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2058_2011_1_S183

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.Sc. (Physiotherapy) Degree Examination – Feb/March 2011

Time: Three Hours **Max. Marks: 70 Marks**

PHARMACOLOGY

(Old Scheme)

Q.P. CODE: 2058

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 various factors that modify effect of drugs.
2. Classify antianginal drugs. Write the mechanism of action, uses and adverse effects of nitrates.
3. Classify analgesics. Write the mechanism of action, uses adverse effects and contraindications of morphie.

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

4. Neostigmine
5. Dopamine
6. Lithium
7. Sucralfate
8. Ketamine
9. Insulin preparations
10. Transdermal patches
11. L-dopa

SHORT ANSWERS **10 x 2 = 20 Marks**

12. Name four antipsychotics.
13. List two drugs used in obesity
14. List two drugs used in the treatment of bronchial asthma
15. Mention two drugs used in constipation.
16. Mention four drugs used in the treatment of peptic ulcer
17. Mention two drugs used in acute cardiac failure.
18. Mention two drugs used in glaucoma
19. Define Pharmacogenetics. Give two examples.
20. List four ant tubercular agents
21. List four antipsychotic agents

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2059_2011_1_S181

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.P.T. Degree Examination – Feb/March 2011

Time: Three Hours **Max. Marks: 100 Marks**

PATHOLOGY & MICROBIOLOGY (Old Scheme)

Q.P. CODE: 2059 & 2060

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

Use separate answer books for section A and section B

Q.P. Code: 2059 – Section 'A' – Pathology (50 Marks)

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

1. Define and classify Anaemia, write about Blood and Bone marrow findings in Iron Deficiency Anaemia
2. Define Oedema, Classify Oedema describe the pathogenesis of Cardiac Oedema.

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

3. Factors influencing repair.
4. Granuloma
5. Bronchiectasis
6. Osteomyelitis
7. Atheromatous plaque
8. Phagocytosis
9. Chemical carcinogens.

SHORT ANSWERS **5 x 2 = 10 Marks**

10. Atrophy
11. List the complication of peptic ulcer
12. Ghon's complex
13. Mention the stages of Lobar Pneumonia
14. List four congenital heart disease

Q.P. Code: 2060 – Section 'B' – Microbiology (50 Marks)

Use separate answer book

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

1. Define nosocomial infection. Discuss the common infections encountered in the hospital and add a note on the disease produced by staphylococcus.
2. Describe the cultural characteristics, pathogenicity and laboratory diagnosis of Typhoid fever.

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

3. Bacterial spores
4. Laboratory diagnosis of pulmonary tuberculosis
5. Autoclave
6. Cryptococcus neoformans
7. Prophylaxis of rabies
8. Hepatitis A virus
9. Coagulase test

CENTRAL LIBRARY

SHORT ANSWERS **5 x 2 = 10 Marks**

10. Routes of transmission of HIV
11. Oral polio vaccine
12. Name two Hepatitis viruses transmitted through oro-faecal route
13. Four bacteria causing urinary tract infections
14. Define hypersensitivity

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2158_2011_1_S101

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.P.T. Degree Examination – Feb/March 2011

Time: Three Hours **Max. Marks: 80 Marks**

PHARMACOLOGY
(RS & RS2)

Q.P. CODE: 2158

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. Enumerate opioids. Write the therapeutic uses of morphine. Add a note on the treatment of an opioid addict
2. Enumerate oral antidiabetics. Write the mode of action and adverse effects of any two of them. Mention two preparations of insulin
3. Enumerate the different routes of drug administration. Write briefly on a) Sublingual route b) Transdermal route

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

4. Salbutamol
5. Therapeutic uses of aspirin
6. Thiazide diuretics
7. Amoxicillin
8. d-Tubocuarine
9. Nifedipine
10. Ignocaine
11. Adverse effects of glucocorticoids
12. Drug dependence
13. Diazepam

SHORT ANSWERS **10 x 2 = 20 Marks**

14. Name two immunosuppressants
15. Antitubercular drugs are given in combination – give reason
16. Name four drugs used in peptic ulcer
17. Name four anticholinergic drugs
18. What is prodrug? Give two examples
19. Write two therapeutic uses of ethyl accohol
20. Name two drugs used as intravenous anaesthetics
21. Name four cephalosporins
22. Name two drugs used in myasthenia gravis
23. Mention four adverse effects of phenytoin

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2159_2011_I_S124

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.P.T Degree Examination – Feb/March 2011

Time: Three Hours **Max. Marks: 80 Marks**

PATHOLOGY & MICROBIOLOGY
(RS & RS2)

Q.P. CODE: 2159 & 2160

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

Use separate answer books for section A and section B

Q.P. Code: 2159 – Section 'A' Pathology (40 Marks)

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

1. Define Neoplasia, write differences between begin and malignant tumour and mention the various routes of spread of tumour
2. Define Peptic ulcer. Mention the sites; describe the pathogenesis and complications of peptic ulcer

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

3. Factors affecting wound healing
4. Gross and microscopy of Alcoholic Cirrhosis
5. Osteomyelitis
6. Define necrosis write about coagulative necrosis
7. Meningitis

SHORT ANSWERS **5 x 2 = 10 Marks**

8. Granuloma
9. List any four congenital heart diseases
10. Dystrophic calcification
11. List the signs of Acute inflammation
12. Volkman's Ischemic contracture

Q.P. Code: 2160 – Section 'B' Microbiology (40 Marks)

Use separate answer book

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

1. Define and classify sterilization. Write a note on autoclave
2. Enumerate bacteria causing meningitis and describe in detail diagnosis bacterial meningitis

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

3. Cryptococcus neoformans
4. Active immunity
5. Laboratory diagnosis of Typhoid fever
6. Coagulase test
7. Robert Koch



SHORT ANSWERS **5 x 2 = 10 Marks**

8. Oral polio vaccine
9. Name four sexually transmitted diseases
10. Enumerate two agents causing bacterial diarrhea
11. Mention two common chemical agents used for disinfection
12. Mention two anaerobic bacteria

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2161_2011_1_S181

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.P.T Degree Examination – Feb/March 2011

Time: Three Hours **Max. Marks: 100 Marks**

THERAPEUTICS (OS, RS & RS2)

Q.P. CODE: 2161

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 principles of Aerobic exercises, techniques and its effects
2. Write an essay on the physiological and therapeutic effects of massage
3. Describe principles, indications and techniques of relaxation

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

4. Explain in details normal gait analysis
5. Explain in detail the merits and demerits of suspension therapy
6. What is joint movements? Write in details principles of mobilization
7. What are physiological effects of breathing exercise
8. Explain the different types of walking aids
9. Write briefly about mat exercises
10. Explain about therapeutic Gymnasium
11. Write in brief about merits and demerits of hydrotherapy
12. Explain principles of co-ordination exercises
13. What are the exercises used for hand functions
14. Write the differences between Coughing and Huffing
15. Write in brief basic neurophysiologic principles of PNF
16. Write in brief about limb girth and limb length measurement
17. Define tightness, giving its sign and symptoms. Discuss stretching and home exercises for quadriceps tightness

SHORT ANSWERS **10 x 2 = 20 Marks**

18. Define three point gait
19. Define flexibility
20. Define ideal standing – muscle work
21. What is active and inactive posture
22. Give the importance of warm-up period in aerobic exercise
23. What are the two therapeutic effects of exercise in water
24. Define strength and endurance
25. Define jacobson's technique
26. What is static power test
27. Give two derived position and use

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2162 2011_1_S186

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.P.T Degree Examination – Feb/March 2011

Time: Three Hours **Max. Marks: 100 Marks**

ELECTROTHERAPY (OS, RS & RS2)

Q.P. CODE: 2162

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 SWD, explain the methods of application, Physiological & Therapeutic effect of SWD.
2. Describe SD Curve in detail, add a note on Rheobase & Chronaxie.
3. Explain production and modes of interferential current add a note on physiological and therapeutic uses of the same

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

4. Faradic re education
5. Effects of Cryotherapy
6. LASER types and uses
7. Properties of electro magnetic energy
8. Therapeutic effect of IRR
9. Write in detail about types and electrode placement techniques in TENS
10. Didynamic currents
11. Russian currents
12. Explain the parameters used in electrical stimulation following nerve injury.
13. Describe production of luminous and non luminous generators in infrared radiations
14. Contra indication of ultra sound
15. Indications and contra indications for paraffin wax
16. Contrast bath
17. Electrode tissue interface.

SHORT ANSWERS **10 x 2 = 20 Marks**

18. Reverse plezo electric effect
19. Eddy current
20. Cosine law
21. Define biofeed back
22. What is cavitation?
23. Four dangers of micro wave diathermy
24. Two uses of NCV studies
25. Parameters of High voltage pulsed galvanic current
26. Accomodation
27. Anodal galvanism



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Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.P.T. Degree Examination - Feb/March 2011

Time: Three Hours **Max. Marks: 80 Marks**

PATHOLOGY & MICROBIOLOGY

(RS - 3 & RS - 4)

Q.P. CODE: 2708 & 2709

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

Use separate answer books for section A and section B

Q.P. Code: 2708 – Section 'A' - Pathology (40 Marks)

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

1. Define necrosis. Mention the types and discuss briefly about dry gangrene.
2. Etiopathogenesis and pathology of Peptic ulcer.

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

3. Metastasis.
4. Primary wound healing.
5. Delayed hypersensitivity reaction.
6. Osteoclastoma.
7. Pyogenic meningitis.

SHORT ANSWERS **5 x 2 = 10 Marks**

8. Classify Leprosy.
9. Nutmeg liver.
10. Hyperplasia.
11. Clinical features of rickets.
12. Mention the complications of Diabetes mellitus.

Q.P. Code: 2709 – Section 'B' - Microbiology (40 Marks)

Use separate answer book

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

1. Define infection. Describe the different sources of infection and routes of transmission of infection with examples.
2. Classify streptococci. Describe the morphology and the diseases caused by streptococcus pyogenes.

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

3. Bacterial capsule.
4. Immunoglobulin G (Ig G).
5. Widal test.
6. Inclusion bodies.
7. Bacterial Meningitis.

SHORT ANSWERS **5 x 2 = 10 Marks**

8. Mention four routes of transmission of hepatitis B infection.
9. Mycotoxins.
10. DPT vaccine.
11. Name two antiviral agents.
12. Mention four causes of pyrexia of unknown origin.

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2710_2011_1_S162

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.P.T. Degree Examination – Feb/March 2011

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. Discuss the various routes of drug administration with example.
2. Classify Non Steroidal Anti Inflammatory Drugs. Write briefly about Piroxicam and Paracetamol.
3. Classify Nitrates. Write their mechanism of action and uses of them.

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

4. Proton Pump Inhibitors.
5. Anti Histaminics.
6. Uses of Glucocorticoids.
7. Write about drug's used in Parkinson's disease.
8. Colchicines.
9. antacids.
10. Lithium.
11. Statins used as Hypolipedemic drugs.
12. Methyldopa.
13. Monoamine Oxidase Inhibitors.

SHORT ANSWERS **10 x 2 = 20 Marks**

14. Compare central and peripheral acting skeletal muscle relaxants.
15. Why Aspirin is used as Prophylactic in MI?
16. What is pro drug give example?
17. Four adverse effects of Benzodiazepines.
18. Why Carbidopa is co-administered with L-Dopa.
19. Mention the therapeutic uses of Neostigmine.
20. Mention four advantages of Atypical antipsychotic drugs.
21. What is pressor agents? Give example.
22. Write a note on sulfonyl urea drugs.
23. What are prokinetic drugs? Give two examples.

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+5 70

2711_2011_1_S161

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.P.T. Degree Examination - Feb/March 2011

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 effects of aerobic exercises with its principles.
2. Define Goniometry. Explain Types, Principles, Limitation and uses of goniometry.
3. Describe co-ordination. Exercises.

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

4. What is Petrissage? Give its uses.
5. Principles of PNF.
6. Describe the technique of mobility exercise.
7. What are the principles of Hydrotherapy?
8. Group exercises.
9. Test for sensation.
10. Advantages of mat activities.
11. Ballistic stretching.
12. What are the types and devices of suspension therapy?
13. Principles of peripheral joint mobilization.
14. Classification of active movements.
15. Relaxation Technique.
16. Anthropometric Measurements.
17. Define fundamental position. Explain any one in detail.

SHORT ANSWERS **10 x 2 = 20 Marks**

18. Dynamic power test.
19. Macqueen training.
20. Two Principles of passive movement.
21. Precaution for stretching.
22. Grades of joint Mobilization.
23. Causes of impaired balance.
24. Disadvantages of group exercise.
25. Elements of Asanas.
26. Define 10 RM.
27. Define Isokinetic exercise.

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Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.P.T. Degree Examination – Feb/March 2011

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 ultrasound, its dangers and contraindications
2. Describe different methods of UVR application, its therapeutic effects and indications
3. Describe in detail the interpretation of electro diagnostic tests in nerve lesions with specific emphasis on SD curve

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

4. Explain the indications for Microwave diathermy
5. Describe the method of application and use of TENS following post operative surgeries
6. Explain the possible reasons how use of Laser therapy is beneficial in wound healing
7. Write in detail about the contraindications for diadynamic currents
8. Explain the application of Iontophoresis for pain management
9. Describe in detail the indications for HVPGS
10. Explain the safety guidelines for treatment in a hydrotherapy pool
11. Write about the indications and application of contrast bath in detail
12. Define Micro currents and also explain its benefits elaborately
13. Explain the physiology of nerve impulse propagation in different nerve fibres
14. Describe the method of application of IFT in pelvic floor muscle weakness
15. What are the types of Transformers and explain its uses in electrotherapy
16. Describe the instrumentation in neuromuscular electrical stimulation
17. What are Russian currents and also explain its uses in physiotherapy application

SHORT ANSWERS **10 x 2 = 20 Marks**

18. Name the different types of laser and its purpose
19. Types of cavitation
20. Pulsed electromagnetic energy – Any 2 uses
21. Russian currents – any two benefits
22. Any 4 uses of cryotherapy
23. List the uses of acupuncture TENS
24. Mention the properties of Laser
25. Dosage for psoriasis with UVR
26. Any 2 contraindications for wax bath
27. What is Duty cycle?

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2713_2011_1_S152

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.P.T. Degree Examination – Feb/March 2011

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**

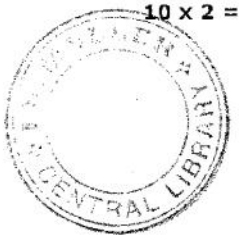
1. Describe various scales of measurement and suggest one statistical test for each.
2. Distinguish between simple random sampling and systematic sampling methods with respect their procedure, advantages and limitations.
3. State various steps involved in designing a survey.

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

4. Objective of Research Problem.
5. Difference between questionnaire and schedule.
6. Sources of error in measurement.
7. Properties of Normal distribution.
8. Measures of Central tendency.
9. Analysis of Variance (ANOVA).
10. Procedures for Hypothesis testing.
11. Criteria for Good samples.
12. Variables and their types.
13. Uses of t-test.

SHORT ANSWERS **10 x 2 = 20 Marks**

14. Sample.
15. Binomial distribution.
16. Median.
17. α-error and B-error.
18. Sampling design errors.
19. Frequency polygon.
20. Skewness and Kurtosis.
21. Retrospective studies.
22. Bar diagram.
23. Define Biostatistics.



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2058_2011_1_S262

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Physiotherapy) Degree Examination – Aug / Sep 2011

Time: Three Hours **Max. Marks: 70 Marks**

PHARMACOLOGY

(Old Scheme)

Q.P. CODE: 2058

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 analgesic drugs. Discuss the pharmacology actions, therapeutic uses & contraindications of morphine
2. Discuss the pharmacology factors influencing the calcium metabolism and their therapeutic application. Out line the management of osteoporosis
3. Classify the Immunosuppressant drugs. Discuss the mechanism of action, adverse effects and therapeutic uses of Methortrexate.

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

4. Drug allergy
5. Methods to prolong the action of drugs
6. Potassium sparing diuretics
7. Carbamazepine
8. Angiotensin converting Enzyme inhabitors
9. Salbutamol
10. Centrally acting skeletal muscle relaxants
11. Drugs used in leprosy
12. Glucocorticoids are contraindicated in patients with peptic ulcer? Why?

SHORT ANSWERS **10 x 2 = 20 Marks**

13. Name two fluroquinolones and mention two important adverse effects
14. Adverse effects of Metformin
15. Mention the drugs used in anaphtlactic shock
16. Write two use & two adverse effect of gentamicin
17. Name four drugs used
18. Atropine poisoning
19. Mention the two uses and two adverse effects if lithium
20. Advantages and disadvantages of nitrous oxide
21. Mention the drugs used in the treatment of gout

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2059_2011_1_S102

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – Aug / Sep 2011

Time: Three Hours **Max. Marks: 100 Marks**

PATHOLOGY & MICROBIOLOGY (Old Scheme)

Q.P. CODE: 2059 & 2060

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

Use separate answer books for section A and section B

Q.P. Code: 2059 – Section 'A' – Pathology (50 Marks)

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

1. Describe, define and classify gout. Write a note on its pathogenesis
2. Describe wound healing

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

3. Causes of haemorrhagic disorders
4. Bronchitis
5. Pneumoconiosis
6. Septic arthritis
7. Discuss etiology of diabetes mellitus
8. Scleroderma
9. Chemotaxis

SHORT ANSWERS **5 x 2 = 10 Marks**

10. Giant cell
11. Causes of meningitis
12. Caseation necrosis
13. Pathogenesis of poliomyelitis
14. Osteomalacia

Q.P. Code: 2060 – Section 'B' – Microbiology (50 Marks)

Use separate answer book

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

1. Define antiseptics and disinfectants. Describe the different agents used for disinfection
2. Enumerate the organisms causing enteric infections. Give a detailed account of enteric fever

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

3. Autoclave
4. Universal precautions against HIV infection
5. Candidiasis
6. Morphological classification of bacteria
7. Syphilis
8. Mycobacterium tuberculosis
9. Escherichia coli

SHORT ANSWERS **5 x 2 = 10 Marks**

10. Flagella
11. Phagocytosis
12. Candida albicans
13. Tyndallization
14. Passive immunity

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75 4

2158_2011_1_S133

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – Aug / Sep 2011

Time: Three Hours **Max. Marks: 80 Marks**

PHARMACOLOGY
(RS & RS2)

Q.P. CODE: 2158

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. Enumerate aminoglycosides. Write their common properties
2. Enumerate beta blockers. Write the therapeutic uses and adverse effects of propranolol
3. Classify non steroidal anti-inflammatory drugs. Write the pharmacology of aspirin

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

4. Sulfonylureas
5. Pethidine
6. Amoxicillin
7. Rifampicin
8. Cotrimoxazole
9. Enumerate the drugs used in bronchial asthma. Write the mode of action of any one of them
10. What is drug tolerance? Explain with examples
11. Therapeutic uses of prednisolone
12. Lignocaine
13. Sublingung route of administration

SHORT ANSWERS **10 x 2 = 20 Marks**

14. Name four drugs used in leprosy
15. Name four anticancer drugs
16. Antitubercular drugs are used in combination – give reason
17. Mention four uses of atropine
18. Name four drugs used in hypertension
19. Name two mucolytics. Write their mode of action
20. Mention four adverse effects of phyenytoin
21. Mention four uses of frusemide
22. Name four drugs used in parkinsonism
23. Name four general anaesthetics

CENTRAL LIBRARY

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2159_2011_1_S42

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T Degree Examination – Aug / Sep 2011

Time: Three Hours **Max. Marks: 80 Marks**

PATHOLOGY & MICROBIOLOGY
(RS & RS2)

Q.P. CODE: 2159 & 2160

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

Use separate answer books for section A and section B

Q.P. Code: 2159 – Section 'A' Pathology (40 Marks)

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

1. Define and classify Granulomas. Describe the evolution and fate of a Tubercle
2. Define necrosis. Describe the causes and morphology of different types of necrosis with examples

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

3. Complications of wound healing
4. Atrophy
5. Cellular ageing
6. Alcoholic cirrhosis
7. Cerebral haemorrhage

SHORT ANSWERS **5 x 2 = 10 Marks**

8. Aetiology of carcinoma lung
9. Name ulcerative lesions of intestine
10. Fallot's tetralogy
11. Classification of diabetes mellitus
12. Gouty Tophi

Q.P. Code: 2160 – Section 'B' Microbiology (40 Marks)

Use separate answer book

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

1. Mention the various microscopes used in microbiology. Describe principle and function of light microscope
2. Name the organisms causing Urinary Tract Infections (UTI). Briefly discuss the laboratory diagnosis of UTI

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

3. Cryptococcus
4. Mycobacterium tuberculosis
5. Salmonella typhi
6. Gram staining
7. Robert Koch

SHORT ANSWERS **5 x 2 = 10 Marks**

8. Mention 4 gram negative bacilli
9. Hot air oven
10. Post operative wound infection
11. Spore
12. Natural immunity

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2161_2011_1_S182

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T Degree Examination – Aug / Sep 2011

Time: Three Hours **Max. Marks: 100 Marks**

THERAPEUTICS (0S, RS & RS2)

Q.P. CODE: 2161

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 proprioceptive neuromuscular facilitation in detail
2. Explain the principles of hydrotherapy and its method of application in exercise therapy
3. Describe in co-ordination and write in detail about Frenkels exercises

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

4. Write in brief on the physiological and therapeutic effects of massage
5. Explain relaxation and write in brief about Mitchel's relaxation
6. Classify stretching. Explain ballistic strectching in detail
7. Explain the different types of walking aids
8. Write – briefly about Mat activities
9. Write about postural mechanism and patient education to maintain good posture
10. Explain in brief about principles and techniques of Aerobic exercise
11. What are the merits and demerits of Bronchial hygiene
12. Outline an exercise porgramme to strengthen hamstring from grade 1 to grade 5
13. Explain the principles and concepts of specificity exercise
14. What are the causes for tightness? Explain the prevention exercises for hamstring tightness
15. Explain coughing mechanism, types and factors that decreases the effectiveness of cough
16. Describe the techniques of mobility exercise
17. What is petrissage? Give its uses

SHORT ANSWERS **10 x 2 = 20 Marks**

18. Define soft tissue tightness
19. Define equilibrium
20. What is strength
21. Name some of the hand exercises
22. List out some of aerobic exercises for children
23. Define Isometrics
24. Give two derived position and use
25. Define Oxford regimens
26. What is tapotement
27. Define flexibility



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2162_2011_1_S182

Rajiv Gandhi University of Health Sciences, Karnataka

II year B.P.T Degree Examination – Aug / Sep 2011

Time: Three Hours **Max. Marks: 100 Marks**

ELECTROTHERAPY (OS, RS & RS2)

Q.P. CODE: 2162

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 Faradic currents, explain the production and physiological effects of Faradic currents
2. Explain the production and therapeutic effects of Infra-red rays
3. Enumerate the methods of applications of Short-wave diathermy

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

4. Describe in brief about Cathodal Galvanism & its effects
5. Explain the indications & contraindications of Ionotophoresis
6. Give the characteristics of Strength-Duration curve
7. Enumerate the types of TENS (Transcutaneous Electrical Nerve Stimulation) in brief
8. Explain the physiological effects of Interferential therapy
9. What are the safety precautions to be followed in application of electric currents
10. Discuss the method of application of UVR in brief
11. Explain the attenuation of Ultrasound in brief
12. Enlist the contraindications to Wax therapy
13. Describe about Fluidotherapy
14. Give the physiological effects of Pulsed Electromagnetic Radiations
15. Describe the method of application of Cryotherapy
16. Explain Faradic Galvanic test
17. Give in brief the therapeutic effects of Galvanic Stimulation

SHORT ANSWERS **10 x 2 = 20 Marks**

18. Mention four uses of Biofeedback
19. What is Nerve Conduction Velocity Test?
20. Define High Voltage Pulsed Currents and give two effects
21. What is Resting Membrane Potential and Action potential
22. Define Anelectrotonus
23. What are the Ions used for treating hyperhydrosis?
24. What is Chronaxie?
25. Define Accomodation
26. Give two uses of Micro-Wave Diathermy
27. What is Inverse Square Law and its application in electrotherapy?

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2708_2011_1_S183

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - Aug / Sep 2011

Time: Three Hours **Max. Marks: 80 Marks**

PATHOLOGY & MICROBIOLOGY

(RS - 3 & RS - 4)

Q.P. CODE: 2708 & 2709

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

Use separate answer books for section A and section B

Q.P. Code: 2708 – Section 'A' - Pathology (40 Marks)

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

1. Write vascular and cellular events in acute inflammation
2. Rheumatic fever

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

3. Phagocytosis
4. Renal edema
5. Bone fracture healing
6. Granuloma
7. Rickets

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SHORT ANSWERS **5 x 2 = 10 Marks**

8. Hyperplasia
9. Investigations for iron deficiency anaemia
10. Fallots tetralogy
11. What is pneumoconiosis?
12. What is protein energy malnutrition?

Q.P. Code: 2709 – Section 'B' - Microbiology (40 Marks)

Use separate answer book

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

1. Define and classify immunity. Write in detail about innate immunity
2. Define sterilization. List the various physical methods of sterilization. Explain use of autoclave in detail

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

3. Prophylaxis of viral diseases
4. Bacterial capsule, chemical composition and functions
5. Vibrio Cholerae. Morphology and lab diagnosis
6. Importance of normal microflora of the human body
7. Malaria

SHORT ANSWERS **5 x 2 = 10 Marks**

8. Name any two urinary tract infection causing bacteria
9. Name any four biological vectors
10. Name four commonly used disinfectants in hospitals
11. What are cocci and bacilli? Give examples
12. Mention any two opportunistic fungal infections

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10

80

2710_2011_1_S182

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - Aug / Sep 2011

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 analgesics. Write the actions, uses and adverse & contraindications effects of morphine
2. Enumerate factors modifying drug effect. Explain any 2 with suitable examples
3. Enumerate drugs for congestive cardiac failure. Describe the actions, uses and adverse effects of cardiac glycoside

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

4. Merits and demerits of sublingual route
5. Drugs for glaucoma
6. Loop diuretics
7. Selective β_2 agonists
8. Prokinetic agents
9. IInd generation sulphonylureas
10. Neuromuscular blockers
11. Co Carbidopa
12. Calcium channel blockers
13. Drug dependence with examples

SHORT ANSWERS **10 x 2 = 20 Marks**

14. Why atropine is given before Neostigmine in myasthenia gravis?
15. Why Propranolol is contraindicated in bronchial asthma patient?
16. Mention two clinical uses of diazepam
17. Mention the antidote for morphine and Paracetamol toxicity
18. Glucocorticoids are beneficial in bronchial asthma – How?
19. Mention one drug each for acute and chronic Gout
20. Mention two drugs for depression
21. Name two clinical uses of aspirin
22. Rationale of using mucolytics in productive cough
23. Mention two long term adverse effects of corticosteroids

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2711_2011_1_S155

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination - Aug / Sep 2011

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 postural mechanism and its principles of reduction.
2. Explain principles and progression in co-ordination exercises.
3. Explain types and techniques of suspension therapy for lower limb.

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

4. Explain principles and techniques of free exercises.
5. Explain group exercises.
6. Briefly describe the types and uses of massage techniques.
7. Write methods and techniques of Pranayamas.
8. Write about electrical tests for neuro muscular efficiency.
9. Write the principles and aims of manual muscle testing.
10. Describe functional re-education for upper limb activities.
11. Write about evaluation and activities for treating impaired balance.
12. Explain briefly about dynamic exercises.
13. Explain classifications of passive movements.
14. Write the techniques for measurement of axillary crutch.
15. Explain different methods of gait training.
16. Explain techniques of mobilization for lower limb.
17. Write about the types and uses of mobility aids.

SHORT ANSWERS **10 x 2 = 20 Marks**

18. Diagonal patterns of P.N.F techniques for upper limb.
19. Define tightness and contracture.
20. Write two uses of assisted exercises.
21. What is active and inactive posture?
22. Write two uses of aerobic exercises.
23. Two uses of stretching.
24. What is apparent length measurement in lower limb?
25. Parts of goniometer.
26. Give two uses of parallel bar.
27. Merits of hydrotherapy.

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82 20

2712_2011_1_S183

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – Aug / Sep 2011

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 technique of stimulating the lower leg muscles in detail
2. Describe the method of application of IFT in Lower back region. Add the contraindications for the same
3. Write in detail about the application of UVR in the treatment of plantar ulcers and also about the dosage and progression

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

4. Explain the method of ultrasound application in pressure sores
5. Describe the technique of electrical stimulation in the management of Bell's palsy
6. Explain the mechanism by which the application of cryotherapy reduces spasticity
7. Explain the benefits of SWD in the treatment of osteoarthritis of knee
8. Method of application of faradism for lower limb odema control
9. Rationale the reasons for diadynamic currents to be effective in pain management
10. Describe the procedure for pressure sores management of the sacral area with UVR
11. Explain the role ultrasound therapy in sports injuries
12. Describe the uses of sinusoidal currents in denervated muscles
13. Write in detail about the precautions during Laser application in musculoskeletal conditions
14. Method of hydro collator packs application in periarthritis and its associated benefits
15. What are the possible effects for using micro current's in acute conditions?
16. Explain the physiological benefits of treating trigger points with TENS
17. Describe the indications and contraindications for pulsed SWD

SHORT ANSWERS **10 x 2 = 20 Marks**

18. Dosage for chronic conditions with ultrasound therapy
19. Uses of conventional TENS
20. Significance of Sweep mode in IFT
21. What are Selective pulses?
22. Cryoglobinemia
23. Leed's regimen
24. Define labile technique
25. Define Catelectrotonus
26. Mention the ion used in hyperhidrosis condition
27. What is Pre-modulated bipolar method of IFT?

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2713_2011_1_S156

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.P.T. Degree Examination – Aug / Sep 2011

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. What are measures of central tendency? Explain each of them with an example. Why are they called measures of central tendency?
2. Discuss briefly the steps involved in the research process.
3. What is meant by sampling? What are the different methods of sampling? Explain two methods of sampling.

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

4. Describe the various scales of measurement with an example to each.
5. What is hypothesis? How is hypothesis formulated?
6. What are the advantages of probability sampling over non-probability sampling?
7. What is standard normal distribution? Mention its important properties.
8. What are the underlying assumptions of one-way analysis of variance? Explain briefly under what circumstances ANOVA is applied in data analysis.
9. Mention any three differences between questionnaire and schedule.
10. Describe which type of graphical representation is most suitable for qualitative data.
11. What are the basic principles of a research design?
12. What are the criteria for a good sample? What do you mean by sampling variation?
13. Describe briefly the different methods of data collection.

SHORT ANSWERS **10 x 2 = 20 Marks**

14. Explain the role of aims and objectives in research.
15. Define the following terms with a suitable example (a) Random Experiment (b) Exhaustive outcome.
16. Distinguish between primary and secondary data.
17. What are the criteria for the application of chi-square test?
18. What is Binomial distribution?
19. Define one-tailed and two-tailed tests.
20. Define Population and sample.
21. What are the measures of asymmetry?
22. How do you construct a smooth frequency curve?
23. What are sampling design errors?



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