

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - APRIL 2015

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 Atherosclerosis. Discuss aetiopathogenesis and fate of thrombus.
2. Describe etiology and pathogenesis of different types of Oedema.

SHORT ESSAYS (Answer any Four)

4 x 5 = 20 Marks

3. Iron deficiency anaemia
4. Morphology of reversible cell injury
5. Pathological calcification
6. Factors affecting healing
7. Rickets

SHORT ANSWERS

5 x 2 = 10 Marks

8. Types of embolism
9. Jaundice
10. Neuritis
11. Volkmann's ischemic contracture
12. Ghon's complex

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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. Name the organisms causing meningitis. Discuss the morphology, pathogenicity and laboratory diagnosis of *Streptococcus pneumoniae*
2. Enumerate viruses causing hepatitis. Describe the pathogenesis and laboratory diagnosis of Hepatitis-B virus. Add a note on its prophylaxis

SHORT ESSAYS (Answer any Four)

4 x 5 = 20 Marks

3. Bacterial capsule
4. Anaphylaxis
5. Classification of fungi based on disease caused
6. Lab diagnosis of tetanus
7. Hot-Air oven

SHORT ANSWERS

5 x 2 = 10 Marks

8. Name four organisms causing respiratory tract infections
9. DPT vaccine
10. Mention any two properties of Antigens.
11. Name two differential staining methods
12. Name any four zoonotic diseases

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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. Classify Skeletal muscle Relaxants. Discuss the Mechanism of action uses and adverse effects of Pancuronium.
2. Classify Opioid analgesics. Describe the uses, adverse effects and contraindications of Morphine.
3. Enumerate routes of drug administration with examples. Write the advantages and disadvantages of oral, IV and sc routes of administration.

SHORT ESSAYS (Answer any Eight)

am8 x 5 = 40 Marks

4. Sublingual Route of Administration
5. Atropine substitutes
6. Cox 2 inhibitors.
7. Uses of Prazosin
8. Fibrinolytics
9. Frusemide
10. Drugs to be avoided in elderly and why?
11. Baclofen
12. Anti cholinergic drugs
13. Uses and adverse effect of alpha blockers

SHORT ANSWERS

10 x 2 = 20 Marks

14. One use and one adverse effect of Ranitidine
15. One use and one adverse effect of Metformin
16. One use and one adverse effect of Hydrocortisone
17. One use and one adverse effect of Salmeterol
18. One use and one adverse effect of Diclofenac
19. One use and one adverse effect of Lithium
20. One use and one adverse effect of Adrenaline
21. One use and one adverse effect of Phenytoin
22. One use and one adverse effect of Bromocryptine
23. One use and one adverse effect of Verapamil

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II Year B.P.T. Degree Examination - APRIL - 2015

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. Define balance. Describe in detail the evaluation of impaired balance and balance re-training
2. What are the indications and principles of massage? Describe in detail physiological and therapeutic uses of manipulations in massage
3. How is limb length measured? What are the different types of crutches? Write in detail about various crutch gaits

SHORT ESSAYS (Answer any Twelve)

12 x 5 = 60 Marks

4. Explain non-equilibrium tests for co-ordination
5. Enumerate the principles of PNF
6. Write the protocol for re-education of a muscle from power 1 to 2
7. What are the effects and uses of resisted exercises?
8. Write briefly about the various types of breathing exercise
9. Define hydrotherapy. Enumerate the precautions and contra indications of hydrotherapy
10. What are the normal and abnormal responses to acute aerobic exercise?
11. Write about Frenkels exercises for lower limb
12. Explain the principles, methods and techniques of pranayama
13. Illustrate MMT for knee flexors and extensors
14. Explain petrissage manipulation
15. Define passive movements. Classify it and write down the principles for giving passive movements
16. Write briefly about the benefits of suspension therapy
17. Therapeutic gymnasium

SHORT ANSWERS

10 x 2 = 20 Marks

18. Write the principles of co-ordination exercise
19. Enumerate any two mat activities
20. Define good posture
21. Explain Delormes technique
22. What is Mitchell's Relaxation Technique?
23. Write any two derived positions
24. List down the components of a gait cycle
25. Define stretching
26. What is 1 RM?
27. Write any two principles of MMT

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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 IFT. Explain principle and production of IFT. Describe physiological and therapeutic effects of interferential therapy.
2. Define LASER. Describe therapeutic and physiological effects of LASER. Add a note on indications and contraindications of LASER.
3. Classify types of UVR. Explain the methods of test dose and describe calculation of dosage. Add a note on its therapeutic effects.

SHORT ESSAYS (Answer any Twelve)

12 x 5 = 60 Marks

4. Valves and types
5. Explain physiological changes occurring in a nerve during electrical stimulation
6. Define TENS and explain conventional TENS
7. Explain various theories of pain
8. Explain physiological and therapeutic effects of faradic currents
9. Describe principles and application of ultra sound
10. Micro currents
11. Explain physiological and therapeutic effects of cryotherapy
12. Explain procedure of Iontophoresis in the treatment of hyperhydrosis
13. Write a note on physiological and therapeutic effects of IRR
14. Explain methods of application of wax therapy
15. Difference between high frequency and low frequency currents
16. Describe principle and production of MWD
17. Describe the physiological effects of sinusoidal currents

SHORT ANSWERS

10 x 2 = 20 Marks

18. Define shock
19. Define static electricity
20. Define electromagnetic induction
21. What is duty cycle?
22. What is Neuropraxia
23. Define nociception
24. Two uses of fuse
25. Define biofeedback
26. What is latent heat?
27. Define H- reflex

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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. Describe the features of a good research design.
2. Describe basic principles of graphical representation along with types of diagrams.
3. Describe various measures of Central tendency and how are they related with each other.

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

4. Motivation in research.
5. Statement of Research problem.
6. Factors to be considered in the preparation of questionnaire.
7. Importance of the study of statistics.
8. Uses of Analysis of Variance (ANOVA) with an example from physiotherapy situation.
9. Computer application in research.
10. Normal Probability curve.
11. Chi-Square test for 2X2 contingency table.
12. Different measures of scales with an example to each.
13. What is Descriptive statistics?

SHORT ANSWERS

10 x 2 = 20 Marks

14. What is hypothesis?
15. When do you use Paired 't' – test?
16. Describe Quartiles.
17. Analysis of Co-Variance (ANACOVA)?
18. Define Simple Random Sampling.
19. Define Co- efficient of variation.
20. Differences between Bar diagram and Histogram.
21. Mention various types of Mean.
22. Define probability of an event.
23. Sampling variation.
