

Rajiv Gandhi University of Health Sciences, Karnataka
II Year B.P.T. Degree Examination - 22-Jan-2021

Time: 3 Hours

Max. Marks: 40 Marks

PATHOLOGY (RS-3 & RS-4)

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 edema. Discuss etiopathogenesis of renal edema.
2. Define inflammation. Discuss vascular and cellular events in acute inflammation.

SHORT ESSAYS (Answer any Three)

3 x 5 = 15 Marks

3. Myocardial infarction
4. Describe pathogenesis of peptic ulcer
5. Delayed hypersensitivity reaction
6. Myxoedema

SHORT ANSWERS

5 x 3 = 15 Marks

7. Granulation tissue
8. Aschoff body
9. Transudate fluid
10. LE cell
11. Eosinophilia



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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 Neoplasia. Describe differences between benign and malignant tumours.
2. Define healing. Describe the healing of fractures in long bones.

SHORT ESSAYS (Answer any Three)

3 x 5 = 15 Marks

3. Clinical features and karyotypic abnormalities in Turner Syndrome.
4. List the differences between necrosis and apoptosis.
5. Aetiopathogenesis and morphology of rheumatic heart disease.
6. Define thrombosis and fate of thrombus.

SHORT ANSWERS

5 x 3 = 15 Marks

7. Mention complications of gastric ulcer.
8. Define granulomas and give two examples of Granulomatous inflammation.
9. Mention four opportunistic infections in Acquired Immunodeficiency Syndrome (AIDS)
10. Mention risk factors for atherosclerosis.
11. Describe cardinal signs of inflammation.



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Time: 3 Hours

Max. Marks: 40 Marks

MICROBIOLOGY (RS-3 & RS-4)

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. Draw a neat, labeled diagram of bacterial cell. Write in detail about flagella
2. Enumerate organisms causing diarrhea. Write in detail about laboratory diagnosis of Cholera

SHORT ESSAYS (Answer any Three)

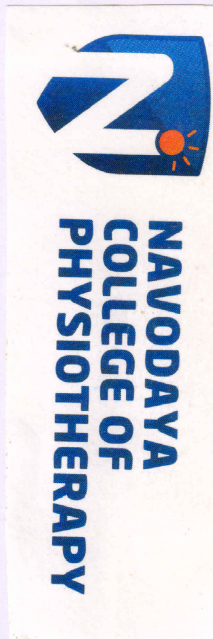
3 x 5 = 15 Marks

3. Polio vaccines
4. Laboratory diagnosis of Anthrax
5. Hepatitis B virus – laboratory diagnosis and prophylaxis
6. Filariasis

SHORT ANSWERS

5 x 3 = 15 Marks

7. Name two lactose fermenting and two non lactose fermenting organisms
8. Pasteurization
9. Inclusion bodies
10. Window period
11. Name four atypical Mycobacteria



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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 sterilization. Mention the methods of sterilization by moist heat. Describe Autoclave in detail.
2. Enumerate antigen antibody reactions. Discuss agglutination reaction in detail.

SHORT ESSAYS (Answer any Three)

3 x 5 = 15 Marks

3. IgM antibody.
4. Laboratory diagnosis of Cholera.
5. Urinary tract infection.
6. Laboratory diagnosis of HIV infection.

SHORT ANSWERS

5 x 3 = 15 Marks

7. Draw a labelled diagram of Bacterial spore.
8. Mention two complications of Plasmodium falciparum infection.
9. OPT vaccine.
10. Name four organisms causing Sexually transmitted diseases.
11. Mention two methods of viral cultivation.



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II Year B.P.T. Degree Examination - 27-Jan-2021

Time: Three Hours

Max. Marks: 80 Marks

PHARMACOLOGY

(RS3 & RS4)

Q.P. CODE: 2710

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 oral antidiabetic drugs. Describe the actions, uses and adverse effects of second generation sulphonylureas.
2. Enumerate antihypertensive drugs. Write a note on ACE inhibitors.

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

3. First pass metabolism and bioavailability.
4. Anti-cholinesterases.
5. Centrally acting muscle relaxants.
6. Neuroleptics.
7. Nitrates.
8. Frusemide.
9. Anabolic steroids.
10. Anti-emetics.
11. Inhalational Glucocorticoids.
12. NSAID's

SHORT ANSWERS

10 x 3 = 30 Marks

13. What is prodrug? Give two example.
14. Mention 2 drugs for migraine.
15. Why levodopa is combined with Carbidopa in treatment of Parkinson's disease?
16. Mention 2 clinical uses of Atenolol
17. Why low dose aspirin is used in myocardial infarction?
18. Write the antidotes for organo-phosphorous compound poisoning.
19. What is Gout? Mention 2 drugs for its treatment.
20. Mention 2 drugs used in treatment of osteoarthritis.
21. What is Teratogenesis? Give one example
22. What is peptic ulcer? Write two examples.



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II Year B.P.T. Degree Examination – 27-Jan-2021

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. Explain the management of diabetes mellitus.
2. Classify antihypertensive drugs. Write a note on ACE inhibitors.

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

3. Drug dependence.
4. Anticoagulants.
5. NSAID's
6. Anti-convulsants.
7. Cholinergic agonists.
8. B-blockers.
9. Antianxiety drugs.
10. Glucocorticoids.
11. Write on parkinsonism.
12. Proton pump inhibitors.

SHORT ANSWERS

10 x 3 = 30 Marks

13. What is prodrug? Give two examples.
14. Intra-theal route
15. Two drugs used in inflammatory myopathy.
16. Two drugs used in Myasthenia gravis
17. Two drugs used in allergy
18. Prokinetic drugs.
19. Lithium.
20. Nitrazepam application
21. What is postural hypotension? Mention two drugs which causes postural hypotension.
22. Frusemide.



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II Year B.P.T. Degree Examination – 29-Jan-2021

Time: Three Hours

Max. Marks: 100 Marks

EXERCISE THERAPY (RS3 & RS4)

Q.P. CODE: 2711

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 relaxation techniques and its uses.
2. Write an essay on facilitation techniques.

OR

Explain in detail about suspension therapy, principles, and types of suspension therapy.

SHORT ESSAYS (Question No 3 & 12 choice)

10 x 5 = 50 Marks

3. Principles of postural Re-Education.
4. Advantages and disadvantage of group exercises.
4. Types of aerobic training.
5. Measurement of limb length.
6. Asanas and its effects on the body.
7. Contraindication of hydrotherapy in detail.
8. Principles of mobilization.
9. Indications and contraindications for active movement.
10. Techniques of massage manipulations
11. Functional Re Education for upper limb
12. Physiological changes during aerobic training.

OR

Precaution and contraindications of stretching.

SHORT ANSWERS

10 x 3 = 30 Marks

13. Effects of pranayamas
14. Endurance testing
15. Indications for resisted exercises
16. Indication for axillary crutches
17. Indications for passive movement
18. Indications of goniometry
19. Balance training.
20. Importance of group therapy
21. Limitations of MMT
22. Endurance



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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. What is stretching? Explain the methods of stretching contracted skeletal muscles.
2. What are the techniques used in massage therapy? List indications and contraindications for massage.

OR

What is manual muscle testing? Explain any two grading techniques for assessing muscle power.

SHORT ESSAYS (Question No 3 & 12 choice)

10 x 5 = 50 Marks

3. Describe the procedure of pulmonary function testing.

OR

Explain the types of muscle contractions.

4. Describe crutch and its types.
5. What are the types and uses of suspension therapy?
6. Explain open vs closed chain exercises.
7. What are the advantages and disadvantages of group exercises?
8. Explain Frenkel's exercises.
9. Describe deconditioning.
10. Name the flexibility tests and explain any one.
11. Explain Pranayama in yoga.
12. What are the properties of water?

OR

Describe principles of PNF.

SHORT ANSWERS

10 x 3 = 30 Marks

13. Define Proprioception.
14. What is BRIME?
15. Write in short Mitchel's relaxation method.
16. What is rhythmic stabilization?
17. Define MET.
18. Define friction and its types.
19. What is Flat back posture?
20. What is Centre of buoyancy?
21. Mention the types of goniometer.
22. List the indicators of relaxation.



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II Year B.P.T. Degree Examination - 02-Feb-2021

Time: Three Hours

Max. Marks: 100 Marks

ELECTROTHERAPY

(RS3 & RS4)

Q.P. CODE: 2712

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. What is latent heat? Explain the various techniques of application of cold therapy and its physiological effects.
2. Define pain. Mention various theories of pain and explain in detail about pain gate control theory.

OR

What is TENS? Describe various types of TENS, with its physiological and therapeutic effects.

SHORT ESSAYS (Question No 3 & 12 choice)

10 x 5 = 50 Marks

3. Explain in detail about strength – duration (SD) curve.

OR

Explain about Kromayer lamp.

4. Explain the indication and procedure of faradic foot bath.
5. What is EMG? Explain its therapeutic uses.
6. What are the effects of electrical stimulation of healthy muscle and how electrical stimulation muscle contraction differs from normal voluntary muscle contraction?
7. Define Iontophoresis with its principles and indication.
8. Explain the mechanisms of heat production in tissues through short wave diathermy.
9. What is contrast bath? Explain its therapeutic uses.
10. Classify LASER's and explain its dosage parameters.
11. Explain the therapeutic uses of whirlpool bath.
12. What is dynamic and static interference system in interferential therapy?

OR

Physiological and therapeutic effects of galvanic current.

SHORT ANSWERS

10 x 3 = 30 Marks

13. Penetration depth for different modalities.
14. Resting membrane potential.
15. Why tuning is required in short wave diathermy machine?
16. Inverse square law.
17. What is Russian current?
18. Fluidotherapy
19. Magnetron?
20. Danger of cryotherapy.
21. What are standing waves and its effects.
22. Types of electrodes used in short wave diathermy



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II Year B.P.T Degree Examination – 02-Feb-2021

Time: Three Hours

Max. Marks: 100 Marks

ELECTROTHERAPY (RS5)

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. What is SD Curve? Explain the procedure of SD Curve for radial nerve. Write the interpretation with a schematic diagram and mention its merits and demerits.
2. Mention the different types of TENS. What are the indications and contraindications of TENS?

OR

Describe the production of SWD with a neat diagram. Mention the physiological and therapeutic effects of SWD.

SHORT ESSAYS (Question No.3 & 12 choice)

10 x 5 = 50 Marks

3. Describe types and methods of placement of electrodes in SWD.

OR

Describe the indications and contraindications of MWD.

4. Explain dosage of LASER.
5. Explain types of IRR generators.
6. What are sensitizers and filters in UVR?
7. Describe principles of LASER methods of application of LASER.
8. Explain methods of application of Paraffin wax.
9. Explain methods of application of ultrasound.
10. Describe physiological and therapeutic effects of cryotherapy.
11. Indication and contraindications of contrast bath.
12. Explain the calculation of E1 dose in UVR.

OR

Explain the physiological effects of IFT.

SHORT ANSWERS

10 x 3 = 30 Marks

13. Define electromagnetic spectrum.
14. What is Coupling media in ultrasound?
15. Define Ohm's law.
16. Name types of UVR generators
17. Composition of Paraffin wax bath
18. What is Lewis hunting reaction?
19. What is cable method in SWD production?
20. Define cyclotherm.
21. What are the dangers of cryotherapy?
22. What is pulsed electromagnetic energy?



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