BACHELOR OF PHYSIOTHERAPY Second Year: SUMMER: 2024

SUBJECT: PHARMACOLOGY

Day: Tuesday Date: 11/06/2024

S-25049-2024

Time: 10:00 AM-12:00 PM

Max. Marks: 40

N.B.

All questions are COMPULSORY.

- 2) Figures to the right indicate FULL marks.
- 3) Draw neat diagram WHEREVER necessary.
- 4) Both the sections should be written in SEPARATE answer books.

SECTION - A

Q.1 Short Answer Question (Any Four out of Five)

 $(4 \times 5 = 20 \text{ Marks})$

- Classify opioid analgesics. Describe the uses with rationale and adverse effects of morphine.
- b) Explain the management and preventive measures of constipation
- c) Compare and contrast Ampicillin and Amoxicillin.
- d) Write the uses of Vitamin D.
- e) Classify the bronchodilators used to treat asthma. Give 2 examples of each.

SECTION - B

Q.2 Short Answer Question (Any Four out of Five)

 $(4 \times 5 = 20 \text{ Marks})$

- a) Write short note on Transdermal route.
- b) Write uses of beta blocker.
- c) Write a note of ACE inhibitors (Mechanism of Action, Adverse Drug Reactions, and Uses).
- d) Classify anticoagulants and mention their uses.
- e) Classify Cephalosporins. Mention therapeutic uses and adverse effects.

SUPPLEMENTARY

BACHELOR OF PHYSIOTHERAPY

Second Year : SUMMER : 2024 SUBJECT: PATHOLOGY & MICROBIOLOGY

Day: Wednesday

Date: 14/08/2024

S-25050-2024

Time: 10:00 AM-01:00 PM

Max. Marks: 80

N.B.

1) All questions are COMPULSORY.

Figures to the right indicate FULL marks. 2)

3) Draw neat diagram WHEREVER necessary.

Both the sections should be written in SEPARATE answer books. 4)

SECTION - A

(Questions Based on Pathology)

Short Answer Question (Any Four out of Five) 0.1

 $(4 \times 5 = 20 \text{ Marks})$

Write a note on laboratory diagnosis of HIV.

b) Define edema. Differentiate between transudate & exudate.

c) Define neoplasm. Distinguish between benign & malignant tumour.

d) Write a short note on Down Syndrome.

e) Define COPD. Write a note on emphysema.

Q.2 Short Answer Question (Any Four out of Five)

 $(4 \times 5 = 20 \text{ Marks})$

a) Define Necrosis. Enumerate types of necrosis with the examples.

b) Define chronic inflammation. Write a note on granuloma with examples.

c) Describe pathology of Myocardial Infarction.

d) Write a note on Parkinsonism.

e) Enlist factors affecting wound healing.

SECTION - B

(Questions Based on Microbiology)

Q.3 Short Answer Question (Any Four out of Five)

 $(4 \times 5 = 20 \text{ Marks})$

a) Enumerate different antibodies in humans. Describe IgG in detail.

b) Describe laboratory diagnosis of Vibrio cholerae.

c) Write about different specific tests used for diagnosis of syphilis.

d) Describe the methods of virus isolation.

e) Write a short note on structure of HIV.

Q.4 Short Answer Question (Any Four out of Five)

 $(4 \times 5 = 20 \text{ Marks})$

Write a short note on Hepatitis B vaccine.

Write about pathogenesis of Malaria. b)

Write about Universal standard precautions. c)

d) Write laboratory diagnosis of Candidiasis.

e) Write the classification of atypical mycobacteria with its examples.

BACHELOR OF PHYSIOTHERAPY

Second Year: SUMMER: 2024 SUBJECT: PSYCHOLOGY

Day: Saturday

Date: 15/06/2024

S-25051-2024

Time: 10:00 AM-12:00 PM

Max. Marks: 40

N.B.:

- 1) All questions are COMPULSORY.
- 2) Figures to the right indicate FULL marks.
- 3) Answers to both the sections should be written in SEPARATE answer book.

SECTION-I

Q.1 Short Answer Questions: (Any FOUR out of FIVE)

(20)

- a) Describe any one type of Conflict.
- b) Difference between Bipolar I and Bipolar II.
- c) Mention two criteria for diagnosing OCD.
- d) Differentiate between neuroticism and psychoticism.
- e) Explain classical conditioning experiment by Ivan Pavlov.

SECTION-B

Q.2 Short Notes: (Any FOUR out of FIVE)

(20)

- a) Normality
- b) Clinical Psychology
- c) Encoding
- d) Short term memory
- e) Learning disability

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BACHELOR OF PHYSIOTHERAPY

Second Year: SUMMER: 2024 SUBJECT: KINESIOLOGY

Day: Tuesday

Time: 10:00 AM-01:00 PM Date: 18/06/2024 S-25052-2024 Max. Marks: 80 N.B.: All questions are COMPULSORY. 1) Figures to the right indicate FULL marks. 2) Answers to both the sections should be written in SEPARATE answer book. 3) Draw neat labelled diagrams WHEREVER necessary. 4) SECTION-A Q.1 Attempt any TWO out of THREE: (20)a) Describe articulating surfaces of shoulder joint. Write a note on scapulo-(5+5)humeral rhythm. b) Describe kinetic and kinematic of cervical spine. Write a note on intervertebral disc. c) Describe kinetic and kinematic of elbow joint.

Q.2 Attempt any FOUR out of FIVE:

(20)

(10)

a) Describe trabeculae system of hip joint.

b) Describe different types of muscles contraction.

c) Describe different types of forces.

d) Explain pump handle and bucket handle moment.

e) Write a note on precision grip with example.

Write a note on types of muscle fiber.

SECTION-B

Q.3		Attempt any TWO out of THREE:	(20)
	a) b) c)	Describe kinetic and kinematic of temporomandibular joint. Describe Arches of foot. Describe articulation of menisci in knee joint. Explain locking and unlocking mechanism of the knee joint.	(10) (10) (5+5)
Q.4		Attempt any FOUR out of FIVE:	(20)
	a)	Describe balance strategies.	(20)
	b)	Explain sit to stand in functional re-education.	
	c)	Describe active and passive insufficiency.	
	d)	Describe lever system with example.	
	e)	Explain pronation and supination twist in mid-foot	

f) Describe various joint classification.

BACHELOR OF PHYSIOTHERAPY Second Year: SUMMER: 2024

SUBJECT: KINESIOTHERAPY

Day: Thursday Date: 20/06/2024

S-25053-2024

Time: 10:00 AM-01:00 PM

Max. Marks: 80

N.B.

1) All questions are COMPULSORY.

2) Figures to the right indicate FULL marks.

Draw neat diagram WHEREVER necessary. 3)

Both the sections should be written in SEPARATE answer books. 4)

SECTION - A

0.1 Answer any TWO of three questions.

(2X 10=20 Marks)

a) Explain determinants of strengthening.

b) Explain principles of mobility exercises.

Define postural drainage. Describe various positions to give postural drainage to right lower lobe.

Q.2 Answer any FOUR of five questions.

(4X 5=20 Marks)

Explain any five trick movements with examples.

b) Explain functional re-education for kneel sit to stand with muscle work.

c) Explain types of contractures. Types of Muscle Contraction

d) Enumerate advantages and disadvantages of home exercise program.

e) Explain any five closed chain exercises to improve mobility at knee joint.

SECTION - B

0.3 Answer any TWO of three questions.

(2X 10=20 Marks)

a) Describe posture in standing from anterior view. Explain any two postural deviations in the same.

b) Explain breathing exercises: Indications, Types of inspiratory breathing exercises Explain in details Static & Dynamic Balance Exercise

c) Discuss kinetics and kinematics of swing phase of gait.

0.4 Answer any FOUR of five questions.

(4X 5=20 Marks)

a) Explain pre-crutch training.

b) Explain types of humidifiers.

c) Explain principles of Frankel's exercises with suitable examples.

d) Explain types of Traction with their uses.

e) Describe forced expiratory techniques with their uses.

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BACHELOR OF PHYSIOTHERAPY Second Year: SUMMER: 2024 SUBJECT: ELECTROTHERAPY

Day: Saturday Date: 22/06/2024

S-25054-2024

Time: 10:00 AM-01:00 PM

Max. Marks: 80

N.B.:

All questions are COMPULSORY.

Figures to the right indicate FULL marks.

3) Answers to both the sections should be written in SEPARATE answer book.

Draw neat labelled diagrams WHEREVER necessary.

SECTION-A

Q.1 Answer Any TWO out of THREE:

 $(2 \times 10 = 20)$

a) Define TENS and its types. Explain parameters of TENS. Add a note on methods of applications of the same. (3+4+3)

b) Explain principle of interferential therapy currents. Write in detail about parameters of IFT. (2+8)

c) Define ultrasound. Write in details its treatment methods. (2+8)

b) Define Faradic Current. Write in detail principle and method of application of Faradism Under Pressure

Q.2 Answer any FOUR out of FIVE:

 $(4 \times 5 = 20)$

- a) Describe Iontophoresis.
- b) Describe EMG biofeedback.

c) Write physiological and therapeutic effects of UVR.

d) Explain Wound Healing with Electrotherapeutic modalities.

e) Explain techniques and method of application of IRR.

SECTION-B

Q.3 Answer Any TWO out of THREE:

 $(2 \times 10 = 20)$

a) Define galvanic and interrupted galvanic current. Technique and interpretation of Strength Duration (SD) curve. (5+5)

b) Write types of electrodes used in IFT. Discuss indications and physiological effects. Add a note on methods of application. (2+3+5)

c) What is SWD? Describe technique and methods of application. (2+8)

Q.4 Answer any FOUR out of FIVE:

 $(4 \times 5 = 20)$

- a) Discuss various methods to reduce skin resistance.
- b) How to Calculate UVR dose for Psoriasis.

c) Explain various types of biofeedback.

d) Discuss various techniques of applications of Ultrasound.

e) Explain the terms Rheobase and Chronaxie.

d) Discuss Non-Thermal effects and Dangers of Ultrasound

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SUPPLEMENTARY BACHELOR OF PHYSIOTHERAPY Second Year: SUMMER: 2024

SUBJECT: PHARMACOLOGY

Day: Tuesday Date: 13/08/2024

S-25049-2024

Time: 10:00 AM-12:00 PM

Max. Marks: 40

N.B.

All questions are COMPULSORY.

2) Figures to the right indicate FULL marks.

Draw neat diagram WHEREVER necessary.

4) Both the sections should be written in SEPARATE answer books.

SECTION - A

Q.1 Short Answer Question (Any Four out of Five) $(4 \times 5 = 20 \text{ Marks})$

- a) Enumerate three advantages and disadvantages of Intravenous route of administration.
- b) Write in short uses and Adverse Drug Reactions of Morphine
- c) Describe mechanism of Action and two therapeutic uses of Omeprazole.
- d) Name 2 insulin preparations and mention their side effects.
- e) Write mechanism of Action and side effects of Aminoglycoside.

SECTION - B

Q.2 Short Answer Question (Any Four out of Five)

 $(4 \times 5 = 20 \text{ Marks})$

- a) Classify skeletal muscle relaxants. Write therapeutic uses, adverse effects and uses of succinylcholine.
- b) Classify drugs used in Angina.
- c) Classify antihypertensive drugs. Write mechanism of action, therapeutic uses and adverse effects of ACE – inhibitors.
- d) Write therapeutic classification of adrenergic drugs. Discuss uses of adrenaline.
- e) Classify drugs used in treatment of rheumatoid arthritis. Discuss any 1 'Disease Modifying Agent' with respect to advantages and disadvantages.

SUPPLEMENTARY BACHELOR OF PHYSIOTHERAPY Second Year: SUMMER: 2024

SUBJECT: PATHOLOGY & MICROBIOLOGY

Day: Wednesday Date: 14/08/2024

S-25050-2024

Time: 10:00 AM-01:00 PM

Max. Marks: 80

N.B.

- 1) All questions are COMPULSORY.
- 2) Figures to the right indicate FULL marks.
- 3) Draw neat diagram WHEREVER necessary.
- Both the sections should be written in SEPARATE answer books.

SECTION - A (Questions Based on Pathology)

Q.1 Short Answer Question (Any Four out of Five)

 $(4 \times 5 = 20 \text{ Marks})$

- a) Write a note on laboratory diagnosis of HIV.
- b) Define edema. Differentiate between transudate & exudate.
- c) Define neoplasm. Distinguish between benign & malignant tumour.
- d) Write a short note on Down Syndrome.
- e) Define COPD. Write a note on emphysema.

Q.2 Short Answer Question (Any Four out of Five)

 $(4 \times 5 = 20 \text{ Marks})$

- a) Define Necrosis. Enumerate types of necrosis with the examples.
- b) Define chronic inflammation. Write a note on granuloma with examples.
- c) Describe pathology of Myocardial Infarction.
- d) Write a note on Parkinsonism.
- e) Enlist factors affecting wound healing.

SECTION – B (Questions Based on Microbiology)

Q.3 Short Answer Question (Any Four out of Five)

 $(4 \times 5 = 20 \text{ Marks})$

- a) Enumerate different antibodies in humans. Describe IgG in detail.
- b) Describe laboratory diagnosis of Vibrio cholerae.
- c) Write about different specific tests used for diagnosis of syphilis.
- d) Describe the methods of virus isolation.
- e) Write a short note on structure of HIV.

Q.4 Short Answer Question (Any Four out of Five)

 $(4 \times 5 = 20 \text{ Marks})$

- a) Write a short note on Hepatitis B vaccine.
- b) Write about pathogenesis of Malaria.
- c) Write about Universal standard precautions.
- d) Write laboratory diagnosis of Candidiasis.
- e) Write the classification of atypical mycobacteria with its examples.

SUPPLEMENTARY

BACHELOR OF PHYSIOTHERAPY

Second Year: SUMMER: 2024 SUBJECT: KINESIOLOGY

Day: Saturday Date: 17/08/2024

S-25052-2024

Time: 10:00 AM-01:00 PM

Max. Marks: 80

N.B.:

- All questions are COMPULSORY. 1)
- Figures to the right indicate FULL marks. 2) 3)
- Answers to both the sections should be written in SEPARATE answer book. 4)
- Draw neat labelled diagrams WHEREVER necessary.

SECTION-A

Q.1 Attempt any TWO out of THREE: Describe kinetic and kinematic of gleno-humeral joint. a) (20)Describe kinetic and kinematic of elbow joint. b) (10)Describe the muscles of respirations and mechanism of respirations. (10)(10)Q.2

Attempt any FOUR out of FIVE:

(20)

- Describe the pulley system of hand. a)
- b) Explain concave and convex rule with example.
- c) Describe relation of COG and BOS in balance.
- d) Describe 'Q' angle in knee joint.
- e) Describe closed and open chain kinematic.
- f) Explain use of cane in unilateral standing.

SECTION-B

Q.3		Attempt any TWO out of THREE:	
	a)	Explain stress strain curve	(20)
	b)	Describe kinetic and kinematic him is interested	(10)
	c)	Describe kinetic and kinematic of sub-talar joint.	(10) (10)
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Attempt any FOUR out of FIVE: Q.4

(20)

- Explain role of sensory organization for balance. a)
- b) Explain functional re-education for supine to sit.
- c) Describe types of muscle contraction.
- Describe dynamic stabilizers of shoulder joint. d)
- Write a note on Arches of foot. e)
- Describe the moment arm and angle of pull.

SUPPLEMENTARY BACHELOR OF PHYSIOTHERAPY

Second Year: SUMMER: 2024 SUBJECT: ELECTROTHERAPY

Day: Tuesday Date: 20/08/2024

S-25054-2024

Time: 10:00 AM-01:00 PM

Max. Marks: 80

N.B.:

- 1) All questions are COMPULSORY.
- 2) Figures to the right indicate FULL marks.
- Answers to both the sections should be written in SEPARATE answer book. 3)
- Draw neat labelled diagrams WHEREVER necessary. 4)

SECTION-A

Q.1 Answer Any TWO out of THREE:

 $(2 \times 10 = 20)$

- a) Describe the Physiological and therapeutic effects of Faradic current.
- Discuss advantages of IFT. Write about physiological and therapeutic effects of IFT. (2+4+4)
- Discuss positioning of electrodes with diagrams in short wave diathermy. Also discuss its indications and contraindications. (4+6)

Q.2 Answer any FOUR out of FIVE:

 $(4 \times 5 = 20)$

- Describe physiological and therapeutic effects of IRR.
- Explain effects and uses of UVR. b)
- Write the method of application of LASER therapy. c)
- Describe with neat labelled diagrams various types of SD curve.
- Describe postural biofeedback.

SECTION-B

Q.3 Answer Any TWO out of THREE:

 $(2 \times 10 = 20)$

- a) Explain pain gate theory and explain parameters of TENS. (5+5)
- b) Write types of electrodes used in IFT. Discuss indications and contraindications effects. Add a note on methods of application. (2+3+5)
- What is mark space ratio? Write thermal and non-thermal effects of ultra sound. Write method of application. (1+4+5)

0.4 Answer any FOUR out of FIVE:

 $(4 \times 5 = 20)$

- a) Define Motor point. Draw neat labelled diagram for motor points on
- b) Explain the pain gate mechanism with diagram: West a Sheet Note on Russian Carlente
- c) Describe the types of UVR.
- d) Describe potential dangeress and precautions in the use of IRR.
- Discuss pulsed SWD.