- MAY 2003

(Pages : 2) (43) RC—2582

SECOND YEAR B.Sc. (PHYSIOTHERAPY) DEGREE EXAMINATION, 2003

PATHOLOGY AND MICROBIOLOGY

(1997–1998 Batch)

Time : Three Hours Maximum : 80 Marks

Your answers shall be specific to the questions asked.
Draw neat and labelled diagrams wherever necessary.

Section A (Pathology)

(40 marks)

I. Long Essays. (Answer any *one*)

1 Define Gangrene. What are the types of gangrene ? Write briefly about gas gangrene.

2 Define Inflammation. What are the cardinal signs of acute inflammation ? Briefly outline the haemodynamic changes in acute inflammation.

(1 × 10 = 10 marks)

II. Short Essays. (Answer any *four*)

3 Thromboembolism.

4 Pulmonary tuberculosis.

5 Laboratory investigations in a case of Anaemia.

6 Meningitis.

7 Routes of metastasis.

(4 × 5 = 20 marks)

III. Short Answers :

8 Dyoplasia.

9 Callus.

10 Anticoagulant.

11 HIV virus.

12 Granuloma.

(5 × 2 = 10 marks)

Section B (Microbiology)

(40 marks)

I. Long Essays. (Answer any *one*)

1 Describe the morphology cultural characteristics, pathogenicity and laboratory diagnosis of Typhoid Fever.

2 Define Immunity. Classify immunity. Write briefly on active immunity.

(1 × 10 = 10 marks)

Turn over

II. Short Essays. (Answer any *four*)

3 Hot air oven.

4 Clostridium tetani.

5 Hepatitis B virus.

6 Staphylococcus aureus.

7 Rabies.

(4 × 5 = 20 marks)

III. Short Answers :

8 Bacterial capsule.

9 Endotoxin.

10 Organisms causing vrinary tract infection.

11 Pasteurisation.

12 B.C.G.

(5 × 2 = 10 marks)

C—2582

MAY 2003

(Pages : 2)

RC—2584

SECOND YEAR B.P.T. DEGREE EXAMINATION, 2003

ELECTROTHERAPY

Time : Three Hours

Maximum : 100 Marks

Your answers shall be specific to the questions asked.
Draw neat and labelled diagrams wherever necessary.

I. Long Essays. (Answer any *two*)

1 With diagram, explain the production of short wave diathermy. Discuss the transmission of high frequency currents in the tissue.

2 Define Strength duration curve. Write in detail about the interpretation of results using SD curve.

3 What is the selection of treatment mode and technique of treatment in case of decubitus ulcer using ultraviolet radiation ?

(2 × 10 = 20 marks)

II. Short Essays. (Answer any *twelve*)

4 What are the therapeutic uses of laser ?

5 What is the physiological effects of cryotherapy ?

6 Write about the properties of electromagnetic radiation.

7 What is piezoelectric effect ?

8 Brief the generation of action potential.

9 Write the different methods of application of interferential therapy.

10 What is attenuation ?

11 List out the precautions taken during infrared radiation.

12 Brief out the magnetron in microwave diathermy.

13 What is collimation and coherence ?

14 Write briefly on electrodiagnostic test available in physiotherapy.

15 Brief about the criteria for selection of parameters in Transcutaneous electrical nerve stimulator.

16 What are the physiological effects of galvanic current ?

17 Production of ultraviolet radiation by Kromayer's lamp.

(12 × 5 = 60 marks)

III. Short Answers :

18 Define Base in interferential therapy.

19 Write parameters of law transcutaneous electrical nerve stimulator.

20 What is synapse ?

Turn over

21 What is dedynamic current ?

22 What is rectilinear propagation ?

23 List the types of Laser.

24 Define Accommodation.

25 What is alternating current ?

26 What is impedance ?

27 What is unstable cavitation ?

(10 × 2 = 20 marks)

- MAY 2003

(Pages : 2) (47)

RC—2583

SECOND YEAR B.P.T. DEGREE EXAMINATION, 2003

THERAPEUTICS

Time : Three Hours Maximum : 100 Marks

Your answers shall be specific to the questions asked.
Draw neat and labelled diagrams wherever necessary.

I. Long Essays. (Answer any *two*)

1 List the principles of strengthening.

2 Describe the exercises for the mobility of joints of hand and finger.

3 Mention the different methods of aerobic training. Give its advantages and disadvantages.

(2 × 10 = 20 marks)

II. Short Essays. (Answer any *twelve*)

4 Give the therapeutic effects of exercises in water.

5 What is Petrissage ? Give its uses.

6 Principle and uses of goniometry.

7 Write *five* types of crutch gaits.

8 Explain *two* types of suspension therapy method.

9 Give indications of relaxation.

10 Identify *two* gait deviations. Describe them in detail.

11 Therapeutic effects of breathing exercise.

12 Testing and stretching of hamstring tightness.

13 Principles and uses of mat exercise.

14 Describe postural deviation of lumbar spine.

15 Give progression of Frenkets exercise from sitting to walking.

16 Principles of peripheral neuromuscular facilitation.

17 Physiological effects of breathing exercises.

DR. MGR. MEDICAL UNIV. CENTRAL LIBRARY

(12 × 5 = 60 marks)

III. Short Answers :

18 Define Co-ordination and inco-ordination.

19 Give *two* uses of postural drainage.

20 Give *two* exercise for a stiff ankle.

21 Differentiate contracture and tightness.

22 Mention *two* uses of the overhead pulley.

Turn over

48

23 Give *two* effects of effleurage.

24 What is slow reversal ?

25 Write down use of finger kneading.

26 Differentiate between Coughing and Huffing.

27 What is squaring of the pelvis ?

(10 × 2 = 20 marks)

Time

I.

II.

II.

- MAY 2003

(49)

RC--2581

SECOND YEAR B.Sc. (PHYSIOTHERAPY) DEGREE EXAMINATION, 2003

PHARMACOLOGY

(1997–1998 and 1998–1999 Batch)

Time : Three Hours | Maximum : 80 Marks

Your answers shall be specific to the questions asked.
Draw neat and labelled diagrams wherever necessary.

I. Long Essays. (Answer any *two*)

1 Enumerate the broad spectrum antibiotic. Write the mechanism of action, antimicrobial spectra, uses and side-effects of tetracyclines.

2 Enumerate the glucocorticoids. Write the pharmacological actions, uses and their side-effects.

3 Enumerate the routes of Drug administration. Write the advantages and disadvantages of parenteral routes.

(2 × 10 = 20 marks)

II. Short Essays. (Answer any *eight*)

4 Diphenyl hydantoin.
5 B-Blockers.
6 Pethidine.
7 Expectorants.
8 Drug antagonism.
9 Halothane.
10 Centrally acting muscle relaxants.
11 Clonidine.
12 Drug tolerance.
13 Rifampicin.



(8 × 5 = 40 marks)

II. Short Answers :

14 Two uses and *two* side effects of lignocaine.
15 Mention *four* uses of co-trimaxazole.
16 Mention *two* uses and *two* side effects of aspirin.
17 Mention the uses of digoxin.
18 Mention the drugs used in myashenia gravis.
19 Mention the drugs used in anaphylactic shock.
20 Explain the rationale of using physostigmine in atropine poisoning.
21 Mention *two* uses and *two* side-effects of furosemide.
22 Name *two* uses and *two* side-effects of insulin.
23 Name the hormones controlling calcium metabolism.

(10 × 2 = 20 marks)

Te' No. of Pages :1]

Code No.RC-2910

II Year B.P.T. EXAMINATION OF NOVEMBER-2003
PHARMACOLOGY - THEORY PAPER
(1996 - 97 BATCH)

50

Time : 3 Hours] [Max. Marks : 80

Your answers shall be specific to the questions asked.

❖ ❖ ❖

I ***Long Essays:*** *(Answer any two)* [2 x 10 = 20]

1. What is biotransformation. Enumerate biotransformation reactions with suitable examples. Mention the factors modifying biotransformation.
2. Enumerate the nonsteroidal anti-inflammatory drugs. Write the pharmacological actions, uses and side effects of salicylates.
3. Enumerate the drugs used in diabetes mellitus. Write the pharmacological actions, uses and side effects of oral anidiabetic agents.

II ***Short Essays:*** [8 x 5 = 40]

4. Intravenous general anaesthetics.
5. Renal elimination of drugs.
6. Transcutaneous route of drug administration.
7. Rifampicin.
8. Propranolol
9. d-tubocurarine.
10. Cephalo sporins.
11. Treatment of organophosphorous poisoning.

III ***Short Answers:*** [10 x 2 = 20]

12. Name two anabolic steroids. Mention two uses.
13. Mention two uses and two side effects of chlorem phenecol.
14. Mention two uses and two side effects of thiazide diuretics.
15. Name two calcium channel blockers. Mention two important uses.
16. Mention four drugs used in multidrug therapy of tuberculosis.
17. What are terratogenic drugs. Give two examples.
18. Name two drugs given by inhalation in brochialasthma.
19. Define Plasma half life.
20. Mention two uses and two side effects of adrenaline.
21. Enumerate vasodilators used in congestive cardiac failure.

❊ ❊ ❊ ❊ ❊

Total No. of Pages :1]

(51)

Code No.RC-3

II Year B.P.T. EXAMINATION OF NOVEMBER-2003
PHARMACOLOGY - THEORY PAPER
(1997-98 AND 1998-99 BATCH)

Time : 3 Hours] [Max. Marks

Your answers shall be specific to the questions asked.

❖ ❖ ❖

I *Long Essays:* (Answer any two) [2 x 10 = 2

1. Enumerate the narcotic analgesics. Write the pharmacological actio uses and side effects of morphine.
2. Enumerate the drugs used in tuberculosis. Write the mechanism of act uses and side effects of streptomycin.
3. Enumerate the drugs used in diabetes mellitus. Write the pharmacologi actions uses and side effects of insulin.

II *Short Essays:* (Answer any Eight) [8 x 5 = 4

4. Thyroxine.
5. Phenobarbitone.
6. Drug allergy.
7. Inhalational route of drug administration.
8. Cough suppressants.
9. Adrenaline
10. Methods of prolongation of drug action.
11. Calcium channel blockers.
12. Dantrolene
13. Write the uses and side effects of atropine.

III *Short Answers:* [10 x 2 = 20

14. Mechanism of action of xylocaine.
15. Mention the advantages of sublingual route of drug-administration.
16. Mention four uses of ciprofloxacin.
17. What is super infection. Mention two drugs producing this effect.
18. Rationale of using digoxin in congestive cardiac failure.
19. Rationale of using nitrites in angina pectoris.
20. Name two moderate efficacy diuretics. Mention their mechanism of action.
21. What is terratogenecity. Name two terratogenic drugs.
22. Name four general anaesthetics.
23. Name the uses of ethyl alcohol.

❖❖❖❖❖

Total No. of Pages :2]

(52)

Code No.RC-2912

II B.P.T. EXAMINATION OF NOVEMBER-2003
THERAPEUTICS - THEORY PAPER

Time : 3 Hours] [Max. Marks : 100

Your answers shall be specific to the questions asked.
Draw neat and labelled diagrams wherever necessarry.

❖ ❖ ❖

I **Long Essays:** *(Answer any two)* [2 x 10 = 20]

1. Outline the indications of postural drainage. Describe the contra-indications for P.D. Describe the position for anterior segment of right upper lobe.
2. Explain the term PNF. List the different techniques used in PNF. Describe any one technique in detail.
3. List out the different gait deviations. Describe any three in detail.

II **Short Essays:** *(Attempt any Twelve)* [12 x 5 = 60]

4. List the uses of Massage.
5. What are the causes for tightness? Explain prevention exercises for quadriceps tightness.
6. Describe the advantages of group exercises.
7. What is PRE? Describe the Delorme's technique.
8. Explain the different types of suspension therapy.
9. Give the therapeutic effects of exercise in water.
10. Describe the uses of walking aids.
11. Explain the factors responsible for a good posture.
12. Give the principles of relaxation. Describe one technique in detail.
13. Describe the components of aerobic training.
14. Describe 5 exercises that can be used in hand rehabilitation.
15. Explain the method used to measure chest expansion.
16. What are the merits and demerits of suspension therapy?
17. What are the physiological effects and uses of friction massage?

P.T.O.

III ***Short Answers:*** [10 x 2

18. Give uses of bridging activity.
19. List <u>two</u> physiological effects of breathing exercise.
20. Give 2 uses of shoulder wheel.
21. Explain why a therapeutic gynnasium must have a wooden floor
22. Differentiate between anatomical and physiological movements.
23. Give 2 uses of exercise under water.
24. Define precision pattern.
25. What is active insufficiency of a two joint muscle?
26. Give 2 principles of manual muscle testing.
27. Define cadence.

❁ ❁ ❁ ❁ ❁

exercise.

have a wooden floor
ological movements.

nuscle?

Total No. of Pages :2]

(54)

Code No.RC-2911

II B.P.T. EXAMINATION OF NOVEMBER-2003

(1996-97 Batch)

PATHOLOGY & MICROBIOLOGY - PAPER - 1 - A

Time : 3 Hours] *[Max. Marks : 100*

Your answers shall be specific to the question asked.
Draw neat and labelled diagrams wherever necessarry.

❖ ❖ ❖

SECTION - A

(Pathology)

I ***Long Essays:*** *(Answer any one)* [1 x 10 =10]

1. Define necrosis. Discuss briefly morphologic features of each type of necrosis.
2. What is thrombus? Discuss Etiopathogenesis & complications of thrombosis.

II ***Short Essays:*** *(Answer any six)* [6 x 5 = 30]

3. Nephrotic syndrome.
4. Differences between benign and malignant tumors.
5. Factors influencing healing process.
6. Osteomyelitis.
7. Peptic ulcer.
8. Laboratory investigations in a case of Anaemia.
9. Osteomalasia.

III ***Short Answers:*** [5 x 2 = 10]

10. Carcinogen
11. Ulcer
12. Chemotoxis
13. Dysplasia
14. Hypertrophy

P.T.O.

SECTION - B

(55)

(Microbiology)

I *Long Essays:* *(Answer any one)* [1 x 10=

1. Define and classify immunity and describe the active immunity.
2. Describe the morphology culture character pathogenicity and laborat diagnosis of Mycobacterium Tuberculosis.

II *Short Essays:* *(Answer any six)* [6 x 5=

3. Hepatits A virus
4. Clostridium Botulinum.
5. Syphilis
6. Infections.
7. Prophylaxis of diphtheria
8. Enteric fever.
9. Urinary tract infection.

III *Short Answers:* [5 x 2=

10. Bacterial Flagella
11. Incineration
12. Mantoux test
13. Endotoxin
14. Bacterial Growth Curve.

❄ ❄ ❄ ❄ ❄

Total No. of Pages :2]

Code No.RC-2911

II B.P.T. EXAMINATION OF NOVEMBER-2003
(1997-98 Batch and Onwards)
PATHOLOGY & MICROBIOLOGY - PAPER - 1 - A

Time : 3 Hours] *[Max. Marks : 80*

Your answers shall be specific to the question asked.
Draw neat and labelled diagrams wherever necessarry.

❖ ❖ ❖

SECTION - A
(Pathology)

Long Essays: *(Answer any one)* [1 x 10 =10]

1. Define Thrombosis. Discuss Pathogenesis of Thrombosis.
2. Discuss the differences between Healing by primary union and secondary union.

Short Essays: *(Answer any four)* [5 x 4 = 20]

3. Cavernous Haemangioma
4. Gohn's Complex.
5. Complications of Atheromatous plaque.
6. Gross & Microscopy of Alcoholic Cirrhosis.
7. White infarct.

Short Answers: [5 x 2 = 10]

8. Hashimoto's thyroiditis.
9. Involucrum.
10. CSF findings in Tuberculous Meningitis.
11. Gross and Microscopy of Ulcerative Colitis.
12. Etiology of Rheumatic Heart Disease.

P.T.O.

SECTION - B

(57)

(Microbiology)

I ***Long Essays:*** *(Answer any one)* [1 x 10

1. Describe special bacterial characters and their role in bacterial viru
2. Define immunity. Discuss on types of immunity.

II ***Short Essays:*** *(Answer any four)* [5 x 4

3. Serum hepatitis
4. IgA
5. BCG vaccine
6. Clostridium Botulinum.
7. Group 'A' Streptococii.

III ***Short Answers:*** [5 x 2

8. Nagler's reaction.
9. Candida albicans
10. Pasteurization
11. Fimbria
12. Four complications of Hepatitis B infection.

(57)

[1 x 10=

eir role in bacterial virul

unity.

[5 x 4=

[5 x 2=

1.

(58)

Total No. of Pages :2]

Code No.RC-2913

II Year B.P.T. EXAMINATION OF NOVEMBER-2003
ELECTROTHERAPY - THEORY PAPER

Time : 3 Hours] *[Max. Marks : 100*

Your answers shall be specific to the question asked.
Draw labelled, neat diagrams wherrever necessarry.

❖ ❖ ❖

I ***Long Essays:*** *(Answer any two)* [2 x 10 = 20]

1. Give the principles of application of Ultra-sound. Outline the therapeutic uses of the same. [10]
2. Explain the indications, contra indications and dangers of SWD. [10]
3. What is trans cutenous nerve stimulation (tens)? List the types, and give the therapeutic effect of each type. [3+3+4=10]

II ***Short Essays:*** *(Answer any Twelve)* [12 x 5 = 60]

4. Define UVR, list any 4 physiological effects of UVR.
5. Explain the importance of cryotherapy in acute soft-tissue injuries.
6. Explain the importance of spacing of electrodes in SWD.
7. Describe the production of Luminous and non luminous generators in Infrared radiation.
8. Give the therapeutic effects of MWD.
9. What is laser? Explain the principles of laser therapy.
10. Explain anodal galvanism.
11. Describe the uses of faradic stimulation.
12. Explain the generation of action potential.
13. What is cavitation, with reference to ultra sound therapy.
14. List out the tests of electro-diagnosis. Describe any two in detail.
15. Explain the parameters used in electrical stimulation following a nerve injury.
16. Explain the pain gate theory.
17. Give the physiological effects of moist heat therapy.

P.T.O.

III *Short Answers:* [10x 2 =

18. Define dielectric constant in SWD.
19. What is phonophoresis?
20. What is the importance of coupling media in ultra sound therapy.
21. Give the dangers of infra red rays.
22. What is magnetron?
23. What are diode lasers.
24. Define electro-magnetic radiation.
25. Define rheobase.
26. Give 2 contra-indications of cryotherapy.
27. What is latent heat in way therapy?

❄ ❄ ❄ ❄ ❄