II Year B.P.T. Degree Examination - April 2014

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)

- $1 \times 10 = 10$ Marks
- 1. Define thrombus, discuss aetiopathogenesis and fate of thrombus.
- 2. Define anaemia, classify anaemmias and write laboratory diagnosis of Iron deficiency anaemia.

SHORT ESSAYS (Answer any Four)

- 3. Pathological calcification.
- 4. Classification of Leprosy.
- 5. Infarction.
- 6. Gall stones.
- 7. Myxedema.

SHORT ANSWERS

- 8. Eosinophilia.
- 9. Types of cirrhosis.
- 10. Mention four complications of Diabetes Mellitus.
- 11. Mention types of Hypersensitivity reactions.
- 12. Atrophy.

4 x 5 = 20 Marks

5 x 2 = 10 Marks

II Year B.P.T. Degree Examination - April 2014

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. Define and classify hypersensitivity reactions. Discuss type-1 hypersensitivity.
- 2. Define Pyrexia of unknown origin. Enumerate the organisms causing it. Discuss the laboratory diagnosis of typhoid fever.

SHORT ESSAYS (Answer any Four)

- 3. Prophylaxis against tetanus.
- 4. ELISA.
- 5. Antimicrobial susceptibility testing.
- 6. Gonorrhoea.
- 7. Cryptococcus neoformans.

SHORT ANSWERS

- 8. Define adjuvant and give two examples.
- 9. Name four bacteria causing urinary tract infections.
- 10. Interferons.
- 11. Quellung reaction.
- 12. Mention two differences between endotoxin and exotoxin.

1 x 10 = 10 Marks

 $4 \times 5 = 20$ Marks

5 x 2 = 10 Marks

II Year B.P.T. Degree Examination – April 2014

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)

- Classify Non-Steroidal anti-inflammatory drugs. Write the mechanism of action, adverse 1. effects and therapeutic uses of aspirin.
- 2. Classify beta-blockers. Write the therapeutic uses and adverse of beta-blockers.
- 3. Classify anticoagulants. Write the mechanism of action, therapeutic uses and adverse effects of warfarin.

SHORT ESSAYS (Answer any Eight)

- Transdermal patches 4.
- 5. Osmotic diuretics
- 6. Nifedipine
- 7. Tricyclic antidepressants
- 8. Carbamazepine
- 9. Metformin
- 10. Drug induced parkinsonism.
- 11. Dopamine
- 12. Statins
- 13. Antidote for Organophosphorus poisoning - Explain its mechanism.

SHORT ANSWERS

- 14. What is enzyme induction? Enlist two enzyme inducers.
- 15. Mention two drugs with high plasma protein binding capacity.
- 16. Mention the antidote for heparin toxicity with its rationale.
- 17. Mention two drugs used in the treatment of Systemic Lupus Erythematosus.
- Mention four drugs used in H. Pylori induced peptic ulcer. 18.
- 19. Mention two uses and two adverse effects of digoxin.
- 20. Mention two drugs used in acute bronchial asthma.
- 21. Mention four uses of corticosteroids.
- 22. What is teratogenicity? Write two examples.
- 23. What is malignant hyperthermia? Mention one drug which causes it.

$10 \times 2 = 20$ Marks

$2 \times 10 = 20$ Marks

8 x 5 = 40 Marks

II Year B.P.T. Degree Examination – April 2014

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 Proprioceptive Neuromuscular facilitation.
- 2. Describe the physiology of balance and the components of balance.
- 3. Explain relaxation and write about Jacobson's relaxation.

SHORT ESSAYS (Answer any Twelve)

- 4. Manual muscle testing for deltoid muscle
- 5. Tests for sensation
- 6. Classification of passive movements
- 7. Write about open chain and closed chain exercise.
- 8. Technique of suspension therapy for knee flexion and extension
- 9. Use of Frenkles exercise and its progression
- 10. Merits and demerits of Hydrotherapy
- 11. Write about Mat exercises.
- 12. Indications and contraindications of joint mobilization
- 13. Principles and technique of Free exercises
- 14. Evaluation of aerobic capacity
- 15. Technique of Goniometric measurement for Ankle Joint
- 16. Write in brief about concentric and eccentric exercise with examples.
- 17. Write in brief about the angle of pelvic inclination.

SHORT ANSWERS

- 18. Speed Test
- 19. Brief Resisted Isometric Exercise
- 20. Petrissage
- 21. Gutter Crutch
- 22. Define equilibrium.
- 23. SAID Principle
- 24. Disadvantages of group therapy
- 25. Apparent Limb length
- 26 Active and Inactive posture
- 27 Two tests for inco-ordination.

12 x 5 = 60 Marks

10 x 2 = 20 Marks

II Year B.P.T. Degree Examination – April-2014

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)

- 1. Classify Infra Red generators, Explain the production and effects of various types.
- 2. Describe the production of shortwave diathermy and explain its various effects.
- 3. Define faradic current. Explain the physiological and therapeutic effect faradic current.

SHORT ESSAYS (Answer any Twelve)

- 4. Nerve conduction velocity.
- 5. Therapeutic uses of whirl pool bath.
- 6. Explain various method of application of Cryotherapy.
- 7. Indication and contraindication for microwave diathermy.
- 8. Various parameter of dosage in ultrasound.
- 9. Physiological and therapeutic effects of Russian current.
- 10. Define electricity and its types.
- 11. Dangers and precaution for shortwave diathermy.
- 12. Explain contrast bath and its uses.
- 13. Physiological effects of high voltage pulsed galvanic stimulation.
- 14. Explain the procedure and interpretation of SD Curve test.
- 15. Fluidotherapy.
- 16. Define phonophoresis and method of application.
- 17. Define shock give an account of prevention.

SHORT ANSWERS

- 18. Define Joule's law.
- 19. What is salutatory conduction?
- 20. Define Rheobase.
- 21. Define inverse square law.
- 22. Beat frequency.
- 23. Drugs used for iontophosesis.
- 24. Define motor unit.
- 25. Skin impedance.
- 26. Define Cavitations.
- 27. Define collimation.

10 x 2 = 20 Marks

12 x 5 = 60 Marks

2 x 10 = 20 Marks

II Year B.P.T. Degree Examination – April 2014

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)

- 1. Enumerate the problems encountered by researchers in India.
- 2. Define mean, median and mode. Discuss the merits and demerits of mean, median and mode.
- 3. What is a test of hypothesis? Explain the need for tests of hypothesis in physiotherapy.

SHORT ESSAYS (Answer any Eight)

- 4. What are the features of a good research design?
- 5. What is stratified random sampling technique? Explain the procedure of selection of samples using stratified random sampling.
- 6. Define coefficient of variation. Explain the circumstances under which this is used as a measure of dispersion.
- 7. What is normal distribution? Mention its important properties.
- 8. Describe briefly the different methods of data collection.
- 9. Explain the role of computers in Physiotherapy research.
- 10. Briefly explain the basic principles of experimental designs.
- 11. With the help of a suitable illustration describe how pie diagram can be drawn for the discrete data.
- 12. Explain the techniques of developing measurement tools.
- 13. What are the under lying assumptions of one-way analysis of variance. Explain briefly under what circumstances ANOVA is applied in data analysis.

SHORT ANSWERS

- 14. Distinguish between inclusive and exclusive method of class intervals in frequency distribution.
- 15. Distinguish between standard deviation and standard error.
- 16. What is sampling frame?
- 17. Distinguish between qualitative and quantitative variables. Give one example to each.
- 18. Define level of significance and confidence level.
- 19. Define the probability of an event.
- 20. What is target population? Give an example.
- 21. What is randomization?
- 22. What is the necessity of defining the research problem?
- 23. What is sampling distribution?

10 x 2 = 20 Marks

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2 x 10 = 20 Marks

8 x 5 = 40 Marks