

(Affiliated to the Tamil Nadu Dr M.G.R Medical University, Chennai)

#### B. Sc. CARDIOPULMONARY PERFUSION CARE TECHNOLOGY

1401 – ANATOMY I YEAR

# UNIT I – ANATOMY OF BASIC OF ANATOMICAL TERMINOLOGIES AND BONY THORACIC CAGE

I. ELABORATE ON 10 MARKS

#### REFERENCE - THE TAMILNADU DR.M.G.R MEDICAL UNIVERSITY QUESTION PAPER

S.no	Questions	Reference	Bloom's Taxonomy
1	Describe the <b>Bony Thoracic Cage</b> in detail, including its components (sternum, ribs, vertebrae), the three classes of ribs, and its overall protective and respiratory functions.	August 2011	Analyze / Describe
2	Define <b>Anatomical Position</b> . Elaborate on all the primary <b>Directional Terms</b> (Superior/Inferior, Anterior/Posterior, Medial/Lateral, Proximal/Distal), giving a specific anatomical example for each pair.	November 2022	Describe / Apply
3	Discuss the <b>Classification of Ribs</b> (True, False, Floating) and detail the <b>characteristic features of a Typical Rib</b> , including its parts and articulations.	August 2012	Analyze / Describe
4	Explain the various Planes of the Human Body (Sagittal, Coronal, Transverse). Discuss how these planes are critically important for interpreting modern medical imaging techniques.	August 2015	Explain / Apply
5	Describe the <b>Sternum</b> (Breast Bone), detailing its three parts and their specific articulations. Write a note on the anatomical and clinical significance of the <b>Sternal Angle</b> .	August 2011	Describe / Analyze
6	Define <b>Body Cavities</b> . Describe the boundaries,	November	Describe /



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S.no	Questions	Reference	Bloom's Taxonomy
	subdivisions (e.g., Pleural, Pericardial, Mediastinum), and major contents of the <b>Thoracic Cavity</b> .	2022	Understand
7	Discuss the <b>Applied Anatomy</b> of the Thoracic Cage, covering clinical conditions such as Rib Fractures, Flail Chest, and the site for Bone Marrow Aspiration.	August 2012	Apply / Evaluate
8	Write an essay on the <b>Joints of the Thoracic Cage</b> , including their type and the movements they permit, especially during the process of respiration.	August 2015	Analyze / Describe
9	Define the <b>Intercostal Space</b> . Describe its boundaries and detailed contents (Intercostal muscles, vessels, and nerves).	August 2011	Describe / Understand
10	Differentiate between the <b>Atypical Ribs</b> (1st, 2nd, 11th, and 12th) and a <b>Typical Rib</b> . Explain the features that make them unique.	November 2022	Analyze / Differentiate

# WRITE NOTES ON 5 MARKS

## REFERENCE - THE TAMILNADU DR.M.G.R MEDICAL UNIVERSITY QUESTION PAPER

S.no	Questions	Reference	Bloom's Taxonomy
1	Write a note on the <b>Sternal Angle</b> (Angle of Louis) and list two anatomical structures located at this level.	August 2011	Understand
2	Explain the anatomical significance of the directional terms <b>Proximal</b> and <b>Distal</b> with	November 2022	Understand / Explain



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S.no	Questions	Reference	Bloom's Taxonomy
	reference to the limbs.		
3	Classify the 12 pairs of ribs into <b>True</b> , <b>False</b> , and <b>Floating Ribs</b> , giving the rib numbers for each group.	August 2012	Understand / Classify
4	Explain the key differences between the <b>Coronal</b> and <b>Transverse</b> planes of sectioning the body.	August 2015	Understand / Differentiate
5	Write a short note on the <b>Head and Tubercle</b> of a typical rib and their points of articulation with the vertebrae.	August 2011	Describe
6	Describe the concepts of <b>Superficial</b> and <b>Deep</b> in anatomical terminology, providing examples involving the skin, muscle, and bone.	November 2022	Explain / Apply
7	Enumerate the three layers of <b>Intercostal Muscles</b> and state their primary function in respiration.	August 2012	Understand / Enumerate
8	Define and provide examples for the terms  Ipsilateral and Contralateral.	August 2015	Understand / Define
9	Write a note on the <b>Costovertebral Joints</b> in the thoracic cage.	August 2011	Describe
10	Explain the <b>Anatomical Position</b> and why it is essential for anatomical descriptions.	November 2022	Understand / Explain



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S.no	Questions	Reference	Bloom's Taxonomy
1	Name the three main parts of the <b>Sternum</b> .	August 2011	Remember / List
2	Define the anatomical term <b>Posterior</b> (Dorsal).	November 2022	Remember / Define
3	List the three main bones that form the Bony Thoracic Cage.	August 2012	Remember / List
4	Define a <b>Coronal Plane</b> .	August 2015	Remember / Define
5	What is the difference between <b>Cranial</b> and <b>Caudal</b> ?	August 2011	Remember / Differentiate
6	Name the most inferior part of the sternum that is often cartilaginous in youth.	November 2022	Remember / Name
7	Define a <b>Transverse Plane</b> .	August 2012	Remember / Define
8	List three structures that run in the <b>Costal Groove</b> of a rib.	August 2015	Remember / List
9	Which vertebrae does the 1st rib articulate with?	August 2011	Remember / Recall
10	Define <b>Midsagittal Plane</b> .	November 2022	Remember / Define
11	What are <b>Floating Ribs</b> ? Give their numbers.	August 2012	Remember / Define
12	Name the bones that articulate with the <b>Manubrium</b> of the sternum.	August 2015	Remember / List



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S.no	Questions	Reference	Bloom's Taxonomy
13	Define the term <b>Lateral</b> .	August 2011	Remember / Define
14	Name the part of a typical rib found just lateral to the tubercle.	November 2022	Remember / Recall
15	State the anatomical significance of the <b>Jugular Notch</b> (Suprasternal Notch).	August 2012	Remember / State