

Candidate Marks Report

Series : 6 2018

This candidate's script has been assessed using On-Screen Marking. The marks are therefore not shown on the script itself, but are summarised in the table below.

Centre No :	Assessment Code :	J587
Candidate No :	Component Code :	01
Candidate Name :		

Total Marks : **25 / 60**

In the table below 'Total Mark' records the mark scored by this candidate.
'Max Mark' records the Maximum Mark available for the question.

Paper:	J587/01
Paper	25 / 60
Total:	
Question	Total / Max Mark Mark
1	1 / 2
2	0 / 1
3	0 / 1
4	0 / 2
5	0 / 2
6	1 / 1
7i	1 / 1
7ii	0 / 1
8	0 / 2
9	2 / 3
10	1 / 1
11a	1 / 1
11b	1 / 1
12	1 / 2
13	0 / 1
14	0 / 1
15	0 / 1
16	1 / 1
17	2 / 2
18	0 / 1
19	1 / 1
20	1 / 1
21a	0 / 5
21bi	0 / 1
21bii	3 / 4
22a	2 / 4
22b	2 / 6
23a	2 / 3
23b	0 / 4
23c	2 / 3

Section A

Answer all the questions.

- 1 Describe the function of alveoli.

The function of the alveoli is to gaseous exchange where oxygen and carbon dioxide exchange.



[2]

- 2 Fig. 1 below shows a diagram of the heart.

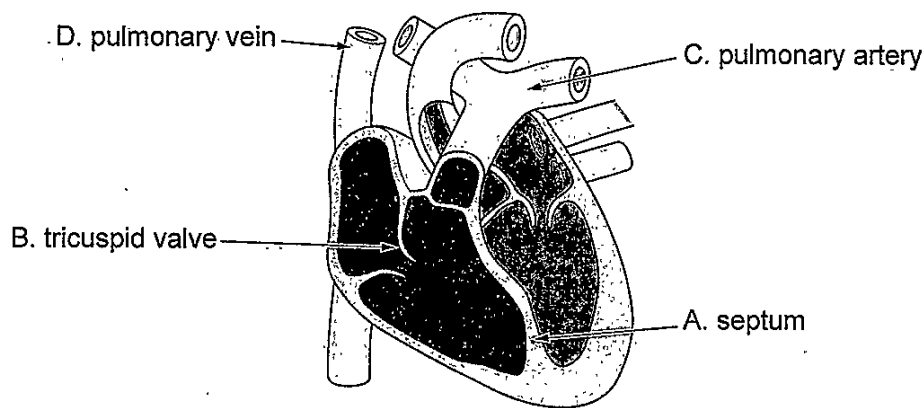


Fig. 1

Identify the part of the heart that is labelled incorrectly in Fig. 1.

B - Tricuspid valve



[1]

- 3 Give a definition of a synovial joint.

Hinge joint



[1]

- 4 A rugby player will use their shoulder joint when making a tackle.

Name the **two** articulating bones in the shoulder joint that are at risk of injury during a rugby tackle.

1. Deltoid



2. Laminar dors?



[2]



- 5 Reversibility is a principle of training.

Using a practical example, explain what is meant by the term 'reversibility'.

Reversibility is where you get an injury and it takes a long period of time without training. For example a football player who has been injured will have to train again. [2]

- 6 Which **one** of the following shows the correct distances for the multi-stage fitness test and the test for speed?

Put a tick (✓) in the box next to the correct answer.

- A 30 m for the multi-stage fitness and 25 m for the speed test
 B 20 m for the multi-stage fitness and 25 yards for the speed test
 C 20 m for the multi-stage fitness and 30 m for the speed test
 D 30 m for the multi-stage fitness and 30 yards for the speed test

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[1]

- 7 Fig. 2 shows a diagram of the lower leg.

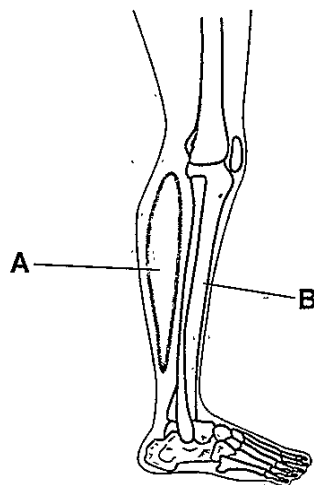


Fig. 2

Identify muscle A and bone B.

- (i) Muscle A: Gastrocnemius [1]
 (ii) Bone B: Tibula [1]



8 Identify two potential hazards in a swimming pool.

- 1. Drowning
 - 2. Slipping TV
- [2]

9 Using practical examples, explain the difference between the transverse and longitudinal axes of rotation.

longitudinal axes of rotation is a line from head to toes SKEN. Transverse is a rotation that is in front of you FU. A practical example of a transverse rotation could be bicep curls.

[3]

10 Give a practical example where aerobic endurance is important in sport.

long distance running

[1]

11. (a) Circuit training is a training method that consists of a series of exercise stations.

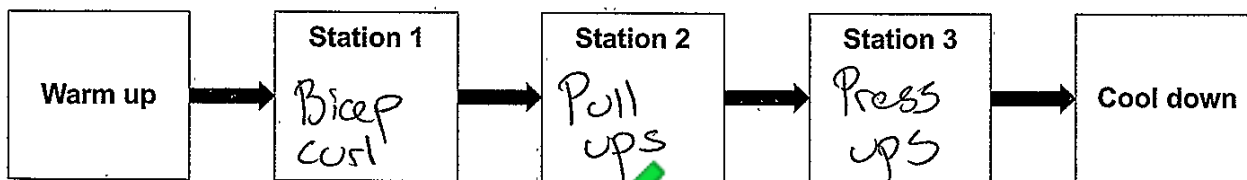
Describe one other feature of circuit training.

Timed ~~training~~ at each station

[1]

(b) Design a simple circuit training session to overload the upper body by completing the diagram below, placing one of the named exercises in each station.

- | | | | | | |
|---------------|--------|--------|-------------|------------|----------|
| Bicep curls ✓ | Lunges | Squats | Press ups ✓ | Pull ups ✓ | Step ups |
|---------------|--------|--------|-------------|------------|----------|



[1]



12 Cartilage plays an important role in the skeletal system.

Assess how cartilage helps a marathon runner during performance.

Stops the two knee bones from rubbing against each other.



[2]

13 Which class of lever will a weightlifter be using when performing a bicep curl?

First class



[1]

14 The performer in Fig. 3 below has performed a movement that has passed through the frontal plane.

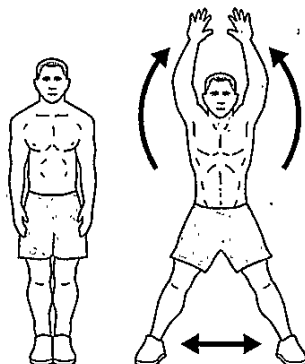


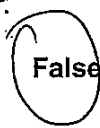
Fig. 3

Is this statement true or false? Draw a circle around your answer.

True



False



[1]

15 Which one of the following statements is false?

Put a tick (✓) in the box next to the correct answer.

- A Fixators help stabilise a joint and prevent unnecessary movement
- B Most lever systems in the body are 3rd class
- C A common hazard in rugby is concussion
- D Fartlek training improves speed and endurance



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<input type="checkbox"/>
<input type="checkbox"/>

[1]

Turn over



16 Fig. 4 shows a diagram that highlights one plane of movement.

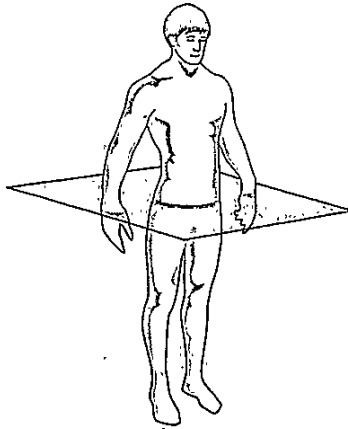


Fig. 4

Name the movement plane highlighted in Fig. 4 above.

Transverse ✓ [1]

17 Describe a suitable cool down for a dancer.

A dancer's suitable cool down for a dancer would be stretching. ✓
 Drinking water and slow walking movement will help to cool down. ✓ [2]

18 Give a practical example of how an appropriate level of competition can prevent injury to a performer in a sport or physical activity.

Before playing a football match you would all warm up to prevent injury. ✗ [1]



19 Fig. 5 shows a picture of the foot of a long jumper taking off.

Label Arrows A and B to correctly identify the components of this lever system.

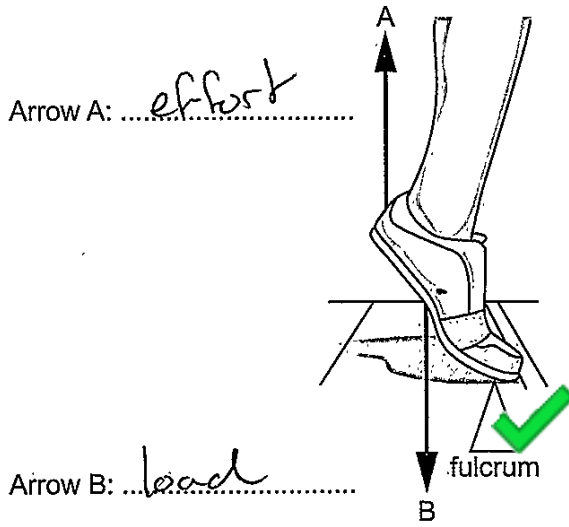


Fig. 5

[1]

20 The human heart is part of a single-circulatory system.

Is this statement true or false? Draw a circle around your answer.

True

False

[1]



Section B

Answer all the questions.

- 21 (a) Explain the short term effects on the heart and the blood of a swimmer performing a 100m front crawl.

The heart will be pumping very quickly, circulating blood around the body quickly. The recovery rate will also improve. Blood will be pumped to the working muscles. Cardiovascular fitness will also improve. Stroke volume will improve.

[5]

- (b) A swimmer who undergoes a six month training programme will experience muscular hypertrophy.

- (i) What is meant by the term 'muscular hypertrophy'?

where it slows you down.

[1]

- (ii) Describe other muscular benefits the six month training programme might have for the swimmer.

- Doing this programme will improve the strength of the swimmer.

- This programme will help the swimmer's

cardiovascular endurance.

- less risk of injuries.

- Recovery rate will be improved.

[4]



22. (a) Reaction time and speed are important fitness components required for a 100 m sprinter.

Define the fitness components of reaction time and speed and explain their importance to a 100 m sprinter.

A 100m sprinter will need reaction time because they need to hear and react to the starting shot, giving them a quick advantage.

A 100m sprinter would need speed in order to run fast and win the race.

[4]



(b)* Before an athlete participates in a sprint they will complete a warm up to prepare their body and mind for the race.

Using practical examples, describe the components of a warm up and evaluate the different mental preparation techniques that could be used to fully prepare the athlete for the race.

A sprinter would warm up by starting off with a pulse raiser, for example a short jog between cones. They would then go on to do some stretches in order to help prevent injuries. For example stretching hamstrings before performing a 100m sprint.

A sprinter would need to also use mental preparation before their performance. This is to mentally prepare them for the sprint. So for example a 100m sprinter could mentally picture what the sprint is going to be like step by step.

..11..

[6]



23 Fig. 6 below shows the respiratory rate for two hockey players before, during and after a match.

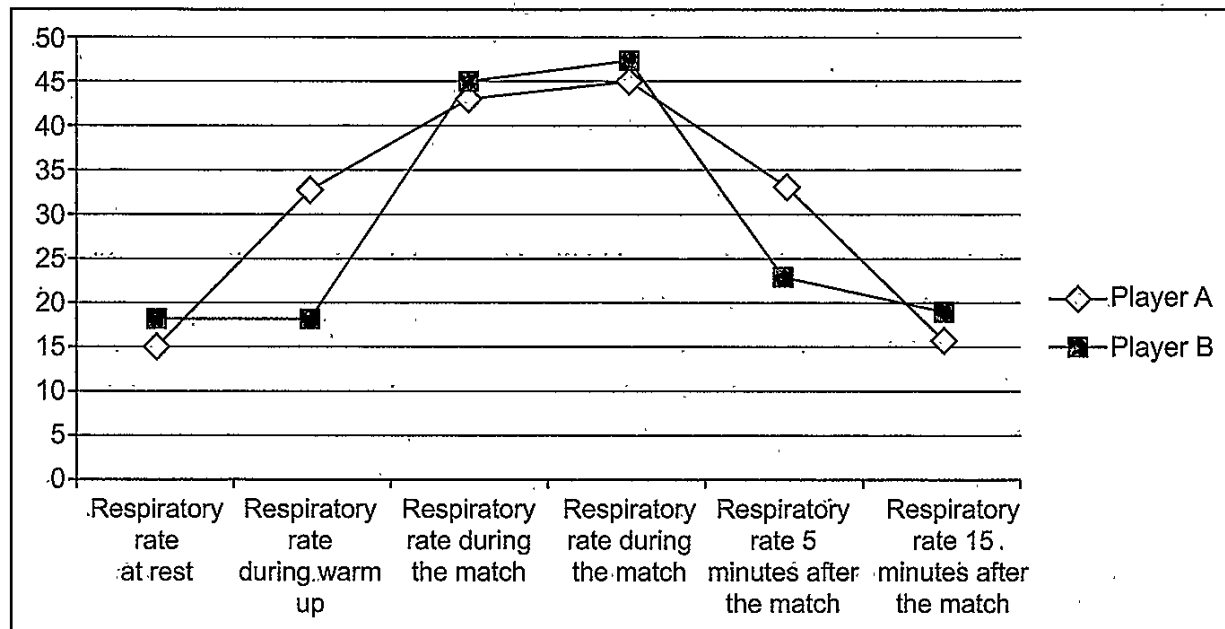


Fig. 6

- (a) Using the information in Fig. 6, analyse how the two players' respiratory rates compare and why they may be different.

Player A's heart rate increased quickly during the warm up, whereas player B's didn't. Player A has a slightly better heart rate during the match as it stays lower than player B. This means he is fitter. Player B's heart rate drops quickly 15 mins after the match. Their heart rates are different because they play in different positions. Player B may be a striker. [3]



- (b) Explain the role of respiratory muscles during inspiration while player A is performing in the hockey match.

The role of the respiratory muscles during player A's performance is to inspire because the diaphragm goes up and the ribs go in. This helps him to breathe during his performance.

[4]

- (c) Analyse the effects that lactic acid could have on the performance and recovery of the hockey players.

Lactic acid will cause muscle fatigue and you will feel more soreness after the performance. Lactic acid will slow down the hockey player during the performance.

[3]

END OF QUESTION PAPER



ADDITIONAL ANSWER SPACE

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).

BP



BP



BP



Area with horizontal dotted lines for writing.



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SEEN

<i>To be completed by the examiner or moderator</i>		
I have read the scribe's cover sheet.		
I have marked the script/moderated the candidate's work in accordance with the instructions given.		
Comments: (if appropriate) for awarding body attention		
Examiner/Moderator		Date
Name: (Please print)	SEEN	
Signature		

SEEN

Notes on the completion of the Scribe cover sheet

Centre:

- **Examination scripts:** the form **must** be completed and placed inside the candidate's completed script when handwritten. Where the candidate's completed script has been typed, please refer to the relevant awarding body's instructions.
- **Non-examination assessment:** the form **must** be completed and securely attached to the front of the work. The work **must** be sent to the moderator in addition to the sample requested.
- The script/non-examination assessment **must** be produced in accordance with the regulations in **Chapter 5, section 5.7 of the JCQ publication *Access Arrangements and Reasonable Adjustments***. Failure to comply **may** constitute malpractice which could lead to the **disqualification of the candidate**.
- The information required in the boxes on the form **must** be correct and complete.
- In the box marked **Comments** please indicate whether any problems were experienced with the production of the script, which should be drawn to the attention of the examiner.
- The form **must** be signed by the scribe and countersigned by the head of centre/examinations officer in order for the candidate's work to be accepted.

Scribe:

During the examination or the production of non-examination assessment, a scribe:

- **must** write or type accurately, and at a reasonable speed, what the candidate has said;
- **must** draw or add to maps, diagrams and graphs strictly in accordance with the candidate's instructions, **unless the candidate is taking a design paper, in which case a scribe will only be permitted to assist with the written parts of the paper;**
- **must** abide by the regulations since failure to do so could lead to the disqualification of the candidate;
- **must** write or word process a correction on a typescript or Braille sheet if requested to do so by the candidate;
- **must** immediately refer any problems in communication during the examination to the invigilator or examinations officer;
- **must not** give factual help to the candidate or indicate when the answer is complete;
- **must not** advise the candidate on which questions to do, when to move on to the next question, or the order in which questions should be answered;
- **may**, at the candidate's request, read back what has been recorded.

N.B. Where an application for the use of a scribe is processed using *Access arrangements online*, the centre must generate a pre-populated scribe cover sheet. In such circumstances, the completed scribe cover sheet is the only document which needs to accompany the candidate's script/non-examination assessment.

SEEN

Off Page Comments

Item Name	Comment
9	Twisting awarded for longitudinal example Point 3.
21a	TV for pumping very quickly as needs to state increase. Blood pumped to working muscles = TV as needs to state MORE Stroke volume will improve = TV as this is linked to a long term effect.0
23c	Sub-max reached for performance so no mark awarded for 'slow down the hockey player during the performance' as Point 3. Answer must relate to both performance and recovery for maximum marks.
23a	Despite talking about heart rate, there is some analysis of the graph that has been positively marked.
7ii	Do not accept tibula as stated in guidance in MS.