Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – 28-May-2024

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. Define Oedema. Discuss etiology and pathogenesis of different types of oedema.
2. Define Necrosis. Classify and discuss various types of Necrosis.

SHORT ESSAYS (Answer any Three) 3 x 5 = 15 Marks

3. Hepatitis.
4. Iron deficiency anemia.
5. Morphology of reversible cell injury.
6. Rickets.

SHORT ANSWERS 5 x 3 = 15 Marks

7. Name four Hemoparasites.
8. Hypertrophy.
9. Types of embolism.
10. Mention four complications of Diabetes Mellitus.
11. Dysplasia.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – 30-May-2024

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 One) 1 x 10 = 10 Marks

1. Classify nonsteroidal anti-inflammatory drugs. Write the therapeutic uses and adverse effects and contraindications of aspirin.
2. Enumerate Glucocorticoids. Mention the uses and long-term adverse effects of prednisoline. Add a note on HPA axis suppression.

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

3. Describe the mechanism of action and therapeutic uses of Succinylcholine.
4. Angiotensin converting enzyme inhibitors.
5. Phase I biotransformation.
6. Proton pump inhibitors.
7. Various routes of drug administration
8. Explain the mechanism of action, uses and adverse effects of warfarin.
9. Write a note on Clonidine.
10. Bisphosphonates.
11. Treatment of Myasthenia gravis.
12. Write the therapeutic uses and adverse effects of Propranolol.

SHORT ANSWERS 10 x 3 = 30 Marks

13. List two uses and two adverse effects of Nitrates.
14. Two drugs used in Motion sickness.
15. Why carbidopa is co-administered with L-Dopa?
16. List four drugs used in Bronchial asthma.
17. Define teratogenicity. Give one example.
18. Name any two uses and adverse effects of Atorvastatin.
19. Define drugs synergism with one example.
20. Name two anti-anxiety drugs.
21. Enlist one use and one adverse effect of Lithium.
22. Write two drugs used in constipation and their side effects.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – 28-May-2024

Time: 3 Hours Max. Marks: 40

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. Name the organisms causing Meningitis. Discuss the morphology, pathogenicity and laboratory diagnosis of Streptococcus pneumoniae
2. Draw neat and labelled diagram of HIV. Write about laboratory diagnosis of HIV-AIDS

SHORT ESSAYS (Answer any Three) 3 x 5 = 15 Marks

3. Bacterial Growth Curve
4. Gas Gangrene
5. IgA
6. Cultivation of virus

SHORT ANSWERS 5 x 3 = 15 Marks

7. Rheumatic fever
8. Name two properties of antigen
9. Name two spore bearing bacteria
10. Significant bacteria
11. BCG vaccine

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T Degree Examination – 07-Jun-2024

Time: Three Hours Max. Marks: 100

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 (Second Question Choice) 2 x 10 = 20 Marks

1. Explain levers, it's orders and the application of levers in physiotherapy.
2. Define proprioceptive neuro muscular facilitation. Explain in detail about the basic techniques, principles, effects and uses.

   OR

   Define aerobic exercise, types, phases of aerobic training and its application for patients.

SHORT ESSAYS (Question No 3 & 12 choice) 10 x 5 = 50 Marks

3. What is good posture? Write about corrective methods and patient education to maintain good posture.

   OR

   Principles and benefits of suspension therapy.
4. Determinants of an exercise program.
5. Phases of gait cycle.
6. Jacobson's relaxation technique.
7. Write the causes for immobility and describe the principles for giving passive movements.
8. Classify massage techniques. Enumerate the general indications and contraindications for massage.
9. Describe the physiology of balance and their components.
10. Explain starting positions. Describe the muscle work of kneeling and sitting.
11. Posture control mechanism.
12. Discuss with examples closed kinetic chain exercises for shoulder.

    OR

    Enumerate the various parameters measured in pulmonary function test.

SHORT ANSWERS 10 x 3 = 30 Marks

13. Mc Queen PRE.
14. Spurt and Shunt muscle.
15. Half Kneeling.
16. List out three principles of manual muscle testing.
17. Controlled sustained stretch.
18. Define strength, power and endurance.
19. Repetition maximum.
20. Axillary crutch measurement.
21. Classification of walking aids.
22. Rhythmic initiation.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T Degree Examination – 05-Jun-2024

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
(QP contains two pages)

LONG ESSAYS (Second Question choice) 2 x 10 = 20 Marks

1. Explain the principle of production of ultrasound and its various method of applications
2. Define LASER. What are the different types of LASER. Enumerate the physiological and therapeutic effects of LASER. Add a note on safety precautions of LASER.

   Or

   Describe strength duration curve (SD curve) in detail and enumerate the advantages and indication of SD curve

SHORT ESSAYS (Question No.3 & 12 choice) 10 x 5 = 50 Marks

3. Explain the therapeutic effects of interferential therapy

   OR

   Describe the physiological and therapeutic effects of cyclotherm
4. Describe the types and method of placement of electrodes in short wave diathermy
5. Explain the indications and procedure of faradism under pressure
6. Discuss the therapeutic effects of galvanic current
7. Write a note on electromagnetic spectrum
8. Write a note on sinusoidal currents
9. Describe the various method of application of cryotherapy
10. Write a note on High Voltage Pulsed Galvanic Current (HVPGS)
11. Describe the physiological effects of infra red rays
12. Write a note on hydrocollator packs

    OR

    Define Iontophoresis and enumerate its application and uses

SHORT ANSWERS 10 x 3 = 30 Marks

13. What is self induction?
14. What is accommodation?
15. Mention any two uses of interferential therapy
16. State inverse square law
17. List any three contraindications of SWD
18. How will you calculate E1 dosage in UVR?
19. What is cryotherapy?
20. Define Pulsed Electro Magnetic Energy and mention its uses
21. Define chronaxie and Rheobase
22. Mention the uses of transformer

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – 20-Nov-2024

Time: 3 Hours Max. Marks: 40

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. Define and classify neoplasia. Discuss the differences between benign and malignant tumours
2. Define edema. Discuss etiopathogenesis of edema. Discuss renal edema

SHORT ESSAYS (Answer any Three) 3 x 5 = 15 Marks

3. Osteoporosis
4. Factors affecting healing
5. Define thrombosis and fate of thrombosis
6. Morphological features of rickets

SHORT ANSWERS 5 x 3 = 15 Marks

7. Mention three complications of diabetes mellitus
8. Eosinophilia
9. Mention four etiology of leukemia
10. Name any four congenital heart diseases
11. Types of emphysema

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – 20-Nov-2024

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. Draw a neat labelled diagram of bacterial cell. Describe bacterial cell wall in detail.
2. Define Pyrexia of unknown origin. Discuss in detail pathogenesis and laboratory diagnosis of enteric fever.

SHORT ESSAYS (Answer any Three) 3 x 5 = 15 Marks

3. Gas gangrene.
4. Hot air oven.
5. Laboratory diagnosis of Hepatitis B virus infection.
6. Acquired Immunity.

SHORT ANSWERS 5 x 3 = 15 Marks

7. Draw a neat labelled diagram of secretory IgA.
8. Mention three non-suppurative complications of streptococcal infection.
9. Name four fungi causing opportunistic infections.
10. Draw a neat labelled diagram of HIV.
11. Name four bacteria causing meningitis.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T Degree Examination – 25-Nov-2024

Time: Three Hours | Max. Marks: 100 Marks

EXERCISE THERAPY (RS5)
Q.P. CODE: 2740

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

LONG ESSAYS (Second Question Choice) 2 x 10 = 20 Marks

1. Write an essay on physiology and components of balance.
2. Write an essay on types of resisted exercises. Briefly explain progressive resisted exercises.
   OR
   Write an essay on Proprioceptive neuromuscular facilitation. List the components of PNF.

SHORT ESSAYS (Question No 3 & 12 choice) 10 x 5 = 50 Marks

3. Describe the principles of passive movements.
   OR
   Mention general and local contraindications for massage.
4. Explain anthropometric measurements.
5. List the types and uses of walking aids used for gait re-education.
6. Physiological adaptations during aerobic exercise.
7. Principles and uses of relaxation techniques.
8. Explain the types of active movements.
9. Describe the determinants of exercise program.
10. Explain the approaches to relaxation training.
11. Describe the Aquatic therapy techniques.
12. List the causes and explain any one causes of hypomobility.
    OR
    What are the types of goniometry technique for elbow flexion?

SHORT ANSWERS 10 x 3 = 30 Marks

13. Define fundamental and derived position.
14. Differences between clapping and hacking.
15. What are the effects and uses of standing?
16. What are the goals of hydrotherapy?
17. Describe Slow reversal technique.
18. Differences between muscle excursion and joint range.
19. Define DOMS (Delayed Onset of Muscle Soreness).
20. Define PNF and mention the PNF pattern.
21. What is reciprocal inhibition?
22. Define passive range of motion and active range of motion.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – 22-Nov-2024

Time: Three Hours Max. Marks: 80

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 One) 1 x 10 = 10 Marks

1. Classify antiparkinsonian drugs. Write the pharmacological actions, adverse and drug intereactions of levodopa

2. Classify oral hypoglycaemic and explain about metformin

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

3. Treatment for H. Pylori infection
4. Prokinetic drugs
5. Antiplatelet
6. Status asthamaticus
7. Classify antihypertensive drugs
8. Uses and adverse effects of alpha blockers
9. Factors modifying bioavailability
10. Drug dependence
11. Organophosphorous poisoning
12. β-blockers

SHORT ANSWERS 10 x 3 = 30 Marks

13. Name two parenteral iron preparations with two uses
14. Name four drugs used in the treatment of constipation
15. Write two skeletal muscle relaxants and its uses
16. List four atypical antipsychotic drugs
17. list four drugs used in epilepsy
18. Name any two uses and adverse effects of Atorvastatin
19. Rational for using physostigmine in atropine poisoning
20. Antidote for a) Heparin toxicity b) Benzodiazepine overdose
21. Write two differences between benzodiazepines ad barbiturates
22. Why is carbidopa co administered with levodopa?

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T Degree Examination – 27-Nov-2024

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 (Second Question choice) 2 x 10 = 20 Marks

1. Describe construction of EMG equipment.
2. Define Microwave. Describe production, applicators, dosage parameters, physiological and therapeutic effects of Micro Wave Diathermy.
   Or
   Define TENS. Describe types, placement of Electrodes, indications, Contraindications, Physiological and Therapeutic effects of TENS.

SHORT ESSAYS (Question No.3 & 12 choice) 10 x 5 = 50 Marks

3. Explain method of application of Whirl Pool Bath.
   Or
   Describe Earthing techniques and precautions.
4. Describe Indications and contraindications of Cyclotherm.
5. Explain construction and working of Condensers.
   Or
   Explain Production of Ultrasound
6. Explain physiological and therapeutic effects of Faradic Current.
7. Explain Macro current and Micro current.
   Or
   Explain Pain Gate Control Theory
8. Describe stimulation for Tissue Repair.
9. Describe characters of Partially Denervated Muscle in SD Curve.
10. Explain production of IFT.
11. Explain Theraktin tunnel.
12. Explain dosage calculation in LASER.
    Or
    Describe therapeutic uses of Contrast Bath.

SHORT ANSWERS 10 x 3 = 30 Marks

13. Define Faradays laws.
14. What is Electrode coupling?
15. Define sensitizers.
16. What are the composition of Wax Bath Therapy unit?
17. Define Hyperhydrosis.
18. Define attenuation.
19. Define all or none law.
    Or
    Define Ohm's law
20. List indications of Moist Heat Therapy.
21. What are parameters of IRR?
22. Mention the uses of pulsed Electro Magnetic Energy.