

Rajiv Gandhi University of Health Sciences, Karnataka
II Year B.P.T. Degree Examination – 05-Jan-2022

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 antidepressants. Write the mechanism of action, uses and adverse effects of Amitriptyline.
2. Classify oral hypoglycemic drugs and explain about Metformin.

Amitriptyline.

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

3. Write a note on drugs to be avoided in elderly.
4. Describe the mechanism of action and therapeutic uses of omeprazole.
5. Enumerate various drugs used in Gout. Explain the mechanism of action of any one drug.
6. Glucocorticoids. *Glucocorticoids*
7. Write the mechanism of action therapeutic uses of Frusemide.
8. Write the therapeutic uses and adverse effects of Propranolol. *Propranolol*
9. Enumerate various routes of administration of drugs.
10. NSAID's
11. Write a note on centrally acting skeletal muscle relaxants.
12. Explain the mechanism of action, uses and adverse effects of oral anticoagulants.

SHORT ANSWERS

10 x 3 = 30 Marks

13. What is drug tolerance? Explain with suitable examples.
14. Define drug antagonism.
15. Enlist two uses and two adverse effects of Aspirin.
16. Enlist two uses and two adverse effects of Phenobarbital.
17. List two uses and two adverse effects of Nitrates.
18. Enlist one use and one adverse effect of Lithium.
19. Enlist two anti-anxiety drugs.
20. List two uses and two adverse effects of Dexamethasone.
21. List two drugs which cause postural hypotension in elderly.
22. Why carbidopa is given along with Levodopa.

Rajiv Gandhi University of Health Sciences, Karnataka
II Year B.P.T Degree Examination – 29-Jan-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. 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**
4. 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.

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 (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.

Rajiv Gandhi University of Health Sciences, Karnataka
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.

Rajiv Gandhi University of Health Sciences, Karnataka
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?

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

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 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 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 - 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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II Year B.P.T Degree Examination – 10-Jan-2022

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. Describe in detail about the physiological effects and therapeutic effects of faradic current
2. 45 years old female reports with complaints in low back pain area. While taking history patient reported the pain since past three months and there was no obvious history of any injury and no history of radiating to any other parts of the area. The pain is constant since onset. While interacting the patient seems to be so anxious about her pain and loves to talk about the pain to people around
 - a) List all possible electro therapeutic modalities that might be indicated for this case
 - b) Choose appropriate modality from the above list
 - c) What will be the starting parameters you will use and how you will progress (based on number of days/patient symptoms)
 - d) Describe with a circuit diagram of the modality that you have seen
 - e) Other than the given information what extra information would have helped you to make a clear choice and what is the strategy that you will use for her anxiety

OR

Describe in detail about the thermal and non thermal effects of ultrasound. Add a note on phonophoresis

SHORT ESSAYS (Question No.3 & 12 choice)

10 x 5 = 50 Marks

3. Define Pain and explain Pain Gate theory

OR

Describe about the Kromayer lamp

4. Write about the sensitizers and filters used in UVR
5. Describe about the diode valve
6. Discuss the various techniques of application of cryotherapy
7. Using strength duration curve how will evaluate whether the muscle is partially or completely denervated. Explain
8. Explain the physiological effects of TENS (*Transcutaneous electrical Nerve Stimula*)
9. List the contraindications and dangers of SWD
10. Define medium frequency currents. Explain the dosage parameters of interferential therapy
11. Explain the technique of application of faradic foot bath
12. Does muscle contraction with electrical stimulation differs from normal voluntary contraction of muscle. If yes, justify

OR

Explain the therapeutic effects of infra red rays

Rajiv Gandhi University of Health Sciences, Karnataka

10 x 3 = 30 Marks

SHORT ANSWERS

13. What is attenuation?
14. Define rebox current
15. What is pulsed electromagnetic energy?
16. What is resting membrane potential?
17. Define near field and far field with neat labeled diagram
18. List any three indications and contraindications of micro wave diathermy
19. Describe FG test
20. Difference between micro and macro currents
21. Describe sinusoidal and diadynamic currents
22. List the therapeutic uses and contraindications of whirlpool bath

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

Rajiv Gandhi University of Health Sciences, Karnataka
II Year B.P.T. Degree Examination – 03-Jan-2022

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. Draw and label a diagram of Bacterial cell and write in detail about bacterial spore **1 x 10 = 10 Marks**
2. Define sterilization. Classify sterilization. Describe the methods of moist heat sterilization

SHORT ESSAYS (Answer any Three)

3. Laboratory diagnosis of Typhoid fever
 4. Laboratory diagnosis of Fungal infections
 5. IgG immunoglobulin
 6. Laboratory diagnosis of urinary tract infections
- 3 x 5 = 15 Marks**

SHORT ANSWERS

7. Define antigen.
 8. Prophylaxis of hepatitis B
 9. List four organisms causing sexually transmitted diseases
 10. Draw a neat and labeled diagram of HIV
 11. Name four DNA viruses
- 5 x 3 = 15 Marks**

Rajiv Gandhi University of Health Sciences, Karnataka
II Year B.P.T. Degree Examination – 03-Jan-2022

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 and classify Anemia. Discuss clinical features and Lab diagnosis of Megaloblastic anemia.
2. Describe the clinical features and diagnosis of Osteomyelitis.

SHORT ESSAYS (Answer any Three)

3 x 5 = 15 Marks

3. Explain the clinical features and lab diagnosis of Pyogenic meningitis.
4. Discuss Necrosis and its types.
5. Discuss Down's syndrome.
6. Describe the etiology, gross and microscopy of Atherosclerosis.

SHORT ANSWERS

5 x 3 = 15 Marks

7. Enumerate microscopic features of Squamous cell carcinoma.
8. Name four chemical mediators of inflammation.
9. Enumerate types of Edema.
10. Enlist the different modes of transmission of HIV.
11. Enumerate the skeletal changes in Rickets.
