**SECTION - B****[40 Marks]**

4. **Write short Notes up to 5 lines in length.** [5x3=15]  
 (a) SA Node  
 (b) Spinal Accessory Nerve  
 (c) Vas Deferens  
 (d) Inner Ear  
 (e) Orbicularis Oris
5. **Answer the following question upto 3 pages in length.** [10]  
 Describe venous drainage of Upper limb with applied anatomy. Make a suitable diagram explaining your answer.
6. **Attempt any ONE question out of the following two questions and answer should be upto 5 pages in length.** [15]  
 (a) Describe Stomach for its structure, blood supply and nerve supply. Draw suitable diagrams also.
- OR**
- (b) Describe Female reproductive system. Draw suitable diagram.
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**B.P.T. [1<sup>st</sup> Prof.]**

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**Physiology**

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
 2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
 3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**  
 4.) **The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.**

**SECTION - A****[40 Marks]**

1. **Write short Notes on :** [5x3=15]  
 (a) Osmotic Pressure (b) Action Potential in Nerve  
 (c) Motor Unit (d) Normal ECG  
 (e) Acromegaly
2. **Answer the following question upto 3 pages in length.** [10]  
 Describe functions of Cerebellum and tests to access its functions.
3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
 (a) Describe how chemical regulation of respiration occurs in body  
OR  
 (b) Enumerate Clotting factors. Explain intrinsic pathway of coagulation

**SECTION - B****[40 Marks]**

4. **Write short Notes up to 5 lines in length.** [5x3=15]  
 (a) Diffusion across Cell Membrane  
 (b) Jaundice  
 (c) Cardiac Cycle  
 (d) Erythrocyte  
 (e) Micturition Reflex
5. **Answer the following question upto 3 pages in length.** [10]  
 Enumerate functions of Skin and explain how skin helps in regulation of Body temperature.
6. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
 (a) Explain excitation contraction coupling in Skeletal muscle- Add a note on hypertrophy of muscle.  
OR  
 (b) Enumerate Hormones regulating glucose metabolism in the body. Explain mechanism of action and functions of insulin

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B.P.T. [1<sup>st</sup> Prof.]

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## Biochemistry

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
 2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
 3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**  
 4.) **The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.**

SECTION - A

[40 Marks]

1. **Answer the following( up to 5 lines in length):** [5x3=15]  
 (a) Explain the functions of Endoplasmic reticulum and also draw a labelled diagram.  
 (b) Define Electrolytes and name the clinical abnormalities associated with electrolyte imbalance.  
 (c) Write short note on Disaccharides.  
 (d) Write short note on t-RNA.  
 (e) Define structure and functions of Cholesterol in Body.
2. **Answer the following question upto 3 pages in length.** [1+5+4= 10]  
 Define Enzymes and enumerate the major classes of enzymes, give one example for each. Discuss various factors affecting enzyme activity.
3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
 (a) Enumerate Fat soluble vitamins. Discuss the functions and manifestations of Vitamin D deficiency. [6+6+3= 15]  
OR  
 (b) Describe the steps of TCA cycle and products of citric acid cycle. What is the biological significance of TCA cycle. [4+6+5= 15]

SECTION - B

[40 Marks]

4. **Write short Notes up to 5 lines in length.** [5x3=15]  
 (a) Maple Syrup Urine Disease  
 (b) Obesity  
 (c) Glucagon Hormone  
 (d) BMR  
 (e) Biologically Important Nucleotides
5. **Answer the following question upto 3 pages in length.** [10]  
 Define pH and methods of measurements of pH. Name the important buffers systems in the body? Explain the role of various body buffers in the regulation of blood pH.
6. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
 (a) Describe the steps of Beta oxidation of fatty acids and its significance? How is it regulated. [8+7= 15]  
OR  
 (b) How is Ammonia transported in blood? How does the brain detoxify ammonia? [10+5= 15]

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BF/2021/03

**Exercise Therapy – I**

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**  
4.) **The Student must write O.P. Code in the space provided on the Title page of the Answer Book.**

**SECTION - A**

**[40 Marks]**

1. **All questions are compulsory. Answer up to 5 lines in length.** [5x3=15]  
(a) Petrissage Technique  
(b) Levers in Physiotherapy  
(c) Muscle Power  
(d) Muscle Tone  
(e) Co- Contraction
2. **Answer the following question upto 3 pages in length.** [10]  
Describe Theories of Motor control and its application.
3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) Describe the principle, techniques of application, indications, contraindications, precaution and uses of Suspension theory.

**OR**

- (b) Describe the principles of Goniometry. Write the testing position and procedure for gastrocnemius muscle.

**SECTION – B**

**[40 Marks]**

4. **All questions are compulsory. Answer up to 5 lines in length.** [5x3=15]  
(a) Centre of Gravity  
(b) Repetition Maximum  
(c) Free Exercises  
(d) Progressive Resistance Exercise  
(e) Use of Swiss Ball and Dumbells
5. **Answer the following question upto 3 pages in length.** [10]  
Describe the types of Movement, technique of application, indications, contraindications and its therapeutic effect.
6. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) Describe fundamental starting position and derived starting position.

**OR**

- (b) Describe the principle and grades of Manual muscle testing. Write the testing position and procedure for quadriceps muscle.

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## Electrotherapy-I

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
 2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
 3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**  
 4.) **The Student must write O.P. Code in the space provided on the Title page of the Answer Book.**

SECTION - A

[40 Marks]

1. **All questions are compulsory. Write short Notes up to 5 lines in length.** [5x3=15]  
 (a) Accommodation  
 (b) Latent Heat  
 (c) Electric Shock  
 (d) Electromotive Force  
 (e) Rheobase
2. **Answer the following question upto 3 pages in length.** [10]  
 Explain about physiological and therapeutic effects of Faradic current.
3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
 (a) Discuss methods of application of Iontophoresis.

OR

- (b) Explain about Pain Gate theory in detail.

SECTION - B

[40 Marks]

4. **All questions are compulsory. Write short Notes up to 5 lines in length.** [5x3=15]  
 (a) Electromagnetic Induction  
 (b) Refraction  
 (c) Potential Difference  
 (d) Joule's Law  
 (e) Density
5. **Answer the following question upto 3 pages in length.** [10]  
 Discuss about the advantages and disadvantages of Paraffin wax bath over hydro-collator packs.
6. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
 (a) Write about indications, contraindications and precautions of UVR therapy.

OR

- (b) Discuss about indications, contraindications & precautions during the application of Iontophoresis.
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**B.P.T. [1<sup>st</sup> Prof.]**

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**English**

[New Scheme w.e.f. 2009]

Time: 1 ½ Hours

Max Marks: 40

- Note: 1.) *Attempt all questions.*  
 2.) **ATTEMPT ALL QUESTIONS IN SINGLE ANSWER BOOK ONLY.**  
 3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**  
 4.) **The Student must write O.P. Code in the space provided on the Title page of the Answer Book.**

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

- i. Please revert back tomorrow.
- ii. He has written his own autobiography.
- iii. The book is full of wrong mistakes.
- iv. Are you a part in the committee.
- v. The School will open up tomorrow.

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

- i. The team should have \_\_\_\_\_ the task by now. (finish)
- ii. Where are we \_\_\_\_\_? (go)
- iii. I really don't \_\_\_\_\_ anything about this matter. (know)
- iv. She is not \_\_\_\_\_ the problem bravely. (face)
- v. Why are you \_\_\_\_\_ here. (stand)

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

Fairy tale is an English language term for a type of short narrative. Fairy tales typically feature such folkloric characters as fairies, goblins, elves, trolls, dwarves, giants or gnomes, and usually magic or enchantments. However, only a small number of the stories thus designated explicitly refer to fairies. The stories may nonetheless be distinguished from other folk narratives such as legends and explicitly moral tales, including beast fables. In less technical contexts, the term is also used to describe something blessed with unusual happiness, as in "fairy tale ending" (a happy ending) or "fairy tale romance". A "fairy tale" of "fairy story" can also mean any far-fetched story or tall tale.

3. Your friend is worried about employment after completing studies. Write a letter offering some advice and sympathy to express your support. [10]

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

- a. India and the pandemic
  - b. Fashion today
  - c. My goal in life
  - d. Career choices
-

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

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## Pathology & Microbiology

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
2.) **USE SEPARATE ANSWER BOOK FOR EACH SECTION.**  
3.) *The Student must write O.P. Code in the space provided on the Title page of the respective Answer Book.*

### SECTION - A

[40 Marks]

**QP Code: BTN201** [Pathology]

1. **Write short Notes up to 5 lines in length.** [5x3=15]  
(a) Coagulative necrosis  
(b) Vitamin D deficiency  
(c) Septic shock  
(d) Typhoid  
(e) Scleroderma
2. **Answer the following question upto 3 pages in length.** [10]  
Define a Granuloma. Enumerate the causes of granulomatous inflammation.
3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) Define Hypertension. Discuss the causes and complications of hypertension.
- OR**
- (b) Enumerate the causes of Pneumonia. Discuss briefly the pathogenesis, morphology and complications of pneumonia.

### SECTION - B

[40 Marks]

**QP Code: BTN202** [Microbiology]

4. **Write short Notes up to 5 lines in length.** [5x3=15]  
(a) Contribution of Robert Koch  
(b) Bacterial Spores  
(c) Physical methods of Sterilisation  
(d) Type III hypersensitivity  
(e) Agents of Mucormycosis
5. **Answer the following question up to 3 pages in length.** [10]  
Enumerate the organisms causing Enteric fever. Write laboratory diagnosis of enteric fever.
6. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) Discuss laboratory diagnosis of Rabies and its prophylaxis.
- OR**
- (b) What are Herpes viruses. Describe disease caused & laboratory diagnosis of any one of them.
-

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BF/2021/03

**Pharmacology**

[New Scheme w.e.f. 2009]

**Time: 1½ Hours**

**Max Marks: 40**

- Note: 1.) **Attempt all questions.**  
2.) **ATTEMPT ALL QUESTIONS IN SINGLE ANSWER BOOK ONLY.**  
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**  
4.) **The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.**  
5.) **Illustrate answer with suitable schematic diagrams.**

1. **Write short Notes up to 5 lines in length.**

[5x3=15]

Attempt all the questions with suitable examples, if any.

- a. Par- enteral route of drug administration
- b. Phenytoin
- c. Thiazides
- d. Aspirin
- e. Vitamin B

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

[10]

Enumerate Anti- malarial drugs. Discuss mechanism of action, therapeutic uses and side- effects of Chloroquine.

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

[15]

- (a) Classify Anti- thyroid drugs. Discuss their mechanism of action, therapeutic uses and side-effects.

OR

- (b) Classify Opioids. Discuss mechanism of action, therapeutic uses and side-effects of Morphine.
-



**QP Code: BTN204**

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

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**Electro Therapy – II**

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**  
4.) **The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.**

**SECTION - A**

**[40 Marks]**

1. **Write short Notes up to 5 lines in length.** [5x3=15]  
a. Conduction  
b. Mutual Induction  
c. Fasciculation Potential  
d. Cavitation  
e. Scalds
2. **Answer the following question upto 3 pages in length.** [10]  
Explain indications & contraindications for the application of LASER Therapy.
3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
a. Write in detail about physiological & therapeutic effects of Ultrasonic therapy.  
**OR**  
b. Explain Pain Gate theory.

**SECTION – B**

**[40 Marks]**

4. **Write short Notes up to 5 lines in length.** [5x3=15]  
a. Frequency  
b. Radiation  
c. Reflection  
d. Spasticity  
e. Pain
5. **Answer the following question upto 3 pages in length.** [10]  
Explain about the Cross fire method of application of Short Wave Diathermy.
6. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
a. Discuss indications, contraindications & precautions used during the application of Cryotherapy  
**OR**  
b. Write in detail about physiological effects of heat & cold on Human body.

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

BF/2021/03

**Exercise Therapy – II**

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**  
4.) **The Student must write O.P. Code in the space provided on the Title page of the Answer Book.**

**SECTION - A**

**[40 Marks]**

1. **All questions are compulsory. Answer upto 5 lines in length.** [5x3=15]  
a. Dynamic posture  
b. Irradiation  
c. Contraindications of grade 5 manipulations  
d. Tadasana  
e. Equilibrium co-ordination tests
2. **Answer the following question upto 3 pages in length.** [10]  
Discuss in detail functional re-education in Quadraped and Kneeling positions?
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 about assessment of Static standing posture? Explain management of Upper crossed syndrome?  
**OR**  
b. Discuss in detail about patterns of facilitation in P.N.F.?

**SECTION – B**

**[40 Marks]**

4. **All questions are compulsory. Answer upto 5 lines in length.** [5x3=15]  
a. Axillary crutches: Indications and Contraindications  
b. Berg balance scale  
c. Active insufficiency  
d. Swiss ball exercises  
e. Role of exercises in disease prevention
5. **Answer the following question upto 3 pages in length.** [10]  
Discuss in detail about techniques, indications and contraindications of Diaphragmatic breathing exercises?
6. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
a. What is Group therapy? Explain its advantages and disadvantages?  
**OR**  
b. Discuss in detail about various types of joint mobilization to improve Shoulder range of motion?
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**B.P.T. [2<sup>nd</sup> Prof.]**

BF/2021/03

**Biomechanics**

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**  
4.) **The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.**

**SECTION - A**

**[40 Marks]**

1. **All questions are compulsory. Answer upto 5 lines in length.** [5x3=15]  
(a) Line of gravity  
(b) Postural mechanism  
(c) Anatomic pulley  
(d) Pelvic tilt  
(e) Arches of foot
2. **Answer the following question upto 3 pages in length.** [10]  
Discuss in detail about different type of Muscle work and contractions?
3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) Define GAIT, discuss about arthrokinematics and osteokinematics of gait cycle from heel strike to toe off?

**OR**

- (b) Discuss in detail about Patellofemoral joint forces?

**SECTION - B**

**[40 Marks]**

4. **All questions are compulsory. Answer upto 5 lines in length.** [5x3=15]  
(a) Law of inertia  
(b) Creep  
(c) Antalgic gait  
(d) Spurt and shunt muscle  
(e) Posture
5. **Answer the following question upto 3 pages in length.** [10]  
Discuss in detail about Synovial joint and classify them.
6. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) Discuss in detail about biomechanics of Shoulder joint?

**OR**

- (b) Discuss arches of Foot and explain there role in foot functions?
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# B.P.T. [2<sup>nd</sup> Prof.]

BF/2021/03

## Sociology & Psychology

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
2.) **USE SEPARATE ANSWER BOOK FOR EACH PART.**  
3.) *The Student must write Q.P. Code in the space provided on the Title page of the respective Answer Book.*

### SECTION - A

[40 Marks]

**QP Code: BTN207**

[Sociology]

1. **Write short Notes up to 5 lines in length.** [5x3=15]  
(a) What is the relation of culture with social consciousness and perception of health?  
(b) How can primary groups facilitate in rehabilitation. Discuss with examples.  
(c) Are home remedies effective means of controlling morbidity? Discuss with illustrations  
(d) Discuss caste as an element of unequal access to health facilities.  
(e) Discuss family as an agency of socialization?
2. **Answer the following question upto 3 pages in length.** [10]  
What is Social control? How does norms, values and folkways control social deviance.
3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) Discuss recent policy on disability of GOI with examples.

OR

- (b) Discuss the role of Medical social worker in a community. Support your answer with examples.

### SECTION - B

[40 Marks]

**QP Code: BTN208**

[Psychology]

1. **Write short Notes up to 5 lines in length.** [5x3=15]  
(a) Personality  
(b) Intelligence tests  
(c) Motivation  
(d) Use of denial as defense mechanism by patient  
(e) Counselling of patients
2. **Answer the following question upto 3 pages in length.** [10]  
Discuss principles of Perception with suitable examples.
3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) Discuss emotional and psychological needs of patients who have medical conditions or trauma leading to unambulatory or semi-ambulatory state and your interventions.

OR

- (b) Discuss the factors which lead to non-compliance of treatment by patients and how you can help patients to improve compliance.
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**B.P.T. [3<sup>rd</sup> Prof.]**

BF/2021/03

**Orthopaedics**

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
2.) ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.  
3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED  
4.) The Student must write O.P. Code in the space provided on the Title page of the Answer Book.

**SECTION - A**

**[40 Marks]**

1. **Write short Notes up to 5 lines in length.**

[5x3=15]

- (a) Cubitus varus
- (b) Meralgia paraesthetica
- (c) Dequervain's disease
- (d) Plantar fasciitis
- (e) Ulnar (Cubital) tunnel syndrome

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

[10]

Discuss in detail clinical presentation, management and complications of Shoulder dislocation.

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 clinical presentation, management and complications of Lateral condyle fractures of humerus in children.

**OR**

- (b) Discuss in detail the clinical presentation, management and complications of Open fracture of both bones leg fractures in adults.

**SECTION - B**

**[40 Marks]**

4. **Write short Notes up to 5 lines in length.**

[5x3=15]

- (a) Patella fracture
- (b) Wrist drop
- (c) Frozen shoulder
- (d) Management of bedsore
- (e) Retrocalcaneal bursitis

5. **Answer the following question upto 3 pages in length.**

[10]

Discuss in detail the care of a patient of Traumatic paraplegia in the wards.

6. **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 clinical presentation, imaging and management of Recurrent dislocation of patella.

**OR**

- (b) Discuss in detail the clinical presentation, differential diagnosis and management of Osteoarthritis of knee.

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**B.P.T. [3<sup>rd</sup> Prof.]**

BF/2021/03

**General Medicine**

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**  
4.) **The Student must write O.P. Code in the space provided on the Title page of the Answer Book.**

**SECTION - A**

**[40 Marks]**

1. **Write short Notes up to 5 lines in length.** [5x3=15]  
(a) Pulmonary embolism  
(b) Clinical features of Vitamin A deficiency  
(c) Drugs used in obesity  
(d) Urticaria  
(e) Urinary tract infections
2. **Answer the following question upto 3 pages in length.** [10]  
Describe the etiology, clinical features and management of Neurological diseases specific to elderly.
3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) Describe the clinical features, diagnosis and treatment of Heart failure.
- OR**
- (b) Write the causes, clinical features and management of Type 2 diabetes mellitus.

**SECTION - B**

**[40 Marks]**

4. **Write short Notes up to 5 lines in length.** [5x3=15]  
(a) Enumerate the causes of Shock  
(b) Clinical features of Rheumatic fever  
(c) Empyema  
(d) Clinical features and diagnosis of Herpes simplex  
(e) Diagnosis of dementia
5. **Answer the following question upto 3 pages in length.** [10]  
Discuss the etiology, clinical features and treatment of AIDS.
6. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) Describe the causes, clinical features, diagnosis and treatment of Cerebral thrombosis.
- OR**
- (b) Describe the clinical features, diagnosis and treatment of Cirrhosis of Liver.
-

**B.P.T. [3<sup>rd</sup> Prof.]**

BF/2021/03

**P.T. in Orthopaedic Conditions**

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**  
4.) **The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.**

**SECTION - A**

**[40 Marks]**

1. **Write short Notes up to 5 lines in length.** [5x3=15]  
(a) Delayed union  
(b) Genu Varum  
(c) Sites of amputation  
(d) Aviator's fracture  
(e) Angular kyphosis
2. **Answer the following question upto 3 pages in length.** [10]  
Discuss the posterior dislocation of the Hip joint and it's management in detail.
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 about TKR and its physiotherapy management.

**OR**

- (b) Discuss etiopathogenesis, clinical features, lab diagnosis and management of Rheumatoid arthritis.

**SECTION - B**

**[40 Marks]**

4. **Write short Notes up to 5 lines in length.** [5x3=15]  
(a) Myositis ossificans  
(b) Compartment syndrome  
(c) Complications of arthroplasty  
(d) Bumper fracture  
(e) Synovitis
5. **Answer the following question upto 3 pages in length.** [10]  
Describe in detail about etiopathogenesis, clinical features, types and management of Pes Cavus.
6. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) Discuss in detail about Fracture shaft femur and it's management.

**OR**

- (b) Elaborate various causes of Sports injuries and add a note on physiotherapy management of sports injuries.
-

**B.P.T. [3<sup>rd</sup> Prof.]**

BF/2021/03

**P.T. in Medical Conditions**

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**  
4.) **The Student must write O.P. Code in the space provided on the Title page of the Answer Book.**

**SECTION - A**

**[40 Marks]**

1. **Write short Notes up to 5 lines in length.**

[5x3=15]

- (a) Classification of Chest wall deformities
- (b) Buerger's exercise
- (c) Physiotherapy management of Tabes dorsalis
- (d) Marasmus
- (e) Active cycle of Breathing technique

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

[10]

What is Lymphedema. Describe the physiotherapy management of a patient suffering from lymphedema of the right upper limb.

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

[15]

- (a) Describe Cerebral palsy. Write the types of cerebral palsy and their physiotherapy management.

**OR**

- (b) Define Asthma. Write a detailed note on risk factor, clinical features and physiotherapy management of asthma.

**SECTION - B**

**[40 Marks]**

4. **Write short Notes up to 5 lines in length.**

[5x3=15]

- (a) Diaphragmatic breathing exercise
- (b) Osteoporosis
- (c) Fibromyalgia
- (d) Clinical features of pellagra and scurvy
- (e) Exercise stress test

5. **Answer the following question upto 3 pages in length.**

[10]

What is Psoriasis? Write the etiology, pathophysiology and physiotherapy management of Psoriasis.

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

[15]

- (a) Describe the evaluation and management of leprosy with special emphasis on the role of physiotherapy.

**OR**

- (b) What are various musculoskeletal disorders seen in the elderly population? Discuss any one in detail with physiotherapy management of the same.

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**Research Methodology and Biostatistics**

[New Scheme w.e.f. 2009]

**Time: 3 Hours**

**Max Marks: 80**

- Note:** 1.) *Attempt all questions.*  
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED**  
4.) **The Student must write O.P. Code in the space provided on the Title page of the Answer Book.**

**NOTE: SIMPLE CALCULATOR IS ALLOWED.**

**SECTION - A**

**[40 Marks]**

1. **Write short Notes up to 5 lines in length.**

[5x3=15]

- (a) Random sampling
- (b) One way- ANOVA
- (c) Characteristics of scientific approach
- (d) Elements of informed consent
- (e) What does negative & positive correlation imply?

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

[10]

Describe Review of literature and various steps involved in review of literature.

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

[15]

- (a) Discuss Validity and its types in detail.

**OR**

- (b) Describe mean, median and mode with the help of examples in detail.

**SECTION - B**

**[40 Marks]**

1. **Write short Notes up to 5 lines in length.**

[5x3=15]

- (a) Ethical issues in research t-test
- (b) Hypothesis
- (c) Primary and secondary data
- (d) Importance of research in physiotherapy
- (e) Standard deviation

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

[10]

Discuss Experimental research design in detail.

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

[15]

- (a) Describe Structure of research in detail.

**OR**

- (b) Discuss Sampling and its various techniques in detail.

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**B.P.T. [4<sup>th</sup> Prof]**

BF/2021/03

**General Surgery**

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED.**  
4.) **The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.**

**SECTION - A**

**[40 Marks]**

1. **Write short Notes up to 5 lines in length.** [5x3=15]  
(a) Ingrowing Toe Nail  
(b) Squint  
(c) Epistaxis  
(d) Haematuria  
(e) Local Anaesthesia
2. **Answer the following question upto 3 pages in length:** [10]  
Discuss different types of Skin infection & their management.
3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) Discuss classification of Ulcers & management of a large ulcer.
- OR**
- (b) Discuss in detail Pregnancy & its complication during delivery.

**SECTION - B**

**[40 Marks]**

4. **Write short Notes up to 5 lines in length.** [5x3=15]  
(a) Flat Foot  
(b) Cataract  
(c) Salpingitis  
(d) Tetanus  
(e) Kyphosis
5. **Answer the following question upto 3 pages in length.** [10]  
Discuss irregularities of Menstrual period.
6. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) Describe etiology & management of Diabetic foot.
- OR**
- (b) Discuss different type of Fracture in its management.
-

[B.P.T. [4<sup>th</sup> Prof]

BF/2021/03

Neurology

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED.**  
4.) **The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.**

SECTION - A

[40 Marks]

1. **Write short Notes up to 5 lines in length.**

[5x3=15]

- (a) Trigeminal Neuralgia
- (b) Foot Drop
- (c) Schizophrenia
- (d) Choreoathetosis
- (e) Difference between Rigidity & Spasticity

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

[10]

Write about cardinal features of Parkinsonism with its patho-physiology and management.

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

[15]

- (a) Write about patho-physiology, clinical features, investigations & management of DMD (Duchene Muscular Dystrophy).

OR

- (b) Assessment and management of Myasthenia Gravis.

SECTION - B

[40 Marks]

4. **Write short Notes up to 5 lines in length.**

[5x3=15]

- (a) Pott's Spine
- (b) Muscle Tone
- (c) Functions of Extra-pyramidal System
- (d) Weber's Test
- (e) Classification of Nerve Injuries

5. **Answer the following question upto 3 pages in length.**

[10]

Broad classification of Intracranial Tumors.

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

[15]

- (a) What is Defence mechanism? Write about types, causes & assessment of mental disorders.

OR

- (b) Classification, assessment and management of Hydrocephalus

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[B.P.T. [4<sup>th</sup> Prof]

BF/2021/03

P.T. in Neurological Conditions

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED.**  
4.) **The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.**

SECTION - A

[40 Marks]

1. **Write short Notes up to 5 lines in length.** [5x3=15]  
(a) Glasgow coma scale  
(b) Brown- Sequard syndrome  
(c) Cauda equina lesions  
(d) Management of facial nerve palsy  
(e) Kernig's and Brudzinski signs
2. **Answer the following question upto 3 pages in length.** [10]  
Discuss the CSF examination in various types of Meningitis.
3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) What are various grades of Peripheral nerve injury. Discuss in detail radial nerve injury

OR

- (b) Enumerate all Cranial nerves and its testing.

SECTION - B

[40 Marks]

4. **Write short Notes up to 5 lines in length.** [5x3=15]  
(a) Babinski's sign  
(b) Hold relax technique of PNF  
(c) Horner's syndrome  
(d) Grades of spasticity  
(e) Rood's approach
5. **Answer the following question upto 3 pages in length.** [10]  
Describe Hemiplegic gait and gait rehabilitation in hemiplegic patients.
6. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) Describe various types of Head injury. Discuss in detail about physiotherapy management of Traumatic brain injury.

OR

- (b) Discuss in detail regarding physiotherapy assessment and management of patient with complete T10 spinal cord injury.
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[B.P.T. [4<sup>th</sup> Prof]

BF/2021/03

P.T. in Surgical Conditions

[New Scheme w.e.f. 2009]

Time: 3 Hours

Max Marks: 80

- Note: 1.) *Attempt all questions.*  
2.) ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.  
3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED.  
4.) The Student must write O.P. Code in the space provided on the Title page of the Answer Book.

SECTION - A

[40 Marks]

1. **Write short Notes up to 5 lines in length.** [5x3=15]  
(a) Hydrocephalus  
(b) Hydronephrosis  
(c) Colitis  
(d) Bones of wrist  
(e) Hepatitis
2. **Answer the following question upto 3 pages in length.** [10]  
What is Neuropraxia. Describe method of repair of nerve injury.
3. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) What is LSCS. Describe indication of caeserean section & post operative physiotherapy  
OR  
(b) Describe different Chest injuries & its management with post operative exercise.

SECTION - B

[40 Marks]

4. **Write short Notes up to 5 lines in length.** [5x3=15]  
(a) Flat foot  
(b) Colonoscopy  
(c) Ingrowing toe nail  
(d) Rodent ulcer  
(e) Escharotomy
5. **Answer the following question upto 3 pages in length.** [10]  
Describe Head injury and its management.
6. **Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.** [15]  
(a) Discuss management of a Large ulcer & different types of grafts & flaps.  
OR  
(b) Describe different type of Open cardiac surgery with related physiotherapy.
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**[B.P.T. [4<sup>th</sup> Prof]**

BF/2021/03

**Physiotherapy Ethics Administration & Rehabilitation**

[New Scheme w.e.f. 2009]

**Time: 3 Hours**

**Max Marks: 80**

- Note:** 1.) *Attempt all questions.*  
2.) **ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.**  
3.) **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED.**  
4.) **The Student must write Q.P. Code in the space provided on the Title page of the Answer Book.**

**SECTION - A**

**[40 Marks]**

1. **Write short Notes up to 5 lines in length.**

**[5x3=15]**

- (a) Responsibility and Confidentiality.
- (b) Relationship between Physical therapy Professionals
- (c) Philosophy and Philosophical statement in Physiotherapy
- (d) Teaching of Wheelchair activities
- (e) Milwaukee Brace

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

**[10]**

Discuss the rules of Professional ethics and conduct to be followed in the field of Physiotherapy.

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

**[15]**

- (a) Explain the History of physiotherapy.

**OR**

- (b) Explain Community based rehabilitation and out reach programmes to rehabilitate persons with disabilities living in rural areas.

**SECTION - B**

**[40 Marks]**

4. **Write short Notes up to 5 lines in length.**

**[5x3=15]**

- (a) Consumer Protection Act
- (b) Basic Principles of Administration
- (c) Statutory Provisions & Schemes of Assistance to Persons with Disability
- (d) Definition and Importance of Activities of Daily Living (ADLS)
- (e) Liability and Documentation

5. **Answer the following question upto 3 pages in length.**

**[10]**

Describe the identification, assessment, classification and principles of rehabilitation of the mentally subnormal, including Vocational training and Home education programme.

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

**[15]**

- (a) Describe Below knee prosthesis, its checkout, uses and fittings.

**OR**

- (b) Describe principles in the management of Vocational problems, including evaluation and vocational goals for people with disability.

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