

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T Degree Examination – 26-May-2025

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. Define ultrasound therapy. Explain in detail about the thermal and non-thermal effects of ultrasound. Add a note on dangers of ultrasound.
2. Explain wax therapy. Indications, contraindications and methods of application.

OR

Define iontophoresis. Add a note on principles and iontophoresis and contraindications.

SHORT ESSAYS (Question No.3 & 12 choice)

10 x 5 = 50 Marks

3. Microwave diathermy.
- OR**
- Define transformer and its functions.
4. Principles of production of laser.
 5. Difference between conductor and insulator.
 6. Fluidotherapy.
 7. Contrast bath.
 8. Electromagnetic spectrum.
 9. Principles of NMES.
 10. Explain pain gate control theory in detail.
 11. EMG.
 12. Define fuse, its types and principles.

OR

Add a note on FG test.

SHORT ANSWERS

10 x 3 = 30 Marks

13. Ohm's law and its application in physiotherapy.
14. Micro and Macro shock.
15. Lewis Huntington's phenomenon.
16. Electric shock.
17. Phonophoresis.
18. Piezoelectric effect and crystals in UST.
19. Duty cycle.
20. Motor unit with neat labelled diagram and motor point.
21. Half value depth and coupling media.
22. Name two neurotransmitters of peptide and amino acid class (Excitatory and Inhibitory actions).

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II Year B.P.T Degree Examination – 23-May-2025

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. Define massage. Classify massage with indication and contraindications.
2. Explain the tests of co-ordination. Describe the frenkles exercise program for lower limbs in co-ordination.

OR

List the types of posture. Explain the principles of postural re-education.

SHORT ESSAYS (Question No 3 & 12 choice)

10 x 5 = 50 Marks

3. Write a note on grades of mobilization.

OR

Describe the testing and stretching for quadriceps tightness.

4. Explain the procedure of measurement for an axillary crutch.
5. Define suspension therapy. Explain the types suspension.
6. Explain the measurement method for true length.
7. Explain the method of doing effleurage.
8. Describe any two techniques of Pranayama.
9. Describe the elements in an asana.
10. Explain with a diagram vertical suspension for knee joint.
11. Describe the MMT grading for deltoid muscle from grade 2 – grade 5.
12. Give the principles of hydrotherapy.

OR

Explain the principles of PNF technique.

SHORT ANSWERS

10 x 3 = 30 Marks

13. Define free exercises.
14. Define recruitment of motor units.
15. Uses of parallel bars.
16. What is closed chain exercise?
17. Define endurance.
18. Describe hold relax technique.
19. Advantages of PNF exercise.
20. Uses of practicing yoga.
21. Uses of open chain exercise.
22. Why do we measure muscle girth?

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II Year B.P.T. Degree Examination – 19-May-2025

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. Define and classify sterilization. Write in detail about autoclave
2. Describe the pathogenesis and laboratory diagnosis and prophylaxis of enteric fever

SHORT ESSAYS (Answer any Three)

3 x 5 = 15 Marks

3. Laboratory diagnosis of fungal infections
4. Laboratory diagnosis of tetanus
5. Normal flora of human body
6. Cryptococcus neoformans – pathogenicity and laboratory diagnosis

SHORT ANSWERS

5 x 3 = 15 Marks

7. Enriched media
8. Structure of HIV
9. Quellung reaction
10. Name two differential staining methods
11. Name any three organism causing wound infection

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II Year B.P.T. Degree Examination – 19-May-2025

Time: 3 Hours

Max. Marks: 40 Marks

PATHOLOGY (RS5)

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 inflammation. Describe causes of vascular and cellular events of acute inflammation.
2. Classify bone tumours and describe morphology and radiological findings of Osteogenic sarcoma.

SHORT ESSAYS (Answer any Three)

3 x 5 = 15 Marks

3. Klinefelter syndrome: clinical features and genetic basis.
4. Difference between wet and dry gangrene.
5. Clinical features and pathology of Rickets.
6. Factors influencing wound healing.

SHORT ANSWERS

5 x 3 = 15 Marks

7. Four common causes of Eosinophilia.
8. Laboratory diagnosis of myocardial infarction.
9. Cerebrospinal fluid findings of pyogenic meningitis.
10. Routes of transmission of Human Immunodeficiency Virus.
11. Differences between Transudate and exudate.

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II Year B.P.T. Degree Examination – 21-May-2025

Time: Three Hours

Max. Marks: 80 Marks

PHARMACOLOGY (RS5)

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 anticholinergics agents. Mention the mode of action, adverse effects and uses of atropine.
2. Classify Neuromuscular blocking agents and describe the mechanism of action, indication and dose of Pancuronium.

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

3. Oral hypoglycemic drugs
4. Explain various factors modifying drug response.
5. Proton Pump Inhibitors
6. Aspirin
7. Treatment for Gout
8. Bronchodilators
9. Diazepam
10. Phenytoin
11. Treatment for Dementia
12. Antihistamines

SHORT ANSWERS

10 x 3 = 30 Marks

13. Advantages of selective COX two inhibitors over Non-selective COX inhibitors
14. Name any four drugs causing postural hypotension as side effect.
15. Name any two selective serotonin reuptake inhibitors with indication.
16. Name any four drugs used for treatment for Rheumatoid arthritis.
17. Name any four drugs used for treatment for Myasthenia Gravis.
18. Glucocorticoids – uses and adverse effect
19. Metoclopramide.
20. Drug interaction for Non-steroidal anti-inflammatory drugs
21. Name any two angiotensin receptor blockers with their adverse effects.
22. Name any two Thrombolytics with mode of action.
