



## BRITISH GYMNASTICS

### COMMON CORE THEORY LEVEL 4 SENIOR COACH SAMPLE PAPER

**Instructions to Candidates:**

- There will be 90 minutes to complete this paper
- You must answer all questions (approximately 15 minutes per question)
- There will be 6 questions only, 7 are given here to cover all aspects.
- A sample answer paper is attached.
- If a question asks for 3 qualities, give 3 and not 4 or 5.

<b>Total Marks Available: 60</b>		<b>Pass Mark: 36 ( 60%)</b>	<b>MARK</b>
<b>1.</b>	<p><b>THE COACHING PROCESS</b> List 3 qualities that you have learnt through the coaching process and can pass on to your gymnasts. Discuss the importance of these in their future life.</p>		<b>10</b>
<b>2.</b>	<p><b>ANATOMY</b> a. What do you understand by the term lordosis? b. Explain how this can be detrimental to gymnastics. c. Give an example of a basic action where real harm can be done when this condition is found in a gymnast.</p>		<b>10</b>
<b>3.</b>	<p><b>STRENGTH AND ENDURANCE TRAINING</b> Give a guide which indicates the number of repetitions and loading for each of the following:- Muscle endurance; power; maximum strength Take one of these strengths and explain its importance in gymnastics.</p>		<b>10</b>
<b>4.</b>	<p><b>SPORTS PSYCHOLOGY</b> a. What do understand by the term 'feed back'? Show how it can be used in the 3 stages of learning. b. When faced with a poor performance show how feed back can be made positive.</p>		<b>10</b>
<b>5.</b>	<p><b>PLANNING THE TRAINING</b> A gymnast is constantly crying through lack of achievement. a. Explain the possible causes and b. how effective planning of the training programme can help to eliminate this.</p>		<b>10</b>
<b>6.</b>	<p><b>PREVENTION AND MANAGEMENT OF INJURIES</b> Some gymnasts working at a high level can occur 'overuse' injuries. Using a condition of your choice explain how some of the problems can be lessened.</p>		<b>10</b>
<b>7.</b>	<p><b>FLEXIBILTY TRAINING</b> Explain the terms below &amp; outline the use of each. a. Ballistic stretching b. Passive stretching c. Active stretching</p>		

### THE COACHING PROCESS

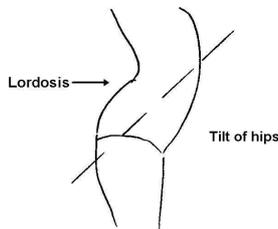
**Q1. List 3 qualities that you have learnt through the coaching process  
Discuss how these qualities can be illustrated in the coaching situation**

1. Fairness. When teaching children the coach can demonstrate fairness by the amount of time spent coaching each child. If a coach spends more time with one or several gymnasts the others will feel as though they are not valued and therefore are not treated fairly. Fairness can also be demonstrated in the way that you discipline the gymnasts. All should be treated in the same fashion for the same behaviour.
2. Consistency There is nothing worse than letting children down. If you say you are going to do a certain thing then this needs to be carried out; you promise them a reward for achieving a task so this must be honoured. Always set the same standards, don't have one standard for one gymnast and something less for another.
3. Athlete centred. Any reaction made to gymnast's behaviour must be done with knowledge of the circumstances. It may be that a gymnast has just had an upset at home; their favourite dog has died. Hopefully you will be made aware of this so whilst you may reprimand the gymnast for certain behaviour you may be better using a quiet approach.

**ANATOMY**

- a. What do you understand by the term lordosis?
- b. Explain how this can be detrimental to gymnastics.
- c. Give an example of a basic action where real harm can be done when this condition is found in a gymnast.

a. Lordosis is an extreme curve of the lower back and is as a result of the hips tilted forwards. This is often common in young girls and is caused by weak or non education of the abdominal muscles.



b. This condition creates a very unstable part of the body. When the lower limbs and upper body are moved particularly when under stress the limbs need to arise from a stable base. Lordosis does not provide this.

c. When landing the lordosis condition can cause harm to the lumbar region. As the gymnast lands the impact is taken through the legs. The impact will be absorbed through the flexing of the ankles, knees and hips but if the back is in this extreme curve then some of the impact will go beyond the hips causing the hips to tilt even more. This result can often hurt or damage the back.. With the hips tilted in the correct manner the impact is absorbed by the body provided that the core strength is good.

**3. Give a guide which indicates the number of repetitions and loading for each of the following:-**

**a. Muscle endurance; power; maximum strength**

**b. Take one of these strengths and explain its importance in gymnastics.**

The chart below gives a guide

	Muscle endurance	Power	Maximum strength
% max load	25 – 50	50- 80	80 - 100
Number of reps	Up to 20	Approx 10	1 - 6
Number of sets	5	4	3.

b. Muscle endurance

The ability to work for a long period of time with a minimum load is vitally important to the training of a gymnast. With training times ranging from 2 -3 hours the gymnast must have the ability to make effective use of this time. There must also be the ability to train in a similar fashion the next day or even at a 2<sup>nd</sup> training in the same day.

The other reason for the need for endurance is so that the gymnast can complete a routine without tiring. With many routines last 1 min to 2 mins gymnast must be able to keep going without showing any signs of stress. If the gymnast becomes stressed half way through the routine his/ her techniques will break down; the gymnast incurs deductions and there is a strong possibility of injury.

**4. a. What do understand by the term ‘feed back’? b. Show how it can be used in the 3 stages of learning.**

Feed back is the reaction that a coach makes to his/her gymnast after a performance/ attempt at skill or activity. After the performance the coach must consider carefully before feeding back to the gymnast. A snap reaction to a performance may have a negative effect. The usual form of feed back is verbal; the gymnast does a skill and the coach can respond by saying good or making some comment about the performance. The comment should be positive; picking out something good about the performance; bad aspects may need to be highlighted. The coach must go through the process; what did I see, what needs to change and how should I share this with the gymnast?

Feed back can also be given by the coach’s reaction, he/she smiles or makes a thumbs up sign as a positive reaction or could turn away as a negative reaction.

b. In the early stages of learning a skill the coach should or may give feedback in the following way:

the coach comments quite often but only bringing 1 aspect to their attention of the gymnast, too many corrections and the gymnast will become confused. The coach must also build on what has been corrected; not jump from one aspect to another. In the middle stages the comments will be less frequent, possible waiting till several attempts have been performed. This is a time when the gymnast has a certain understanding of the skill but is still trying to work it out for him/herself.

c. In the final stages of the skill learning comments will be far less frequent and will possibly be comments concerning the fine tuning of the skill, perhaps something concerned with aesthetics or performance to an audience.

**5. A gymnast is constantly crying during training. He/she has no home problems.**

**a. Explain the possible causes and b. how effective planning of the training programme can help to eliminate this.**

a. If a gymnast is underachieving then he/she can become frustrated. The gymnast does not know how to cope and is possible not getting any help from the coach. If a gymnast is put under pressure then there could be some reaction. It may be that the skills he/she is attempting are too difficult for the gymnast at this stage. Pressure can also be caused by the close proximity of a competition and the gymnast not being ready for this. Another possibility is that the gymnast is scared of the skills that he/she is meant to be learning. There is also the possibility that the coach is too aggressive in their manner and is not coaxing the gymnast through the difficult times in training.

b. With effective planning manner of problems could be resolved. Review the content of the training, re adjust goals and possibly take gymnast back to earlier progressions and return to basics.

If the coach then sits down and goes through the programme and maps out the stages of development progress can be made. Physical preparation can be done in the early stages followed by skill learning of an appropriate level. If the coach actually looks to see what level the gymnast can achieve within the time span then the coach can work back from this and prepare fitness and skill training leading on to routine training. This formulated plan may also relax the coach and prevent him/her being aggressive during training which probably stemmed from their own stressed state.

**6. Some gymnasts working at a high level can develop 'overuse' injuries. Using a condition of your choice explain how some of the problems can be lessened.**

*2 examples given here. You would not get any extra marks by giving 2 examples.*

Severs is an overuse injury occurring at the base of the Achilles tendon with the attachment to the heel bone.

With any type of injury prevention is better than cure. So to try and avoid the problem make sure that the gymnast always warms up sufficiently including the stretching of the Achilles tendon. Also make sure that the alignment of the Achilles tendon is straight; this will not be the case if the gymnast has rolling ankles etc.

Make sure that during training time not too much time is spent on the feet. This may be difficult with some disciplines but perhaps floor work can be mixed with physical preparation or some dance work where loading is not so great.

If your gymnast does have severs then rest is important but work can still be done using different parts of the body, bars if artistic as well as lots of physical prep.

Osgood Schlatter

This often occurs in growing boys mostly around the 12 -14 years. This is a pulling away of the bone just below the knee at the attachment of the quadriceps.

This is caused by high impact or overuse of the quadriceps muscle.

Rest is important although if not too bad it can be worked through to certain degree although some skills may need to be avoided. Avoid plyometric activities; take off for somersaults as well as plyometric training. As with severs the gymnast can work on different activities using upper body, thus resting lower body. Perhaps change the timing of training programmes; sessions where loading on the legs is pre dominant could be shortened.

**7. Explain the terms below & outline the use of each.**

**a. Ballistic stretching**

**b. Passive stretching**

**c. Active stretching**

a. Ballistic stretching. Here the gymnast uses rhythmical bouncing type activities to stretch the limbs. An example of this is leg swings. With an untrained gymnast/child this action could present a problem but with the trained gymnast this type of activity can be good for warm up and for increasing muscle tone. It does however mean that the stretch reflex will come into action at the end of the swing to stop the gymnast hurting his or herself. However this type of activity could still cause a problem if the gymnast is not warmed up sufficiently or tries to work to an extreme.

b. Passive stretching

Here the gymnast puts herself at the full range of movement. This could be straddle sit. The gymnast needs to experience a slight pain and then stay in this position for 30 seconds or more to gain any more stretch. This stretch is normally achieved by the force of gravity working on the body as would be the case with splits. It can also be achieved by a partner or coach pushing against one leg to achieve a greater split. Again the stretch needs to be maintained for 30 seconds. This can be a problem if the partner is too extreme so care needs to be taken. Passive stretching is very important as if it produces good range of movement it does mean that any muscular work needed for say holding a leg to the face will be minimal as the hamstrings could still be fairly relaxed and not pulling the leg downwards.

Active stretching.

This leads on from passive stretching. If the gymnasts' range of movement is good to such an extent that the leg can be swung through 180 deg then the only stage left is for the gymnast to be able to hold the leg in this position. This is active stretching, where the leg is raised and is either rested against apparatus or the coach but then the gymnast tries to lift the leg off the apparatus and hold the leg in this position.