

2001 HIGHER SCHOOL CERTIFICATE EXAMINATION  
Personal Development, Health  
and Physical Education

Section I – Part B (continued)

In your answers you will be assessed on how well you:

- demonstrate an understanding of health and physical activity concepts
- apply the skills of critical thinking and analysis
- illustrate your answer with relevant examples
- present ideas in a clear and logical way

Marks

Question 22 — Factors Affecting Performance (20 marks)

- (a) Describe how an athlete's level of arousal affects performance.

4

If an athlete is too aroused this may cause tension in the body which can affect performance slightly or dramatically. If a runner's arousal levels are high this may cause tension that will affect their start which may be the difference is the race. Also a golfer if their arousal levels are too high might tend to grip the club too tight and miss putts or miss greens and fairways that count the most.

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Question 22 (continued)

- (b) Discuss how prescribed judging criteria are used to measure the quality of a performance.

6

Prescribed judging criteria are used to give an accurate measure of performance, performed by an athlete. The criteria is used to give the judges a list of what is required to the quality of the performance done by an athlete. Sports that usually require these prescribed criteria are gymnasts and divers.

Gymnast's judges get this criteria to make sure they do the routine in full and the criteria also allows the judges to judge on the performance and to get an accurate ~~and~~ score which is in contrast to the other judges.

A diver might need criteria to judge on the take off and to accurately judge on the entry of the water to get a good idea of the performer's mark. They might also need this criteria to judge on the difficulty of the dive.

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## Question 22 (continued)

- (c) Analyse the physiological adaptations that occur when an untrained individual undertakes a 20-week aerobic training program.

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When an untrained individual undertakes a 20 week training program there are a lot of physical adaptations that the body will undergo during this period.

Firstly the individual will be required to fill in a form that asks questions about age, any recent physical activity or any past injuries etc. This will give the supervisor a glimpse of where the individual is up to.

During this twenty week period the athlete will experience a lot of muscle pain during the first few weeks. This can be minimised by warming up and cooling down to release the build up of lactic acid. After a few weeks the muscles will start to adapt to these training sessions and will start to get use to it.

Question 22 continues on page 16

Question 22 (continued)

After these few weeks the body will adapt to this training and to improve on the fitness would need to bring into account 'progressive overload'. This will increase the tolerance of the exercise on the body and will enable the body to be up to this standard.

The body will also have to adapt to the strain and pressure on the joints. Proper stretching might also minimise these aches and pains but after 2 or 3 weeks the body will also adapt to these pains. The body will also have to get use to the intake of fluids that would be required to take on such a program.

The individual must start off at slow short sessions to get used to these kinds of sessions.

End of Question 22