

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - 03-Mar-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 Anemia. Describe the etiology, blood picture and clinical features of Iron deficiency anemia.
2. Define Thrombosis. Discuss Virchow's triad and describe the fate of Thrombosis.

SHORT ESSAYS (Answer any Three)

3 x 5 = 15 Marks

3. Manifestations of Vitamin A deficiency.
4. Discuss Healing of fracture by primary healing.
5. Difference between benign and malignant tumors.
6. Hashimotos Thyroiditis.

SHORT ANSWERS

5 x 3 = 15 Marks

7. Name four opportunistic infections in HIV.
8. Mention four examples of metaplasia.
9. Mention four pigments.
10. Mention two special stains and their applications.
11. Mention three tests for proteinuria.



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II Year B.P.T. Degree Examination - 03-Mar-2021

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 and describe the essential structures
2. Describe the pathogenesis, lab diagnosis, prophylaxis and treatment of cholera

SHORT ESSAYS (Answer any Three)

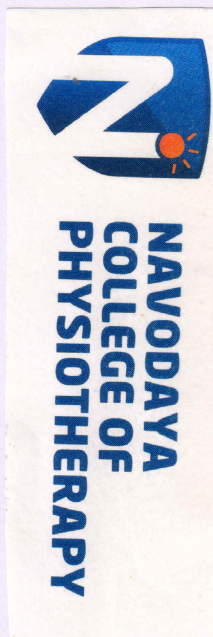
3 x 5 = 15 Marks

3. Lab diagnosis of HIV infection
4. Delayed hypersensitivity
5. Urinary tract infection
6. Laboratory diagnosis of fungal infections

SHORT ANSWERS

5 x 3 = 15 Marks

7. Post exposure prophylaxis for HIV infection
8. Markers of Hepatitis 'B' virus
9. Pseudomonas
10. Etiology of Acute pyogenic meningitis
11. Methicillin resistant Staphylococcus aureus



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PATHOLOGY - (RS-5)

Q.P. Code: 2737

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary

(Note : Both OP 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 cell injury. Discuss etiology and pathogenesis of the same
2. Define and classify Neoplasia. Discuss the differences between benign and malignant tumors

SHORT ESSAYS (Answer any Three)

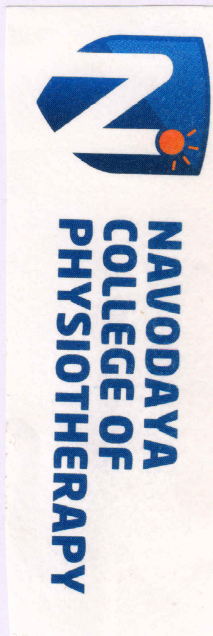
3 x 5 = 15 Marks

3. Cholecystitis
4. Protein Energy Malnutrition
5. Diabetes mellitus
6. Pathological calcification

SHORT ANSWERS

5 x 3 = 15 Marks

7. Virchow's Triad
8. Pancytopenia
9. Rickets
10. Tetralogy of Fallot
11. Eosinophilia



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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 dry heat methods of sterilization
2. Enumerate the organisms causing sexually transmitted diseases. Write in detail about the pathogenicity and laboratory diagnosis of HIV infection

SHORT ESSAYS (Answer any Three)

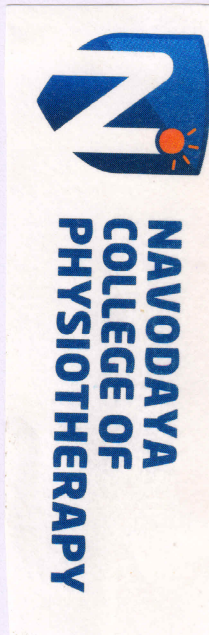
3 x 5 = 15 Marks

3. Prophylaxis of Hepatitis B
4. Bacterial flagella
5. Structure of IgG
6. Clinical manifestation and laboratory diagnosis of Vibrio cholerae

SHORT ANSWERS

5 x 3 = 15 Marks

7. Name any two Gram Negative bacteria
8. Name any four disinfectants commonly used in hospital
9. DPT vaccine
10. Name any two fungi causing systemic mycoses
11. Quellung reaction



Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - 05-Mar-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 peripherally acting skeletal muscle relaxants. Explain the mechanism of action and pharmacological actions of D-tubocurarine.
2. Classify drugs used in the treatment of angina pectoris. Write the pharmacology of nitrates.

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

3. Enumerate various routes of drug administration.
4. What is myasthenia gravis? Name two drugs used to treat it.
5. Write a note on adverse effects produced by drugs.
6. Classify hypolipidemic agents. What are their indications?
7. Write the therapeutic classification of adrenergic drugs.
8. What are thrombolytic agents? Give their clinical uses.
9. Classify beta blockers and state their uses.
10. Write a note on bronchodilators.
11. Write a note on plasma protein binding of drugs.
12. Write a note on sodium valproate.

SHORT ANSWERS

10 x 3 = 30 Marks

13. State the uses of calcium channel blockers.
14. Name two Antiarrhythmic drugs.
15. What are purgatives? Classify them.
16. Name two drugs used to treat peripheral vascular diseases.
17. Define the term nasal decongestants and write examples.
18. What is postural hypotension? Name two drugs causing it.
19. What are prodrugs? Give two examples.
20. Name two drugs each to treat type II diabetes and insomnia.
21. Write a note on chlorpromazine.
22. Why levodopa is combined with carbidopa.



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II Year B.P.T. Degree Examination – 05-Mar-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. What are Anti-cholinergic drugs? Classify and write a note on the major varieties.
2. Classify NSAIDS and explain in detail.

SHORT ESSAYS (Answer any Eight)

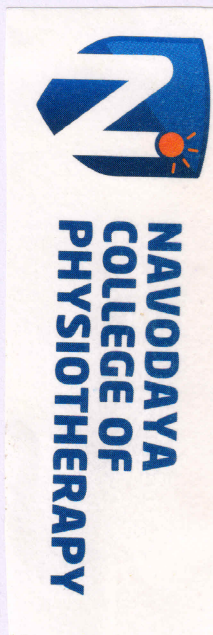
8 x 5 = 40 Marks

3. Nitrates.
4. Blood thinners.
5. Corticosteroids.
6. Calcium channel blockers.
7. Factors modifying bioavailability.
8. Diuretics.
9. Drugs used as oral-hypoglycemics.
10. Hypolipidaemic drugs.
11. Treatment of peptic ulcer.
12. Treatment of parkinsonism.

SHORT ANSWERS

10 x 3 = 30 Marks

13. Two drugs used in malignant hypertension
14. Two drugs in nausea (Motion Sickness)
15. Two drugs used in atrial brady arrhythmias
16. Intra-Articular route
17. One use and one adverse effect of DRUGS used in dementia.
18. One use and one adverse effect of pancuronium.
19. One use and one adverse effect of digoxin.
20. What is prodrug? Write two examples.
21. Synergism.
22. Write two drug names used in constipation and their side effects.



Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – 09-Mar-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 suspension therapy for knee joint.
2. Write in detail about principles, indications, effects and uses of hydrotherapy.

OR

Write in detail about posture – types, kinetics and kinematics, and the postural control mechanism.

SHORT ESSAYS (Question No 3 & 12 choice)

10 x 5 = 50 Marks

3. Principles of MMT.
4. Explain circuit weight training.
5. Explain Delormes method.
6. PNF for upper limb.
7. Evaluation of balance.
8. Grades of mobilization.
9. Indications, contraindications for passive movement.
10. Different types of active assisted exercises.
11. Cardiovascular changes with aerobic training.
12. Anthropometric measurement.

OR

Principles of resisted exercise.

SHORT ANSWERS

10 x 3 = 30 Marks

13. Two tests for sensation.
14. Relaxation methods.
15. Effects of stretching.
16. Oxford method of muscle testing.
17. Uses of passive movement.
18. coordination & In-Coordination.
19. Concentrics versus eccentric exercises.
20. Circuit weight training.
21. Goals of PNF.
22. Types of suspension therapy.



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II Year B.P.T Degree Examination – 09-Mar-2021

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 different schools of manual therapy. List the indications and contraindications for manual therapy.
2. Define posture. Explain types of posture and analysis of posture in frontal plane.

OR

What are passive movements? Explain the principles, indications and contraindications for passive movements.

SHORT ESSAYS (Question No 3 & 12 choice)

10 x 5 = 50 Marks

3. What is aerobic exercise? Explain the types and phases of aerobic training.

OR

Describe ideal alignment on standing with emphasis on ankle, knee and hip.

4. Describe the types of range of motion.
5. Explain asanas in yoga.
6. What are components of balance?
7. Describe PNF stretching.
8. Explain the tests for co-ordination.
9. Explain physiological effects and uses of 'hacking' massage technique.
10. Explain Jacobson's relaxation method.
11. Explain the fundamental and derived positions.
12. Methods of measurement of thigh and forearm girth.

OR

Explain examination for a patient to be trained with walking aids.

SHORT ANSWERS

10 x 3 = 30 Marks

13. What are the uses of traction?
14. Mention the adverse effects of slumped posture.
15. Define irradiation.
16. Define flexibility and mobility.
17. Define adaptation and conditioning.
18. What is Lofstrand crutch?.
19. What is ballistic stretching?
20. Describe true and apparent limb length.
21. What is reversibility principle?
22. Difference between hydromechanics and thermodynamics.



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II Year B.P.T. Degree Examination – 12-Mar-2021

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 (Second Question Choice)

2 x 10 = 20 Marks

1. Describe production of SWD, explain physiological and therapeutic effect of SWD.
2. Explain indications, contraindications, physiological and therapeutic effect of faradic current.

OR

Define TENS, explain types of TENS with indications and contraindications.

SHORT ESSAYS (Question No 3 & 12 choice)

10 x 5 = 50 Marks

3. Explain principles of production of IFT.

OR

High voltage pulsed galvanic current

4. Explain properties of electromagnetic spectrum.
5. Physiological and therapeutic effects of LASER
6. Role of Sensitizers in UVR
7. Indications and contraindications of contrast bath
8. Sinusoidal current
9. Faradic foot bath
10. Thermal and non-thermal effects of ultrasound
11. Kromayer lamp
12. Pain gate control theory

OR

Explain indications and methods of applications of whirlpool.

SHORT ANSWERS

10 x 3 = 30 Marks

13. Half wave distance in ultrasound.
14. Indications and contraindications for IRR.
15. Mutual induction.
16. Methods of application of wax therapy.
17. Macro current.
18. Indication of UVR.
19. Phonophoresis – indications and contraindications.
20. Methods of application of cryotherapy.
21. Ramping of current.
22. Tetanic contraction.



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II Year B.P.T Degree Examination – 12-Mar-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. Describe SD curve in detail and enumerate the advantages and drawbacks and indications of strength duration curve.
2. Explain the principle of production of ultrasound and its various methods of application.

OR

Define pain and explain the pain gate control theory with neat labelled diagram.

SHORT ESSAYS (Question No.3 & 12 choice)

10 x 5 = 50 Marks

3. Describe diadynamic currents.

OR

Describe the physiological and therapeutic effects of Interferential therapy

4. Explain types of TENS.
5. Explain dosage calculation in LASER.
6. Describe method of application of contrast bath.
7. Explain the Effects and uses of fluidotherapy.
8. Describe physiological and therapeutic effects of Whirlpool bath.
9. Define phonophoresis and enumerate its application.
10. Methods of application and types of electrodes in SWD.
11. Explain cathodal galvanism.
12. Physiological and therapeutic effects Infra-Red Rays.

OR

Define magnetic stimulation and write its indications and contraindications.

SHORT ANSWERS

10 x 3 = 30 Marks

13. Define macrocurrents.
14. Define Rebox currents.
15. Accommodation
16. Motor unit
17. Reverse piezoelectric effect
18. Latent heat
19. Fuse
20. Attenuation
21. Sinusoidal currents
22. Action potential



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