



15553

**BRAINWARE UNIVERSITY**

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398, Ramkrishnapur Road, Barasat  
Kolkata, West Bengal-700125

**Term End Examination 2025-2026****Programme – B.Physiotherapy-2021/B.Physiotherapy-2022****Course Name – Physiotherapy in Medical & Cardiopulmonary Conditions and Pediatrics****Course Code - BPTC703****( Semester VII )****Full Marks : 60****Time : 2:30 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

**Group-A**

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Select the condition associated with Galeazzi's Sign
- |         |              |
|---------|--------------|
| a) CDH  | b) CTEV      |
| c) AGMC | d) Pes Cavus |
- (ii) Select the test conducted for CDH
- |                          |                   |
|--------------------------|-------------------|
| a) Anterior Drawers test | b) Ortolani test  |
| c) Grinding test         | d) Lachman's test |
- (iii) Name the deformities associated with club foot
- |  |   |
|--|---|
| a) Adduction, Inversion and plantarflexion | b) Abduction, Inversion and plantar flexion |
| c) Adduction, Eversion and dorsiflexion    | d) Adduction, Inversion                     |
- (iv) Name the splint used for club foot deformity
- |                   |                        |
|-------------------|------------------------|
| a) Pavlik Harness | b) Dennis Brown Splint |
| c) Cockup splint  | d) Thumb Spika         |
- (v) Interpret which is not the cardinal signs of Inflammation
- |          |                    |
|----------|--------------------|
| a) Rubor | b) Low temperature |
| c) Dolar | d) Calor           |
- (vi) Identify the post natal cause of cerebral palsy
- |                      |  |
|----------------------|--|
| a) Complicated labor | b) Jaundice                                  |
| c) Multiple births   | d) Female parents with thyroid abnormalities |
- (vii) Choose the term in which there is a collection of blood in the loose areolar tissue space between the galea aponeurotica and the skull's periosteum
- |                            |                            |
|----------------------------|----------------------------|
| a) Epidural hemorrhage     | b) Subgaleal hemorrhage    |
| c) Subarachnoid hemorrhage | d) Intracranial hemorrhage |
- (viii) Name the organism causing bacterial meningitis
- |                 |                          |
|-----------------|--------------------------|
| a) Acanthamoeba | b) Hemophilus Influenzae |
| c) Cryptococcus | d) Coccidiodes           |

- (ix) Name the nerve roots affected in Erbs Palsy
- a) C4,C5  
b) C5,C6  
c) C6,C7  
d) C8,T1
- (x) Determine the key difference between osteoarthritis and rheumatoid arthritis is
- a) Osteoarthritis is primarily an autoimmune condition, while rheumatoid arthritis is not  
b) Rheumatoid arthritis generally involves asymmetric joint pain, while osteoarthritis is usually symmetric  
c) Osteoarthritis typically causes joint stiffness that improves throughout the day, while rheumatoid arthritis causes stiffness that worsens with activity.  
d) Rheumatoid arthritis commonly affects the hands and feet, while osteoarthritis affects large weight-bearing joints.
- (xi) Predict the presence of decreased tactile fremitus indicate
- a) Increased lung density  
b) Fluid or air in the pleural space  
c) Normal lung function  
d) Consolidation
- (xii) Determine the sound characterized by a low-pitched, continuous sound often heard during expiration
- a) Crackles  
b) Wheezes  
c) Rhonchi  
d) Stridor
- (xiii) Select the primary reason for performing tactile fremitus during a chest examination
- a) To assess lung volume  
b) To evaluate vocal resonance  
c) To detect lung consolidation or pleural effusion  
d) To identify respiratory rate
- (xiv) Identify the following signs that might indicate a potential CDH in a newborn
- a) Normal range of motion  
b) Asymmetrical thigh folds  
c) Flexibility in joints  
d) Joint contractures
- (xv) Define thrombosis
- a) The formation of a blood clot within a blood vessel  
b) A condition caused by an embolus  
c) Inflammation of a vein  
d) A dilation of an artery

### Group-B

(Short Answer Type Questions)

3 x 5=15

2. What factors can contribute to decreased exercise tolerance in COPD patients (3)
3. Briefly describe the common signs and symptoms of inflammation that a physiotherapist should monitor during treatment? (3)
4. What is the purpose of the Modified Borg Scale in assessing dyspnea? (3)
5. Discuss the management in minimal brain dysfunction (3)
6. Describe the clinical importance of measuring oxygen saturation (SpO<sub>2</sub>) in respiratory assessments. (3)

OR

Explain the significance of auscultation in a cardio-respiratory assessment. (3)

### Group-C

(Long Answer Type Questions)

5 x 6=30

7. Explain the differences between spondylosis and Ankylosing spondylitis. (5)
8. Write about signs and symptoms of Autism Spectrum Disorders (5)
9. Discuss the pathophysiology and clinical features of generalized osteoarthritis. (5)
10. Explain the radiological findings and physiotherapy management of degenerative and traumatic osteoarthritis. (5)
11. Analyse the clinical features and assessment tools used in Still's disease. (5)
12. Evaluate a child with DDH/ CDH (5)

OR

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- (i) Select the reaction which will give the highest yield.
  - (A)  $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$
  - (B)  $\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}_2$
  - (C)  $\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O} + \text{O}$
  - (D)  $\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O} + \text{O}_2$
- (ii) Select the best oxidizing agent for  $\text{Cr}^{2+}$ .
  - (A)  $\text{Fe}^{3+}$
  - (B)  $\text{MnO}_4^-$
  - (C)  $\text{Cr}_2\text{O}_7^{2-}$
  - (D)  $\text{Ce}^{4+}$
- (iii) Name the two elements associated with sickle cell anemia.
  - (A) Hemoglobin, iron and phosphate
  - (B) Hemoglobin, iron and phosphorus
  - (C) Hemoglobin, iron and phosphorus
  - (D) Hemoglobin, iron and phosphorus
- (iv) Name the enzyme used in the synthesis of DNA.
  - (A) DNA polymerase
  - (B) RNA polymerase
  - (C) DNA ligase
  - (D) RNA ligase
- (v) Name the enzyme used in the synthesis of RNA.
  - (A) RNA polymerase
  - (B) DNA polymerase
  - (C) DNA ligase
  - (D) RNA ligase
- (vi) Identify the most toxic form of carbon monoxide.
  - (A) Carbonyl chloride
  - (B) Carbonyl sulfide
  - (C) Carbonyl oxide
  - (D) Carbonyl selenide
- (vii) Check the box in which there is a redox reaction.
  - (A)  $\text{Fe}^{2+} + \text{H}_2\text{O}_2 \rightarrow \text{Fe}^{3+} + \text{H}_2\text{O}$
  - (B)  $\text{Fe}^{2+} + \text{H}_2\text{O}_2 \rightarrow \text{Fe}^{3+} + \text{H}_2\text{O}_2$
  - (C)  $\text{Fe}^{2+} + \text{H}_2\text{O}_2 \rightarrow \text{Fe}^{3+} + \text{H}_2\text{O} + \text{O}_2$
  - (D)  $\text{Fe}^{2+} + \text{H}_2\text{O}_2 \rightarrow \text{Fe}^{3+} + \text{H}_2\text{O} + \text{O}_2$
- (viii) Name the organism causing bacterial meningitis.
  - (A) *Streptococcus pneumoniae*
  - (B) *Neisseria meningitidis*
  - (C) *Haemophilus influenzae*
  - (D) *Listeria monocytogenes*