

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – SEP-2018

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 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 anemia. Classify anemias and write laboratory diagnosis of Iron deficiency anemia.
2. Write about wound healing in detail.

SHORT ESSAYS (Answer any Four)

4 x 5 = 20 Marks

3. Infarction
4. Syphilis
5. Investigations in hemolytic anemia
6. Type I hypersensitivity reactions
7. Osteomalacia

SHORT ANSWERS

5 x 2 = 10Marks

8. Types of cirrhosis
9. Atrophy
10. Types of embolism
11. Metaplasia
12. Name any four congenital heart diseases.

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Time: 3 Hours

Max. Marks: 40 Marks

Pathology 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 Neoplasia. Discuss the difference between benign and malignant tumors.
2. Define and classify anaemia. Write pathology of Iron deficiency anaemia.

SHORT ESSAYS (Answer any Four)

4 x 5 = 20 Marks

3. Primary wound healing
4. Pyogenic meningitis
5. Infarction
6. Dystrophic calcification
7. Lobar pneumonia

SHORT ANSWERS

5 x 2 = 10 Marks

8. Scurvy
9. Hypertrophy
10. Types of cirrhosis
11. Mention four complications of diabetes mellitus
12. Components of Fallot's Tetralogy

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II Year B.P.T. Degree Examination – SEP-2018

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 hypersensitivity. Classify hypersensitivity. Describe anaphylaxis in detail.
2. Discuss the morphology, cultural characteristics and pathogenicity of mycobacterium tuberculosis. Mention the laboratory diagnosis of pulmonary tuberculosis.

SHORT ESSAYS (Answer any Four)

4 x 5 = 20 Marks

3. Poliomyelitis
4. IgA
5. Pyrexia of unknown origin
6. Life cycle of malaria
7. Laboratory diagnosis of fungal infections

SHORT ANSWERS

5 x 2 = 10Marks

8. Define zoonosis. Give two examples.
9. Structure of HIV virus
10. Name four organisms causing opportunistic infections.
11. Rheumatic fever
12. Name four organisms causing sexually transmitted diseases.

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Time: 3 Hours

Max. Marks: 40 Marks

Microbiology

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. Write about morphology, pathogenecity and diagnostic test of Mycobacterium tuberculosis.
2. Define and classify immunity. Write in detail about acquired immunity.

SHORT ESSAYS (Answer any Four)

4 x 5 = 20 Marks

3. Urinary tract infection
4. Autoclave
5. Bacterial spore
6. Gas gangrene
7. Coagulase test

SHORT ANSWERS

5 x 2 = 10 Marks

8. Hepatitis B virus - structure
9. Name four gram negative bacterias
10. BCG vaccine
11. Prophylaxis against tetanus
12. Name four organism causing meningitis

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II Year B.P.T. Degree Examination – SEP-2018

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 Two)

2 x 10 = 20 Marks

1. Classify the drugs used for treatment of congestive heart failure and explain about Digoxin.
2. Classify anti adrenergic drugs and explain about Propranolol.
3. Enumerate various routes of administration of drugs with advantages and disadvantages of parenteral and oral route.

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

4. Streptokinase
5. Metformin
6. Omeprazole
7. General anesthetics
8. Carbamazepine
9. Calcium channel blockers
10. Antianxiety drugs
11. Hypolipidemics
12. Warfarin
13. Atropine

SHORT ANSWERS

10 x 2 = 20 Marks

14. Name two indication and adverse effects of Aspirin.
15. Name two indication and adverse effects of Diazepam.
16. Styptics
17. Name any four drugs used in treatment of Parkinson's disease.
18. Expectorants
19. Name any two Depolarizing muscle relaxants and its uses.
20. Name any two Mono amino oxidase inhibitors and its uses.
21. Name any two Positive Inotropic agents and Its uses.
22. Name any four drugs used for treatment of constipation.
23. Name any four drugs used for treatment of Diarrhea.

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Time: Three Hours

Max. Marks: 80 Marks

Pharmacology (RS - 3 & RS - 4) Q.P. CODE: 2710

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

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. Explain various routes of administration of drugs with example
2. Classify anticholinergics. Write the actions, uses and adverse effects of atropine
3. Classify oral hypoglycemic drugs. Write the mechanism of action, uses and adverse effects of sulfonylureas

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

4. Prodrugs
5. Succinyl choline
6. Phenytoin
7. Thiazides
8. Prazosin
9. Nifedipine
10. Paracetamol
11. Metoclopramide
12. Uses and contraindications of morphine
13. Uses and adverse effects of beta blockers

SHORT ANSWERS

10 x 2 = 20 Marks

14. Mention two anabolic steroids
15. Mention two uses of diazepam
16. List four uses of alcohol
17. Define mucolytic agent. Give two examples
18. What are thrombolytics? Give two examples
19. Mention two intravenous general anesthetic agents
20. Mention two vitamin D preparations and their two uses
21. Mention two centrally acting skeletal muscle relaxants
22. Mention two antihistamines and their two uses
23. What is myasthenia gravis? Name two drugs used to treat it

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II Year B.P.T Degree Examination – SEP-2018

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 (Answer any Two)

2 x 10 = 20 Marks

1. Define LASER. Explain the various methods of production of LASER and its physiological and therapeutic effects.
2. Define TENS. Enumerate and describe various types of TENS and its dosage parameters in detail.
3. Describe Strength Duration curve in detail and its interpretation in nerve lesions.

SHORT ESSAYS (Answer any Twelve)

12 x 5 = 60 Marks

4. Define electric shock and write about various types of electric shock.
5. Moist heat therapy
6. Ultrasound Dosage Calculation
7. Cathodal Galvonism
8. Calculation of E1, E2, E3, E4 dosages in UVR
9. MWD its indications, contraindications
10. Explain the principle of Latent heat and add a note on Wax therapy.
11. Explain the principles of IFT application.
12. Whirlpool bath
13. Define PEME its principles and uses.
14. Whirlpool bath
15. Define Cryotherapy. Add a note on various methods of application of cryotherapy with its physiological effects.
16. Explain the characters of partially denervated muscle.
17. Define Ohms law and its application to DC/AC.

SHORT ANSWERS

10 x 2 = 20 Marks

18. Name the parameters of TENS
19. Phonophoresis and its agents
20. Mention only units of Electricity.
21. Motor unit and synapse
22. Define Macrocurrents.
23. Mention the different types of electrodes used in SWD.
24. Piezoelectric effect
25. Define Russian current.
26. Uses of Condensers
27. Define Magnetic stimulation.

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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 (Answer any Two)

2 x 10 = 20 Marks

1. Define TENS. List the various types of TENS and explain mechanism of action. Add a note on physiological and therapeutic effects of TENS.
2. Explain principles and production of Ultra Sound. Describe thermal and non-thermal effects. Add a note on application of Ultra Sound.
3. Define LASER. Explain principle and production of LASER. Add a note on properties of LASER.

SHORT ESSAYS (Answer any Twelve)

12 x 5 = 60 Marks

4. Explain the role of HVPGS in wound management
5. Explain methods of application of cryotherapy
6. Explain physiology of nerve impulse propagation.
7. Micro currents
8. Anodal galvanism
9. Describe the methods of application of wax therapy
10. Discuss various theories of pain
11. Explain therapeutic effects and indications of UVR
12. Explain the proforma for stimulating flexor compartment of forearm
13. Describe the physiological effects of sinusoidal currents
14. Explain the therapeutic effects of faradic currents
15. Describe principle of production of IRR
16. Explain procedure for plotting S-D curve
17. Write a note on pulsed electromagnetic energy (PEME).

SHORT ANSWERS

10 x 2 = 20 Marks

18. Define ohms law
19. H-reflex
20. What is duty cycle?
21. What is fluidotherapy?
22. Define nociception
23. Rheobase and chronaxie
24. Define motor unit
25. What is magnetron?
26. Define phonophoresis
27. What is amplitude modulated frequency?

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 (Answer any Two)

2 x 10 = 20 Marks

1. What is manual muscle testing? Explain the principles and uses of MMT.
2. Define massage; classify massage with indications and contraindications.
3. Explain the techniques of strengthening biceps brachii from grade 1 to grade 5.

SHORT ESSAYS (Answer any Twelve)

12 x 5 = 60 Marks

4. Describe types of muscle contractions with examples.
5. Define passive movements. Mention the indications of passive movement.
6. Define stretching. What are the physiological effects of stretching?
7. Explain the principles of PNF technique.
8. What are frenkel's exercise? Mention the uses of frenkel's exercise.
9. Define suspension therapy. Mention the types of suspension.
10. Define postural drainage. Mention indications and techniques.
11. Define endurance. Explain the types of endurance with examples.
12. Describe the muscle work during squatting.
13. Describe coordination exercise.
14. Explain the principles of hydrotherapy.
15. Describe the physiological effects of relaxation.
16. What are active exercises? Mention its classification and uses.
17. Write a note on grades of mobilization.

SHORT ANSWERS

10 x 2 = 20 Marks

18. What is 1 RM?
19. Mention four uses of effleurage.
20. Define closed chain exercise.
21. What is hold relax technique?
22. Mention two uses of static cycle.
23. Define muscle tone.
24. Define free exercise.
25. Define tightness and contracture.
26. Mention any two demerits of suspension therapy.
27. Define pinch grip.

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Time: Three Hours

Max. Marks: 100 Marks

Exercise Therapy (RS-3 & RS-4)

Q.P. CODE: 2711

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

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. Classify strengthening exercises. Write in detail about progressive resisted exercises
2. Explain the principles of massage. Enumerate the technique of massage and explain any three
3. Define Aerobic capacity. Explain the types and phases of aerobic exercise

SHORT ESSAYS (Answer any Twelve)

12 x 5 = 60 Marks

4. Explain the methods of postural evaluation
5. Explain the effects of immobilization in musculoskeletal system
6. Write a note on PNF stretching
7. Describe relaxation exercise in detail
8. Explain the merits and demerits of continuous passive mobilization
9. Write briefly about shoulder mobilization
10. Write a note on gait training
11. Explain the role of recreational activities in rehabilitation
12. Explain the principle of hydrotherapy and its application in exercise therapy
13. Write briefly about free exercises
14. Explain co-ordination evaluation in detail
15. Compare open kinematic with closed kinematic exercise
16. Write a note on muscle re-education
17. Explain the principle of asanas

SHORT ANSWERS

10 x 2 = 20 Marks

18. Define isometric contraction
19. Types of receptors
20. Definition of group therapy
21. Indications for hydrotherapy
22. Components of balance
23. Define accommodation
24. List any four uses of mat exercise
25. List any four contra indications for massage
26. Types of suspension therapy
27. List any two principles of strengthening exercise

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Max. Marks: 80 Marks

RESEARCH METHODOLOGY & BIOSTATISTICS

(RS-3 & RS-4)

Q.P. CODE: 2713

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

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. What are measures of central tendency? Explain each of them with an example.
2. Explain different methods of sampling technique
3. Define research. Explain different types of research

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

4. Explain measures of asymmetry.
5. What are the characteristic of statistics?
6. What are measures of dispersion?
7. Define hypotheses. Explain briefly the basic concept concerning testing of hypotheses.
8. Uses of computer in research
9. Uses of biostatistics in health science
10. Types of diagram and graphs
11. Analysis of variance and covariance (ANOVA & ANACOVA)
12. Null and alternative hypotheses
13. Describe briefly about difference between questionnaire and schedules

SHORT ANSWERS

10 x 2 = 20 Marks

14. Skewness
15. Normal probability curve
16. One tailed and two tailed hypotheses
17. Classification
18. What are the errors in sampling?
19. Prospective study
20. Median
21. Ordinal scale
22. Qualitative and quantitative data
23. Mean deviation

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