Max. Marks: 40 Marks

# Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - Aug 2013

Time: 3 Hours

### Pathology Q.P. Code : 2708

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary

(Note : Both QP Codes 2708 and 2709 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One)		1 x 10 = 10 Marks
1.	Write about wound healing in detail	
2.	What is edema, classify and add a note on cardiac edema	
SHO	RT ESSAYS (Answer any Four)	4 x 5 = 20 Marks
3.	Hypersensitivity type 1 reaction	
4.	Syphilis	
5.	Investigations in hemolytic anaemia	
6.	Osteosarcoma	
7.	Carcinogens	
SHORT ANSWERS		5 x 2 = 10 Marks
8.	Dysplasia	
9.	Complications of diabetes mellitus	
10.	What is shock, give examples?	
11.	Gastritis	
12.	Atrophy	

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II Year B.P.T. Degree Examination - Aug 2013

#### Time: 3 Hours

### **Microbiology**

## Q.P. Code : 2709

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary

(Note : Both QP Codes 2708 and 2709 are to be answered within total duration of 3 hours)

#### LONG ESSAYS (Answer any One)

- 1. Describe the morphology, modes of transmission and laboratory diagnosis of HIV. Add a note on universal precautions
- 2. Define Pyrexia or fever of unknown origin. Discuss the laboratory diagnosis of typhoid fever

#### SHORT ESSAYS (Answer any Four)

- 3. Acquired immunity
- 4. Gonorrhoea
- 5. Prophylaxis against tetanus
- 6. Microfilaria
- 7. Chemical methods of sterilization

#### SHORT ANSWERS

- 8. Koch's postulates
- 9. Name two selective media and two enriched media
- 10. Name the diarrhoeagenic Escherichia coli
- 11. What is an adjuvant? Give two examples
- 12. Name four bacteria causing urinary tract infections

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1 x 10 = 10 Marks

 $4 \times 5 = 20$  Marks

#### 5 x 2 = 10 Marks

### Max. Marks: 40 Marks

II Year B.P.T. Degree Examination - Aug 2013

#### Time: Three Hours

#### Max. Marks: 80 Marks

### PHARMACOLOGY

(RS - 3 & RS - 4)

## Q.P. CODE: 2710

Your answers should be specific to the questions asked Draw neat labeled diagrams wherever necessary

#### LONG ESSAYS (Answer any Two)

- 1. Classify antihypertensive drugs. Explain their mechanism of action
- 2. Discuss various factors modifying drug action with examples
- 3. Classify analgesic and antipyretic agents. Discuss the pharmacological actions, adverse effects and therapeutic uses of aspirin

#### SHORT ESSAYS (Answer any Eight)

- 4. Explain the various uses of adrenergic drugs
- 5. Explain the adverse effects and uses of ACE inhibitors
- 6. biotransformation
- 7. Classify sedatives and hypnotics and list their therapeutic uses
- 8. Give the merits and demerits of intravenous route of drug administration
- 9. What are antithrombolytic agents? Give their clinical uses
- 10. Classify antiarrythmic agents
- 11. Write a note on purgatives
- 12. Write a note on bronchodilators
- 13. List various insulin preparations

#### SHORT ANSWERS

- 14. State the uses of diuretics
- 15. Give the therapeutic uses of anticoagulants
- 16. List four adverse drug effects with examples
- 17. What are peripheral vascular diseases? Name two drugs to treat them
- 18. Mention the drugs to treat Parkinson's disease
- 19. Define the terms pharmacokinetics and pharmacodynamics
- 20. What is rheumatoid arthritis? Name two drugs used to treat it
- 21. What is a prodrug? Give examples
- 22. Give reason why L-dopa is given in combination with carbidopa
- 23. Write a note on lithium

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2 x 10 = 20 Marks

8 x 5 = 40 Marks

10 x 2 = 20 Marks

II Year B.P.T. Degree Examination - Aug 2013

#### Time: Three Hours

### PHARMACOLOGY

(RS & RS2)

### Q.P. CODE: 2158

Your answers should be specific to the questions asked Draw neat labeled diagrams wherever necessary

#### LONG ESSAYS (Answer any Two)

- Classify Neuromuscular-blocking agents. Discuss the mechanism of action, uses and ADR of 1. Pancuronium.
- 2. Classify Diuretics. Discuss the mechanism of action, uses and adverse effects of loop diuretics.
- 3. Classify antiepileptics. Write the MOA, uses and advantages of Na. valpurate.

#### SHORT ESSAYS (Answer any Eight)

- 4. Angiotension converting enzyme inhibitors
- 5. Acute Morphine Poisoning
- 6. Anticholinesterase drugs
- 7. Dantrolene.
- 8. Cox-2 inhibitors
- 9. Non Benzodiazepine sedative hypnotics
- 10. Anaphylactic shock
- 11. **Bronchodilators**
- 12. Anabolic steroids
- 13. Newer insulins

#### SHORT ANSWERS

- 14. One use and one adverse effects of DPT vaccine
- 15. One use and one adverse effects of Transdermal Patches
- 16. One use and one adverse effects of Cetrizine
- 17. One use and one adverse effects of Chlorzoxazone
- 18. One use and one adverse effects of Sodium nitroprusside
- 19. One use and one adverse effects of Esmolol
- 20. One use and one adverse effects of Aspirin
- 21. One use and one adverse effects of Metformin
- 22. One use and one adverse effects of Nifidopine
- 23. One use and one adverse effects of Frusemide

### $10 \times 2 = 20$ Marks

### 2 x 10 = 20 Marks

 $8 \times 5 = 40$  Marks

Max. Marks: 80 Marks

II Year B.P.T. Degree Examination – Aug 2013

**Time: Three Hours** 

EXERCISE THERAPY

(RS - 3 & RS - 4)

### Q.P. CODE: 2711

Your answers should be specific to the questions asked Draw neat labeled diagrams wherever necessary

#### LONG ESSAYS (Answer any Two)

- 1. What is Proprioceptive Neuromuscular Facilitation? Write about its principles and techniques of facilitation to improve mobility and strength.
- Define Stretching. Explain the determinants, techniques, contraindications and effects of 2. stretching.
- 3. Define Asanas and Pranayamas. Write about its principles, types and Contraindications.

#### SHORT ESSAYS (Answer any Twelve)

- 4. What are Starting positions and its uses?
- 5. Write a note on Static and Dynamic Power tests with examples.
- Write a note on Co-ordination tests. 6.
- 7. Write about Pulmonary Function Test and its importance.
- 8. Write a note on Jacobsons relaxation technique.
- 9. What are the uses and limitations of Goniometry?
- 10. Define Free exercises. Write about types and uses of free exercises.
- 11. Define Resisted exercises. Write in brief about its principles and uses.
- 12. Define Functional Re-education and write a note on Mat activities.
- 13. Write a note on grades of Mobilisation.
- 14. Define Closed-chain exercise, its effects with 2 examples.
- 15. Write a note on Isotonic exercises.
- 16. What is Anthropometry and its uses?
- 17. Write about principles and uses of Passive movements.

#### SHORT ANSWERS

- 18. Endurance test
- 19. True limb length and its importance
- 20. What is Muscle tone and Postural tone?
- 21. Define Active movement.
- 22. 2 examples of isometric exercises
- 23. Define Open chain exercises.
- 24. 4 uses of Effleurage
- 25. Define Active and inactive postures.
- 26 4 effects of Aerobic exercises
- 27 2 types of Hydro Therapy techniques

#### 10 x 2 = 20 Marks

 $12 \times 5 = 60 \text{ Marks}$ 

2 x 10 = 20 Marks

Max. Marks: 100 Marks

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# Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T Degree Examination – Aug 2013

#### Time: Three Hours

### THERAPEUTICS (OS, RS & RS2)

# Q.P. CODE: 2161

Your answers should be specific to the questions asked Draw neat labeled diagrams wherever necessary

#### LONG ESSAYS (Answer any Two)

- 1. What are resisted exercises? Explain the precautions for resisted exercises
- 2. Mat exercises
- 3. What are aerobic exercises? Explain the principles of aerobic exercises

#### SHORT ESSAYS (Answer any Twelve)

- 4. Bronchial hygiene
- 5. Merits and demerits of suspension therapy
- 6. Delorme's technique
- 7. Indications and contraindications of hydrotherapy
- 8. Principles of manual muscle testing
- 9. Hand muscle strengthening
- 10. Define postural drainage. Give its indications and contraindications
- 11. Frenkel's exercise
- 12. Walking aids
- 13. Classification and uses of active exercises
- 14. Indications and contraindications of massage
- 15. Setting up of therapeutic gymnasium
- 16. Definition and types of relaxation
- 17. Hold-relax technique

#### SHORT ANSWERS

- 18. Define endurance and its types
- 19. Tightness and contracture
- 20. Petrissage
- 21. Define flexibility
- 22. Repetition maximum
- 23. Muscle tone
- 24. What is stretching?
- 25. Equilibrium board
- 26. Pulleys
- 27. Functional position of hand

Max. Marks: 100 Marks

12 x 5 = 60 Marks

 $2 \times 10 = 20$  Marks

10 x 2 = 20 Marks

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# Rajiv Gandhi University of Health Sciences, Karnataka

II year B.P.T Degree Examination – Aug 2013

Time: Three Hours

Max. Marks: 100 Marks

ELECTROTHERAPY (OS, RS & RS2)

# Q.P. CODE: 2162

Your answers should be specific to the questions asked Draw neat labeled diagrams wherever necessary

#### LONG ESSAYS (Answer any Two)

- 1. Describe physiological effects and therapeutic uses of pulsed currents
- 2. Describe the types, effects, merits and demerits of Ultra violet radiation
- 3. Discuss the traditional methods of electrodiagnosis

#### SHORT ESSAYS (Answer any Twelve)

- 4. Ultrasound coupling media
- 5. Classification of LASER
- 6. Half value depth in ultrasound
- 7. Filters in ultra violet radiation
- 8. Therapeutic uses of microwave diathermy
- 9. Gate control theory of pain
- 10. Contraindications for TENS
- 11. Technique of electrical stimulation of denervated muscles
- 12. Principles and advantages of Ionotophoresis
- 13. Indications and technique of faradic foot bath
- 14. Calculation of test dose in ultraviolet radiation
- 15. Precautions and treatment of shock
- 16. Effects and uses visible lights
- 17. Spacing in shortwave diathermy

#### SHORT ANSWERS

- 18. Define EMG Biofeedback
- 19. Neuropraxia
- 20. Mention any four absolute contraindications for Cryotherapy
- 21. Standing waves
- 22. Define CP module
- 23. Pfluger's law
- 24. Define High TENS
- 25. Accommodation of nerve
- 26. Define beat frequency in interferential currents
- 27. What is ramping of current?

 $12 \times 5 = 60 \text{ Marks}$ 

2 x 10 = 20 Marks

10 x 2 = 20 Marks

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II Year B.P.T. Degree Examination – Aug 2013

#### Time: Three Hours

### ELECTROTHERAPY

# (RS-3 & RS-4)

## Q.P. CODE: 2712

Your answers should be specific to the questions asked Draw neat labeled diagrams wherever necessary

#### LONG ESSAYS (Answer any Two)

- 1. Describe production of Ultra sound and explain the various methods of application of this therapy. Add a note on coupling medium used.
- 2. Explain the production of Interferential currents; give the therapeutics and physiological effects of the same.
- 3. List the various tests used for electro diagnosis. Explain any 3 in detail.

#### SHORT ESSAYS (Answer any Twelve)

- 4. Explain about condensers used in electro therapy units.
- 5. What is shock? Give the precautions to be taken to avoid the same.
- 6. Give the types of modified Direct currents used in physiotherapy. Describe any one in detail.
- 7. Write in detail on cathodal galvanism.
- 8. Write a note on Jacobsons relaxation technique.
- 9. What is Iontophoresis? Give the importance of its use in physiotherapy.
- 10. Explain the benefits of using micro currents.
- 11. Give indications and contra indications of IRR.
- 12. Explain the physiological effects of TENS and give a note on the indications for its use.

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- 13. Describe the indications for use of bio feedback.
- 14. Give the principles of production of LASER.
- 15. Explain the type of applicators used in a LASER unit and its uses.
- 16. Outline the benefits of hot pack unit.
- 17. Describe the types of methods used for cryotherapy.

#### SHORT ANSWERS

- 18. Use of a voltmeter in electrotherapy unit.
- 19. What are electrical burns?
- 20. Give 2 uses of diadynamic current.
- 21. Give 2 features of a sinusoidal current.
- 22. What is anodal galvanism?
- 23. Give 2 uses of MWD.
- 24. Define the term EMG.
- 25. Give 2 uses of a wax therapy.
- 26. Define Pain gate theory.
- 27. What is phonophoresis?

#### 10 x 2 = 20 Marks

### 2 x 10 = 20 Marks

Max. Marks: 100 Marks

### $12 \times 5 = 60 \text{ Marks}$

II Year B.P.T. Degree Examination - Aug 2013

#### Time: Three Hours

#### Max. Marks: 80 Marks

### RESEARCH METHODOLOGY & BIOSTATISTICS

### (RS-3 & RS-4)

# Q.P. CODE: 2713

Your answers should be specific to the questions asked Draw neat labeled diagrams wherever necessary

#### LONG ESSAYS (Answer any Two)

- 1. Define research. State the basic principles and importance of research in physiotherapy practice
- 2. Range of movement of 10 frozen shoulder patients were 38,42,45,36,40,44,40,45,34 and 36. Compute Mean, Median and Mode

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3. Explain in detail about graphical presentation of data

#### SHORT ESSAYS (Answer any Eight)

- 4. Define biostatistics and discuss its importance
- 5. Explain the characteristics of good research design
- 6. Explain the assumptions and characteristics of hypothesis
- 7. Explain about the measurement scales
- 8. "Mean is a good average" Justify
- 9. Explain about pie diagram
- 10. Basic principles of experimental design
- 11. Normal probability curve
- 12. Computer and its importance in physiotherapy research
- 13. Explain about Skewness and Kurtosis

#### SHORT ANSWERS

- 14. Mode
- 15. Standard deviation
- 16. Ordinal data
- 17. Simple random sampling
- 18. Questionnaire and Schedule
- 19. Null hypothesis
- 20. Assumptions in ANOVA
- 21. Qualitative research
- 22. Simulation research
- 23. Histogram

10 x 2 = 20 Marks

2 x 10 = 20 Marks

#### 8 x 5 = 40 Marks