

# 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.

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An athletes level of arousal can be described using the inverted U hypothesis a <sup>b</sup> c where a is an athlete who is 'not on the ball' so to speak which effects performance by the athlete seeming to be a bit 'flat' point b is the optimal arousal point where every athlete aims, ~~letta~~ <sup>here the</sup> athlete is quick to reacte with there mind on the job, the level can be reached with method such as mental rehearsal. Point c is the overarousal point where the athlete becomes agresive this is a disadvantage because the athletes mind may waver from the game, just concentrating on when to 'belt' an opponent.

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## Question 22 (continued)

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

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Prescribed judging criteria are a relatively consistent way to measure the quality of an athlete's performance. Judges are given a prescribed set of criteria before each event. Examples might be the quality of tuck or straightness of entry in diving, and although some interpretation is still necessary, events with a prescribed judging criteria generally have closer even scores between judges.

Prescribed criteria is used to measure quality of performance as it breaks down each section and scores points for tiny little things, but it can also deduct for small little things. Diving and dancing are sports where this is used and judges with the prescribed routines in front of them judges mark down every thing from the timing to straightness and various other things. Because of the quality of the judging picking up and checking every little thing it is almost impossible for someone to achieve a perfect score in a event judged like this.

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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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The immediate physiological adaptations for the ~~first~~ <sup>or</sup> first session during the sessions will be an increase in heart rate and increase in stroke volume, sweating and an increase in cardiac output, after the first 3-4 weeks the body would have already started to adapt ~~the~~ possibly the only effect the individual will notice is a increased feeling of happiness with increased energy and it won't be so hard to do day to day jobs anymore. But ~~the~~ here body's resting heart rate would have slightly dropped.

For the next 6-8 weeks during the exercise it will seem easier unless the instructor uses the progressive overload principle of training, which you would assume they would, so know during the heart rate would still climb and would still have to be <sup>over</sup> within 60% of the maximum heart rate for the individual to get ~~and~~ any ~~and~~ advantage out of it. After the classes

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Question 22 (continued)

She would have more increased energy and maybe a weight loss considering diet was right and signs of an general toning of the body. Resting HR may have dropped considerably since first starting.

For the next 12-16 weeks during the class, would have to be a reasonably intensive workout, now increases in heart rate and stroke volume wouldn't be as significant as when she first began training, at home or after training ~~the~~ <sup>her</sup> body would look noticeably tighter than it did before she started to train also providing that she ate well, she would have considerable energy so as she would be reasonably fit.

During the last ~~for~~ 4 weeks of the course the activities would be very hectic with the body having adapted to these changes. The benefits now wouldn't be ~~to continue to get~~ <sup>as great</sup> as she started, with a increase in heart rate during exercise but not as significant as when they first started training, the resting heart rate would be significantly lower than when she first started. With all the adaptations having taken place it's important to continue training so the reversibility principle doesn't take over and all the hard work is lost.

End of Question 22