Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - May 2016

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 anaemia, classify anaemia and write laboratory diagnosis of Iron deficiency anaemia.
2. Define Inflammation. Discuss vascular and cellular events in acute inflammation.

SHORT ESSAYS (Answer any Four) 4 x 5 = 20 Marks

3. Causes of edema
4. Atrophy and Hypertrophy
5. Cholecystitis
6. Hepatitis
7. Thrombosis

SHORT ANSWERS 5 x 2 = 10 Marks

8. Rickets
9. Exudates
10. Name four Haemoparasites.
11. Virchow's triad
12. Eosinophilia

*****

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - May 2016

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:BothQPCodes2708and2709aretobeansweredwithintotalduration of 3hours)

LONG ESSAYS (Answer any One) — 1 x 10 = 10 Marks

1. Define and classify hypersensitivity. Describe type 1 hypersensitivity.
2. Define and classify sterilization. Write in detail about autoclave.

SHORT ESSAYS (Answer any Four) — 4 x 5 = 20 Marks

3. Antibacterial susceptibility testing
4. Tuberculin test.
5. Sexually transmitted diseases.
6. Cultivation of virus.
7. Laboratory diagnosis of malaria.

SHORT ANSWERS — 5 x 2 = 10 Marks

8. Name any four bacteria causing Urinary Tract Infection
9. Name four disinfectants commonly used in hospital.
10. Hepatitis B vaccine.
11. Name four opportunistic fungi.
12. Name two spore bearing bacteria.

*****

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – May 2016

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 antiepileptics. Write the mechanism of action, adverse effects and therapeutic uses of phenytoin sodium.
2. Enumerate the glucocorticiods. Write the pharmacological actions, and their side effects.
3. Classify non steroidal anti inflammatory drugs. Write mechanism of action and adverse effects of aspirin.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. Thiazides
5. Oral anticoagulants
6. Drug tolerance
7. Loop diuretics
8. Methyldopa
9. Write short note on antidepressants
10. Monoamine oxidase inhibitors
11. Ketamine
12. Insulin preparations
13. Write the adverse effects and uses of Digoxin

SHORT ANSWERS 10 x 2 = 20 Marks

14. Prodrug
15. Name two mucolytics
16. Halothane
17. Mention four drugs used in bronchial asthma
18. Name four uses of gentamicin
19. Heparin
20. Drug synergism
21. Xylocaine
22. Mention four uses of vitamin D
23. Name two drug used in IV anesthetics.

*****

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – May 2016

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. Describe the Principles of Manual Muscle Testing (MMT). Explain the grading of quadriceps from grade 2 onwards.
2. Explain the tests of co-ordination. Describe the frenkles exercise program for lower limbs in co-ordination.
3. List the types of posture. Explain the principles of postural re-education.

SHORT ESSAYS (Answer any Twelve) 12 x 5 = 60 Marks

4. Give 5 advantages of group exercise.
5. Describe the testing and stretching for quadriceps tigtness.
6. Explain the procedure of measurement for an axillary crutch.
7. Enlist the principles of passive movement.
8. Give 5 uses of accessory movement mobilization.
9. Explain the method of doing Effleurage.
10. Describe any two techniques of Pranayama.
11. Give the uses of kneading in massage.
12. Explain with a diagram vertical suspension for knee joint.
13. Describe the physiological effects of massage.
14. Give the principles of hydrotherapy.
15. Give the types of goniometers used.
16. Explain measurement method for true length.
17. Describe the elements in an asana.

SHORT ANSWERS 10 x 2 = 20 Marks

18. Define speed and endurance.
19. Give 2 uses of measuring joint ROM.
20. Give 2 advantages of MMT.
21. What is closed chain exercise?
22. Define endurance.
23. Describe hold relax technique.
24. 2 advantages of PNF exercise.
25. Give 2 uses of practicing yoga.
26. 2 uses of open chain exercise.
27. Why do we measure muscle girth.

*****

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – MAY 2016

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. Explain the production of short wave diathermy with circuit diagram and the therapeutic effects of SWD.
2. Describe in detail the interpretation of electro diagnostic tests in nerve lesions with specific emphasis on SD curve.
3. Explain the technique of stimulating for the extensors of the wrist.

SHORT ESSAYS (Answer any Twelve) 12 x 5 = 60 Marks

4. Diadynamic currents and its uses.
5. Rebox currents and its uses.
6. Use of UVR in vitiligo management.
7. Explain Faradism-under elevation
8. Hydro collator packs.
9. Neuromuscular electrical stimulation (NMES)
10. Benefits of cold application in sports injuries.
11. Methods of wax application to stiff joints.
12. Biomechanical and biophysical effects of Laser therapy.
13. Types of Infra red irradiation and its physiological effects.
14. Russian currents.
15. Application of Interferential therapy in pelvic floor re- education.
16. Write a note on Anodal Galvanism.
17. Application of Biofeedback in stress management.

SHORT ANSWERS 10 x 2 = 20 Marks

18. Acoustic streaming.
19. Masking.
20. Tridymite formation.
21. Bell's phenomenon.
22. Burst TENS.
23. Russian currents.
24. Luminous generators.
25. Dipole rotation.
26. Beat frequency in IFT
27. Pascal's law.

*****

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - May 2016

Time: Three Hours | 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. Explain measurement scales. Add a note on sources of errors in measurement.
2. Define sampling. Explain need and criteria for a good sampling.
3. Define research. Explain different types of research.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. What are the characteristic of statistics?
5. What are measures of dispersion?
6. Define hypotheses. Explain briefly the basic concept concerning testing of hypotheses.
7. Objectives of research
8. What is the use of computer in research?
9. Types of diagram and graphs
10. Analysis of variance and covariance (ANOVA & ANACOVA)
11. Explain measures of central tendency with examples
12. Null and alternative hypothesis
13. Describe briefly about difference between questionnaire and schedules.

SHORT ANSWERS 10 x 2 = 20 Marks

14. Prospective study
15. Define population
16. Median
17. Ordinal scale
18. Qualitative and quantitative data
19. Skewness
20. Coding in processing of data
21. Mean deviation
22. Define biostatistics
23. Normal probability curve

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – SEP-2016

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 the drugs used in Cardiac Arrythmias. Add a note on Lignocaine.
2. Classify Anti Cholinergic Drugs. Mention the uses and adverse effects of Atropine.
3. Classify steroids. Write about their pharmacological actions and therapeutic uses.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. Drugs interactions with Non Steroidal Anti Inflammatory Drug's.
5. Sodium Valproate.
6. Proton Pump Inhibitors.
7. Gold preparation used in rheumatoid arthritis.
8. Lubricant purgatives.
9. Insulin action and uses.
10. Write about Drug's used in Dementia.
11. Atypical anti depressant drugs.
12. Pharmacokinetic and Pharmacodynamic changes in Geriatric Patients.
13. Pioglitazone.

SHORT ANSWERS 10 x 2 = 20 Marks

14. Write the disadvantages of oral route of drug administration.
15. Mention drugs used in anaphylactic shock.
16. Mention Mucolytic agents.
17. Uses of Botulinum Toxin (BOTOX).
18. Uses of Barbiturates.
19. Mechanism of Action of clonidine.
20. Uses of Pentoxyphyline.
21. Drug's used in Myasthenia Gravis.
22. Tachyphylaxis.
23. Why ACE-Inhibitors are Cardio protective?

*****

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – SEP 2016

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 pain. Explain the modulation of pain through pain gate control theory. Add a note modulation of pain by TENS.
2. Define Ultra Sound. Explain the principle and production of Ultra Sound.
3. Write in detailed about the physiological effects, indications and contraindications for interrupted direct current.

SHORT ESSAYS (Answer any Twelve) 12 x 5 = 60 Marks

4. Explain indications and contraindications of MWD
5. Give the technique of iontophorosis for hyperhydrosis of hand
6. Explain the procedure for training intrinsic foot muscles with faradic foot bath
7. Describe the instrumentation for neuromuscular electrical stimulation.
8. Explain production of SWD
9. Explain indications and contraindications of contrast bath.
10. Define biofeedback. Explain the uses of biofeedback in physiotherapy.
11. Define IFT. Explain uses of IFT in management of stress incontinence.
12. Describe construction and types of transformer
13. Physiological and therapeutic effects of paraffin wax therapy
14. Explain propagation of nerve impulses during electrical stimulation
15. Explain physiological effects of diadynamic currents
16. Explain indications and contraindications of cryotherapy
17. Write a note on microcurrents.

SHORT ANSWERS 10 x 2 = 20 Marks

18. Define F-wave
19. Uses of fuse
20. Define burst TENS
21. What is PUVA?
22. Classify pain fibers
23. Mention the properties of LASER
24. What is near and far field?
25. What is cross fire techniques?
26. Define sinusoidal currents
27. Define electromagnetic spectrum

*****

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - SEP - 2016

Time: Three Hours | 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. Define sampling. Explain different types of sample design.
2. Explain measures of central tendency.
3. Define research design. Explain different research designs.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. What are the methods of data collection?
5. Null and alternative hypotheses
6. Uses of t-test
7. Explain primary data collection
8. Define variable. Explain briefly its type
9. Scales of measurement
10. Analysis of variance. (ANOVA)
11. Features of a good research design
12. Characteristics of statistics
13. Difference between research method and methodology

SHORT ANSWERS 10 x 2 = 20 Marks

14. Define mean
15. Nominal scale
16. Retrospective study
17. Binomial distribution
18. Cluster sampling
19. Dependent and independent variable
20. Cumulative frequency curve
21. Editing in processing of data
22. Chi-square test
23. Skewness

*****