Please write your NAME and your MEG grade below.

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| **Name :** | **MEG :** |
| **Total** |  **/26**  | **%** |  | **Grade**  |  |
| **Staff Comments :** **+****-** |
| **Student Comments :**  |

**Please make sure that you :**

* Read the question repeatedly & INTERPRET IT correctly (verb (s) to tell you HOW to write; general topic are, the specific things within that area to be included); how many parts of the question are there; how many marks are available.
* Write clearly so work can be read! Write within the boxes (the summer papers are marked online and content outside boxes cannot be read!).
* IF you have time to, read through your work to check for content and quality.
1. **The volume of blood pumped around the body by the heart varies according to the intensity of exercise performed. Define stroke volume and give a resting value for the average adult. (2 marks)**

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1. **Cardiac output increases during physical exercise. Explain how intrinsic control mechanisms cause cardiac output to increase during exercise. (5 marks)**

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1. **Describe the changes that occur in the distribution of cardiac output as a performer moves from rest to exercise. Explain how the vasomotor centre controls this distribution. (5 marks)**

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1. **During the training run blood needs to be diverted away from nonessential organs to the working muscles. Explain how the vasomotor centre controls this distribution. [3 marks]**

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1. **A long distance runner completes a 60 minute sub-maximal training run. A cool down has a number of effects on the vascular system which aid the performer. One effect is the prevention of blood pooling. Identify other effects. [2 marks]**

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1. The performer has moved from an anatomical position into the frontal raise. (4)

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| Joint  | Joint Type  | Movement  | Agonist  | Antagonist  |
| **Hip**  |  |  |  |  |

1. The gymnast in the figure above must keep his shoulders in a fixed position. Name **two** muscles in the rotator cuff group which aid the stability of the shoulder joint.  **(2)**

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1. Flexibility training is an important component of a training programme.

 PNF is one type of flexibility training. Describe PNF stretching.

 **[3 Marks]**

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