Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – APRIL-2019

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) 2 x 10 = 20 Marks

1. Classify Skeletal Muscle relaxants. Discuss the mechanism of action, clinical uses and adverse effects of Pancuronium.
2. Classify the antihypertensive drugs. Add a note on ACE inhibitors.
3. Classify the analgesics. Write the actions, uses and adverse effects of aspirin.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. Mention the various sources of drugs with examples for each.
5. Advantages and disadvantages of Intravenous route.
6. Drug antagonism.
7. Reversible anticholinesterases.
8. Phenytoin sodium.
9. Name the Tricyclic antidepressants. Write their adverse effects?
10. Streptokinase.
11. Classify different routes of drug administration.
12. Name the H2 receptor antagonists. Write their uses?
13. Clinical uses of Prednisolone.

SHORT ANSWERS 10 x 2 = 20 Marks

14. First pass metabolism.
15. Mention two drug induced diseases with suitable examples.
16. Name two nasal decongestants.
17. Name two drugs used in Anaphylatic shock.
18. Mention two uses of Chlorpromazine.
19. Mention two laxatives. Write one use?
20. Write two advantages of Benzodiazapines over Barbiturates.
21. Name one oral hypoglycemic drug and mention its mechanisms of action.
22. Mention two drugs producing Parkinsonism.
23. Why drug dosage should be reduced in elderly people?

Rajiv Gandhi University of Health Sciences, Karnataka

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II Year B.P.T. Degree Examination - APRIL-2019

Time: Three Hours | Max. Marks: 100 Marks

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) 2 x 10 = 20 Marks

1. Explain the principles of proprioceptive neuromuscular facilitation, elaborate the techniques of facilitation used for strengthening.
2. Define suspension therapy. Explain in detail the different types, techniques of suspension therapy for lower limb.
3. Establish a therapeutic exercise program to strengthen lumbar extensor muscles.

SHORT ESSAYS (Answer any Twelve) 12 x 5 = 60 Marks

4. Benefits of CPM.
5. Precautions and contraindication for resistance exercise.
6. Principle of isokinetic exercise and mention its advantages.
7. Describe the cardiovascular changes to aerobic exercise.
8. Write in brief about frenkles exercise.
9. Explain any two techniques of massage applicable for back.
10. Write the purpose of Pulmonary function test.
11. Difference between delorme and oxford technique.
12. Draw a picture of structure of skeletal muscle.
13. Explain the principles of mobilization.
14. What are the components of balance and significance?
15. Explain non equilibrium tests.
16. Mention the causes of decreased muscle performance.
17. What are the derived position used in therapeutic exercise?

SHORT ANSWERS 10 x 2 = 20 Marks

18. Define endurance.
19. Write any two methods to estimate maximal oxygen consumption.
20. Mention any two precautions need to be taken while teaching exercise to osteoporotic patient.
21. What is muscle setting exercise? Mention any four of muscle setting exercise.
22. Any 2 contra indication to stretching and why it is contra indicated.
23. Benefits of pranayama.
24. Define fatigue.
25. Write any four indications for stretching.
26. What is motor unit?
27. Label the parts of goniometer.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - APRIL-2019

Time: Three Hours | Max. Marks: 100 Marks

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) 2 x 10 = 20 Marks

1. Define Medium Frequency Currents, Explain in detail about Static and Dynamic interference system, therapeutic effects of Interferential therapy.
2. Discuss about the production of Micro Wave Diathermy (MWD) and the physiological effect of MWD.
3. What is shock? Explain about earthing techniques, electric shock, its safety precautions and its management.

SHORT ESSAYS (Answer any Twelve) 12 x 5 = 60 Marks

4. Define Ionization and explain the effects of various ions used in medical ionization.
5. Describe condenser field method of Short-wave diathermy.
6. Explain in brief about Electromagnetic Spectrum and its properties.
7. What is electrical burn and give its management.
8. Write about paraffin wax bath, uses and indications.
9. Explain about FG test and its uses.
10. State the method of plotting Strenth-Duration Curve and explain the Characteristic of partially and completely denervated muscle.
11. Give a brief note on Non-thermal effects of Ultrasound.
12. Explain about types of LASER.
13. What is Moist Heat theraphy? Explain in brief about Hydrocollator pack application.
14. Enlist the indications and contra indications of infrared radiation.
15. What is Lewis Hunting Response and give its therapeutic significance.
16. Give the physiological effects of Transcutaneous Electrical Nerve-Stimulation.
17. Describe physiological effects of Faradic Current.

SHORT ANSWERS 10 x 2 = 20 Marks

18. Define fuse and state two uses.
19. What is Electromagnetic Induction?
20. What is Peizoelectric effect and how it is used in electro therapy?
21. What is Nerve Conduction Velocity?
22. What is PUVA?
23. What is Rebox type current?
24. Mention methods of indirect application of ultra sound.
25. Define fluidotherapy.
26. Mention the properties of LASER.
27. Define Axonotemesis.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - APRIL 2019

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) 2 x 10 = 20 Marks

1. Define research design. Explain the different types of research design.
2. Define tabulation. Explain the important types of graphical representation.
3. Explain different methods of data collection.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. Difference between random and non random sampling
5. Describe various scales of measurement with examples
6. Explain measures of central tendency
7. Define biostatistics. Explain briefly about application of biostatistics
8. Criteria for a good research
9. Variables and their types
10. Construction of histogram
11. Chi-square test
12. Explain questionnaire methods of data collection
13. Systematic sampling

SHORT ANSWERS 10 x 2 = 20 Marks

14. Pie diagram
15. Define ratio scale
16. Define mode
17. Cohort study
18. Sampling errors
19. Standard deviation
20. Binomial distribution
21. Skewness
22. Difference between primary and secondary data
23. Define research

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – APRIL-2019

Time: Three Hours | Max. Marks: 80 Marks

Pharmacology (RS-5)

Q.P. CODE: 2739

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. Enumerate different routes of drug administration. Discuss merits and demerits of oral and intravenous routes of drug administration.
2. Classify antiepileptic drugs. Write the mechanism of action, therapeutic uses and adverse effects of phenytoin sodium.
3. Classify antihypertensive drugs. Mention the therapeutic uses and adverse effects of ACE inhibitors.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. Biotransformation of a drug
5. Drug therapy of Parkinson's disease
6. Prokinetic drugs
7. Therapeutic uses and adverse effects of β_2 agonists
8. Explain briefly the pharmacokinetic changes in the geriatric population.
9. Thiazide diuretics
10. Proton pump inhibitors
11. Prazosin
12. Prednisolone
13. Nitrates

SHORT ANSWERS 10 x 2 = 20 Marks

14. What is a Teratogenicity? Mention two teratogenic drugs.
15. Write two differences between benzodiazepines and barbiturates.
16. Name four oral hypoglycemic drugs.
17. Treatment of organophosphorus compound poisoning
18. Write two skeletal muscle relaxants and their uses.
19. Drugs used in prevention and treatment of osteoarthritis
20. Define a Placebo and mention its uses.
21. Mention four uses of β blockers.
22. List two calcium channel blockers and their therapeutic uses.
23. List two hypolipidemic drugs and their therapeutic uses.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T Degree Examination – APRIL-2019

Time: Three Hours Max. Marks: 100 Marks

Exercise Therapy (RS-5)

Q.P. CODE: 2740

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

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. Define passive movements. Classify passive movements and explain the principles of passive movements in detail.
2. Define massage; explain the physiological and therapeutic effects of massage.
3. Explain the techniques of strengthening quadriceps from grade 1 to grade 5.

SHORT ESSAYS (Answer any Twelve) 12 x 5 = 60 Marks

4. Explain the muscle work in kneeling.
5. Describe the merits and demerits of group exercise.
6. Describe techniques of management of Axillary crutches.
7. What is suspension therapy? Explain various types of suspension therapy.
8. Explain various principles of relaxation.
9. Define manual muscle testing, mention the limitations of MMT.
10. Enumerate the type of breathing exercise. Describe any one in detail.
11. Define functional mat exercise and mention the stages from sitting to standing.
12. Describe stretching techniques for hamstring tightness.
13. Write short notes on warm up and cool down exercises.
14. Explain the principles of hydrotherapy.
15. Write about frenkels exercise for lower limb.
16. Define mobilization. What are the indications and contraindication of mobilization?
17. Discuss the adaptation of muscles and connective tissue to resistance exercise.

SHORT ANSWERS 10 x 2 = 20 Marks

18. What is 10 RM?
19. Define flexibility.
20. Define contracture.
21. What is cadence?
22. Give two examples of isometric exercise.
23. Muscle work in ideal standing
24. Define strength and endurance.
25. Give two uses of parallel bar.
26. Define PNF.
27. Define power grip.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T Degree Examination – APRIL-2019

Time: Three Hours | Max. Marks: 100 Marks

Electrotherapy (RS-5)

Q.P. CODE: 2741

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

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. Define UVR. Explain the types of UVR generators and write its physiological and therapeutic effects.
2. Write the types of LASERs and explain the construction and working of any one type of LASER in detail.
3. Explain the principles of production of IFT. Write its physiological and therapeutic effects.

SHORT ESSAYS (Answer any Twelve) 12 x 5 = 60 Marks

4. Classification of LASER.
5. Define shock and explain its types.
6. Anodal galvanism
7. Write note on hydrocollator packs.
8. Method of application of contrast both
9. Whirlpool bath
10. Physiological and therapeutic effects of faradic currents
11. Define iontophoresis and enumerate its application.
12. Calculation of E1, E2, E3 and E4 dosages of UVR
13. Types of electrodes in electrotherapy
14. Physiological and therapeutic effects Cyclotherm
15. Define electrode tissue interface and its influence on transmission of currents.
16. Types of infrared generators
17. Define PEME and explain its principles and uses.

SHORT ANSWERS 10 x 2 = 20 Marks

18. Ohm's law
19. Chronaxie and Rheobase
20. Piezoelectric effect
21. PUVA (Psoralen Ultra Violet A)
22. Tissue impedance
23. Duty cycle
24. Latent heat of fusion
25. Phonophoresis and its agents
26. FUSE
27. Name four sensitizers used in UVR

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - OCT-2019

Time: 3 Hours | Max. Marks: 40 Marks

Pathology – (RS4)

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. Define and classify Shock. Describe the pathogenesis, clinical features and stages of Hypovolumic Shock.
2. Classify Bone tumors. Describe the clinical features, radiological features, gross and microscopy of Osteosarcoma.

SHORT ESSAYS (Answer any Four) 4 x 5 = 20 Marks

3. Fat embolism
4. Clinical features of Vitamin D deficiency
5. Laboratory investigations and clinical features of Hemophilia
6. Ghon's complex
7. Gross and microscopy of Pleomorphic adenoma

SHORT ANSWERS 5 x 2 = 10 Marks

8. Mention 4 secondary causes of diabetes mellitus.
9. Mention the events of acute inflammation.
10. Give 4 causes of thrombocytopenia.
11. Enlist 4 tumor markers.
12. Mention 2 differences between Wet and Dry Gangrene.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - OCT-2019

Time: Three Hours | Max. Marks: 40 Marks

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 x 10 = 10 Marks

1. Name the organisms causing meningitis. Discuss the morphology, pathogenicity and laboratory diagnosis of Streptococcus pneumonia.
2. Define Pyrexia of unknown origin. Enumerate the organisms causing it. Discuss the laboratory diagnosis of typhoid fever.

SHORT ESSAYS (Answer any Four) 4 x 5 = 20 Marks

3. Microfilaria
4. Prophylaxis of polio
5. Laboratory diagnosis of fungal infections
6. Mechanisms of innate immunity
7. Laboratory diagnosis of urinary tract infections

SHORT ANSWERS 5 x 2 = 10 Marks

8. Name four organism causing gastroenteritis.
9. Name four opportunistic infections
10. Name two differential staining methods.
11. Mantoux test
12. Name four sexually transmitted diseases.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – OCT 2019

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) 2 x 10 = 20 Marks

1. Classify Glucocorticoids. Describe the actions, adverse effects and uses of these drugs.
2. Classify Anti-Hypertensive. Describe the actions, adverse effects and uses ACE inhibitors.
3. Classify drugs used in Peptic ulcer. Describe the actions, adverse effects and uses of H_2-Receptor blockers.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. Metformin.
5. Drug Antagonism.
6. Classify Non-steroidal Anti-inflammatory drugs and mention the clinical uses.
7. Write a note on Biotransformation?
8. Write the adverse effects and uses of Phenytoin.
9. Write a note on Methotrexate?
10. Write a note on Digoxin?
11. Write a note on Methylxanthines?
12. Write a note on Nitrates?
13. Write a note on Heparin?

SHORT ANSWERS 10 x 2 = 20 Marks

14. Name two antithrombotic drugs and mention the adverse effect of each.
15. Adverse effects of L-dopa.
16. Sublingual route.
17. List four lipid lowering drugs.
18. Name one loop diuretic and mention three uses.
19. Write the adverse effects of Benzodiazpines?
20. Name two drugs used in GOUT and mention the adverse effect of any one.
21. Mention any two purgatives. Give their mechanism of action.
22. Ipratropium bromide.
23. Idiosyncrasy.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - OCT-2019

Time: Three Hours | Max. Marks: 100 Marks

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) — 2 x 10 = 20 Marks

1. Define PNF. Explain the basic neurophysiological principles of PNF. Add a note on techniques of facilitation.
2. Write in detail about principles and techniques of mobilization of shoulder joint. What is biomechanical basis of mobilization?
3. Define massage. List the various techniques in massage with therapeutic effects for each.

SHORT ESSAYS (Answer any Twelve) — 12 x 5 = 60 Marks

4. Define coordination. Explain uses and techniques of frenkles exercises.
5. What is Pranayama? Explain the principles and techniques
6. What are the types of balance retraining?
7. Explain the postural mechanism and write any two corrective exercises for scoliosis
8. Explain the properties of water and clinical significance of them in hydrotherapy
9. Describe about the components of aerobic exercise program
10. Define suspension therapy. Explain the principles and uses and types of suspension
11. What is MMT? List out the principles and merits of MMT
12. Classify passive movement. Explain the techniques of passive movements
13. Explain principles, effects and use of free exercises. Write any four exercises for knee joint in FWB
14. What is PRE? List out the techniques and explain any one in detail
15. Describe the advantages and disadvantages of group exercises
16. Principles and uses of mat exercises
17. Define crutch gait. Write about partial weight bearing crutch gait

SHORT ANSWERS — 10 x 2 = 20 Marks

18. What do you mean by Trendelenberg gait?
19. List out the effects of De-conditioning on the musculo skeletal system.
20. What is Repetition maximum?
21. Hyperplasia and hypertrophy
22. Valsalva maneuver
23. Karovnen's formula
24. Romberg sign
25. Concave – convex role
26. Sherrington's law of reciprocal innervations
27. Mention any two derived positions of kneeling

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - OCT-2019

Time: Three Hours | Max. Marks: 100 Marks

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) 2 x 10 = 20 Marks

1. Describe the methods of production heat by short wave diathermy
2. Write in detail the principles of production of interferential currents
3. Describe the various methods of pain modulation

SHORT ESSAYS (Answer any Twelve) 12 x 5 = 60 Marks

4. Construction and types of condensers
5. Physiological effects of faradic current
6. Therapeutic uses of wax therapy
7. Cathodal galvanism
8. Mechanical effects of ultrasound
9. Methods of application of electrodes in TENS
10. Dangers of ultra violet radiation
11. Contraindications for Cryotherapy
12. Ionotophoresis for the treatment of hyperhydrosis
13. Types of infra red radiation lamps
14. Properties of LASER
15. Indications and contraindications for whirlpool bath
16. Physiological effects of microwave diathermy
17. Faradic – Galvanic test

SHORT ANSWERS 10 x 2 = 20 Marks

18. Define Ohm's law
19. Define motor point
20. Mention any four absolute contraindications for neuromuscular electrical stimulation
21. Define phonophoresis
22. Define rheobase and chronaxie
23. Direct Piezo electric effect
24. Define burst TENS
25. Define first degree erythema with application of ultra violet radiation
26. Parameters of pulsed electromagnetic energy
27. Parameters of diphase fixe

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - OCT-2019

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) 2 x 10 = 20 Marks

1. Define research. Explain objectives and criteria for a good research.
2. Define biostatistics. Explain characteristics of biostatistics.
3. Explain scales of measurement.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. Measures of central tendency
5. Criteria for good sampling
6. Difference between questionnaire and schedule
7. Stratified sampling
8. Chi-square test
9. Skewness and kurtosis
10. Explain steps involved in the processing of data
11. Describe basic concept concerning testing of hypotheses
12. Analysis of variance and covariance (ANOVA&ANACOVA)
13. Difference between descriptive and inferential statistics.

SHORT ANSWERS 10 x 2 = 20 Marks

14. Define mode
15. Ranking scale
16. Coding
17. Distinguish between primary and secondary data
18. Frequency polygon
19. Case-control study
20. Define statistics
21. Standard deviation
22. Type I and Type II error
23. Define research design

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – OCT-2019

Time: 3 Hours Max. Marks: 40 Marks

Pathology (RS-5)

Q.P. Code: 2737

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

(Note : Both QP Codes 2737 and 2738 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) 1 x 10 = 10 Marks

1. What is fatty change? Explain etiopathogenesis and pathology of fatty liver. (2+4+4)
2. Define rheumatic fever. Describe the etiopathogenesis and pathology of rheumatic heart disease. (2+4+4)

SHORT ESSAYS (Answer any Four) 4 x 5 = 20 Marks

3. Enumerate the stages in the evolution of lobar pneumonia.
4. Write bone marrow findings in Megaloblastic anemia.
5. Morphological features in Rickets
6. Etiopathogenesis and morphology of squamous cell carcinoma
7. Sequence of events in phagocytosis

SHORT ANSWERS 5 x 2 = 10Marks

8. Mention four etiology of leukemia.
9. Microscopic features of Warthin's tumor
10. Name the genetic defect in Down's syndrome with three clinical presentations.
11. Morphology of Chronic venous congestion (CVC) liver
12. Give four examples for Type I hypersensitivity reaction.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – OCT-2019

Time: 3 Hours Max. Marks: 40 Marks

Microbiology (RS-5)

Q.P. Code: 2738

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

(Note : Both QP Codes 2737 and 2738 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) 1 x 10 = 10 Marks

1. Define and classify sterilization. Give a detailed account of moist heat methods of sterilization.
2. Define and classify immunity. Describe acquired immunity in detail.

SHORT ESSAYS (Answer any Four) 4 x 5 = 20 Marks

3. Antiviral agents
4. Laboratory diagnosis of enteric fever
5. Prophylaxis against poliomyelitis
6. Normal flora of human body
7. Life cycle of filarial parasite

SHORT ANSWERS 5 x 2 = 10Marks

8. DPT vaccine
9. Quellung reaction
10. Classification of fungi
11. Name four disinfectants used in the hospital
12. Significant bacteruria

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – OCT 2019

Time: Three Hours | Max. Marks: 80 Marks

Pharmacology (RS-5)

Q.P. CODE: 2739

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. Classify Nonsteroidal anti-inflammatory drugs. Write the therapeutic uses and adverse effects and contraindications of aspirin.
2. Classify anti Cholinergic drugs. Explain therapeutic uses and adverse effects of atropine.
3. Classify diuretics. Explain the mechanism of action, therapeutic uses and adverse effects of furosemide.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. Drug antagonism
5. Cardioselective beta blockers
6. Succinylcholine
7. Bisphosphonates
8. Proton pump inhibitors
9. Insulin preparations
10. Nifedipine
11. Lithium
12. Angiotensin converting enzyme inhibitors
13. Spasmolytic drugs

SHORT ANSWERS 10 x 2 = 20 Marks

14. What is a prodrug? Give two examples of prodrugs.
15. List four atypical antipsychotic drugs
16. Mention two clinical uses and adverse effects of sodium valproate.
17. Mention the antidote for heparin and Warfarin overdose.
18. Mention two merits and two demerits of sublingual route of drug administration.
19. Mention four disease modifying antirheumatic drugs.
20. List four drugs for epilepsy.
21. Why carbidopa is co-administered with L-Dopa?
22. List four drugs used in bronchial asthma.
23. Mention two therapeutic uses and two adverse effects of corticosteroids.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T Degree Examination – OCT-2019

Time: Three Hours | Max. Marks: 100 Marks

Exercise Therapy (RS-5)

Q.P. CODE: 2740

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

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. Explain in detail principles, types and uses of goniometry.
2. Principles of Proprioceptive neuromuscular facilitation.
3. Define balance. Write any two tests of balance. Treatment for balance retraining for patients with balance dysfunction.

SHORT ESSAYS (Answer any Twelve) 12 x 5 = 60 Marks

4. Grades of mobilization
5. Types of suspension therapy
6. Rhythmic stabilization and Rhythmic initiation
7. Indications and Limitations of manual muscle testing
8. Physiological changes during aerobic exercises
9. Jacobson's techniques of relaxation
10. Mention different types of endurance tests.
11. Define limb length discrepancy and types of limb length discrepancies.
12. Sensory evaluation
13. Explain derived position from kneeling and mention advantages and disadvantage for the same.
14. Effects and uses of hydrotherapy
15. Factors contributing to a poor posture
16. Types of muscle work
17. Principles of manual muscle testing

SHORT ANSWERS 10 x 2 = 20 Marks

18. Three point gait
19. Kneading
20. Hold relax technique
21. Self stretching
22. Name two principles of aerobic exercises
23. Two merits of hydrotherapy
24. Define PNF.
25. Define co-ordination.
26. What is a motor unit?
27. Isometric contraction

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T Degree Examination – OCT-2019

Time: Three Hours | Max. Marks: 100 Marks

Electrotherapy (RS-5)

Q.P. CODE: 2741

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

LONG ESSAYS (Answer any Two) 2 x 10 = 20 Marks

1. Define pain. Explain the modulation of pain through pain gate control theory. Add a note on modulation of pain by IFT.
2. Define Ultra Sound. Explain the production and its thermal effects in detail.
3. Define Faradic current. Write in detail about the Physiological and Therapeutic effects of faradic current.

SHORT ESSAYS (Answer any Twelve) 12 x 5 = 60 Marks

4. Explain indications and contraindications of SWD.
5. Define Burns its prevention and management.
6. Explain the procedure for training intrinsic foot muscles with faradic foot bath.
7. Anodal Galvonism
8. Explain production of UVR.
9. Explain indications and contraindications of IDC.
10. Whirlpool bath
11. Moist heat therapy
12. Define Ionization its principles and techniques of Ionization.
13. HVPGS and its Parameters
14. Explain Neuromuscular junction in detail.
15. Explain physiological effects of Sinusoidal currents.
16. Explain Physiological effects of cryotherapy.
17. Write a note on Transformers.

SHORT ANSWERS 10 x 2 = 20 Marks

18. Testing of SWD apparatus
19. Uses of PEME
20. Define Latent heat.
21. What is PUVA?
22. Classify pain fibers.
23. Mention the properties of LASER.
24. Accommodation
25. Write any two uses of Biofeedback in Physiotherapy.
26. Define Rebox type current.
27. Define electromagnetic spectrum.

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