



National Mock Exams 2024

POWERED BY **ExamSimulator**

BTEC Level 3 Sport and Exercise Science Unit 2 Functional Anatomy

Please read before distributing to students.

Purpose of this document

The questions contained within this document and the associated mark scheme are based on the data analysis performed by The EverLearner Ltd. Please note the following:

- We believe this paper has a very strong association with the actual external exam in 2024 in relation to command terms, skills, AO distribution, extended writing requirements and topics.
- However, this is categorically NOT a predicted paper. No one can accurately predict an exam paper and we make no claim to this end.
- It is vital that you only use this document internally in your school/college. Publishing the document online or sharing it in any other way is strictly prohibited as this will undermine the potentially educational experiences of students in other schools/colleges.
- Finally, please check the publication dates of the mark scheme and model answers for this paper as well as the associated revision session in May.

This paper contains:

- Questions in the format of the BTEC Level 3 Sport and Exercise Science Unit 2 Functional Anatomy exam
- Short-answer questions
- Extended writing

How should schools use these papers?

This paper has been constructed specifically for use as a mock exam but can be used less formally as a practice paper or model paper. The content and skills of the paper will be developed within the free-to-air revision sessions offered by James Simms on **Wednesday 1st of May 2024 at 15:00**.

All questions are available on ExamSimulator, where they can be practised multiple times in both online and printable format. ExamSimulator is a premium resource available via TheEverLearner.com and provides immediate diagnostics of student writing performance after every exam answer.

James Simms



Subject	Physical Education
Course	BTEC Level 3 Sport and Exercise Science: Unit 2 Functional Anatomy
Time allowed	1 hour 30 minutes

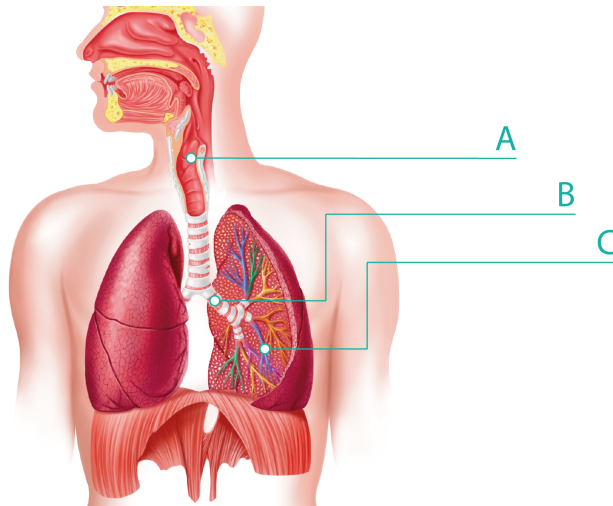
First name	
Last name	
Class	
Teacher	

Title	BTEC Level 3 Sport and Exercise Science - Unit 2 Functional Anatomy - National Mock Exam Summer 2024
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Guidance	<ul style="list-style-type: none">• This paper is marked out of 60 marks.• You have 90 minutes (plus additional time for those who have Exam Access Arrangements).• Answer all questions.• A calculator is permitted for this exam.• This paper contains two 8-mark questions and one 14-mark question.• Good luck.
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Total marks	60
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1. Look at the image of the respiratory system.
Identify the components labelled A, B and C.



A: _____
B: _____
C: _____

Marks: [3]

2. Describe the role of the **internal** intercostal muscles during **expiration**.

Marks: [3]

3. State **one** function of the tricuspid valve.

The function is: _____

Marks: [1]

4. State **one** function of the pulmonary artery.

The function is:

Marks: [1]

5. Describe protraction of a joint.

.....
.....
.....
.....
.....

Marks: [2]

6. State **two** types of movement at the hip when moving along the frontal plane.

Movement 1:

Movement 2:

Marks: [2]

7. Review the image of a squat.

Explain the type of muscle contraction in the **quadriceps** when moving to position **B**.



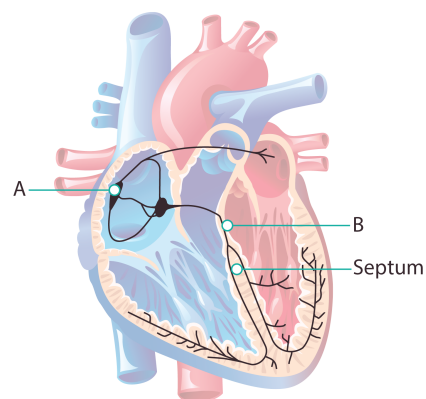
Type of contraction: _____

Explanation: _____

Marks: **[3]**

8. Look at the image of the cardiac cycle.

Identify the components labelled A and B.



A: _____

B: _____

Marks: **[2]**

9. Describe the role of the Purkinje fibres during the cardiac cycle.

Purkinje fibres _____

Marks: [3]

10. Review the table. Identify A and B.

Lung volumes during exercise

Lung volume	Description	Response to exercise
Tidal volume	Amount of air inspired and expired per breath	A
Residual volume	B	Remains the same

A: _____

B: _____

Marks: [2]

11. State one reason why residual volume remains constant during exercise.

Marks: [1]

12. Protection is a function of the skeletal system.

Explain why protection is necessary in rugby.



Marks: **[3]**

13. Explain why type IIx **and** type IIa muscle fibres are recruited in a 400m sprint race.

Shelley



Sport: 400m sprint
Age: 18
Level: 
Intensity: 9/10
Duration (min): <1
Injury: 8/10 (ITBS)
Competitive orientation: 10/10

Type IIx: _____

Type IIa: _____

Marks: **[4]**

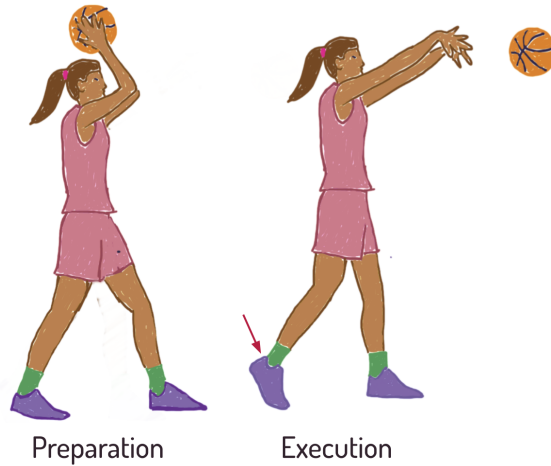
15. Review the image of an athlete completing an overhead pass.

Analyse how the axial and appendicular **skeletons** allow the movement necessary at the:

-Elbows

-Wrists

-Right ankle to move from preparation to execution



Elbows: _____

Wrists: _____

Right ankle: _____

Marks: **[8]**

16. Review the image of a deadlift.

Analyse the required movement necessary at the:

-Trunk

-Hips

-Knees for the athlete to move from preparation to execution



Trunk: _____

Hips: _____

Knees: _____

Marks: **[14]**