Physical Education

Written Assignment: Softball

Part One:

- 1. Explain the correct defensive play in the following situations:
- a) Runner on third base, one out, hard ground ball hit to third baseman. Third baseman will field the ball and tag the runner trying to get home, or throw the ball to the catcher stopping him from being able to make it home safe.
- b) Runner on third base, two out, hard ground ball hit to third baseman. Third base will field the ball and throw it to first baseman in an attempt to get the man running to first out. This is the most likely play because there are two out already and by getting the runner heading to first out it will be side away and the man on third heading home will not be able to score.
- c) Runner on first base, none out, hard ground ball hit to short-stop. Short stop will field the ball will field the ball and throw it to second baseman who will touch the plate to get first out, because the runner on first is being forced to run. Second baseman will then throw the ball to first baseman in attempt to get out the runner heading for first. If both runners get out this would be called a double play.
- d) Runners on first and third bases, one out, easy fly-ball to shallow left field. Left field will catch the ball; the runners will more than likely hold the bases.
- e) Runner on first base, long hit past right fielder. Right field will field the ball.
 - 2. It is the bottom of the last innings, and the fielding side is one run up. One batter is out, and there are runners on first and third bases. The next two batters up are the number 9 and number 1. The fielding side must win to make the finals. Describe the tactics of the batting side for the rest of the innings.

The runner on first base can draw the play by attempting to steal a base; this could then give the opportunity for the runner on third to get home. This would level the scores, even though they are sacrificing the runner on first. If the fielding side choose to throw the ball to home base, the runner heading home may return safely to third, while the runner on first will have time to steal a base and move to second. This means that when number 9 steps up to bat there is no force run because the man that was on first is either out, or on second. The number nine batter will more than likely bunt the ball and make first. From here the batting side will rely on the number one batter to win the game for them.

Fast Pitch Only

3. Explain how a team would defend a bunt, with a runner on first base and one out.

Third baseman would move closer to the batter before the ball was pitched. He would then field the bunt and throw to second and get the runner coming from first out forced. The ball is thrown to second because they want to get the man closest to home base out first.

PART TWO

Section Three: Applied Exercise Physiology

a) Identify three major components of fitness required for successful performance in softball. Explain why each is important.

Anaerobic Fitness

This type of fitness where energy is supplied to the muscles depends heavily on the lactic acid system, to put body parts into motion quickly and sustain high intensity efforts for short periods of time. In softball this component of fitness is important because batsman must move quickly between bases and fielders must move quickly to field the ball.

Muscular Endurance

Muscular Endurance is the ability to work a group of muscles for long periods of time using sub maximal effort. It is important to have Muscular Endurance in softball to repeatedly throw the softball in the field, pitch if you're the pitcher and swing the bat every time you try to hit the ball when you step up to bat.

Agility

Good agility is the ability to change the position of the body quickly and precisely. This is important in softball for reacting to the direction that the batter my hit a hard ground ball. As a batsman you need to be able to turn quickly at each base as you head around the diamond. As a fielder you need to be able to bend down to pick up the ball, turn towards the appropriate base and throw the ball all in the same quick motion.

b) For each component of fitness identified in a) above, select a training method which would be most suitable to develop that component. Explain in detail, what is involved in each training method. (i.e. appropriate exercises, time, work intervals, distances, load etc.)

Training for Anaerobic Fitness

Short Interval Training

This training method allows high intensity work to be performed without the fatigue associated with a continuous session of equal intensity. This method helps the athlete improve there maximum intensity level at a duration of 0-15 seconds. An athlete may

choose to run 60m in interval training, for best results he would do this ten times, taking him 8 seconds each time. He would require a 90 second break between each sprint to perform at maximum capacity without suffering from fatigue. This type of training may be performed a few times a week for a long period of time. This in turn will enable the athlete to increase his or her short distance anaerobic ability for softball.

Training for Muscular Endurance

Isokinetic weight training

This method of training gives the athlete the greatest increase of muscle endurance. It requires machines such as Nautilus, Hydragym or Cybex. These machines permit the athlete to work at a constant speed against a resistance or weight that changes as the muscular force changes throughout the movement range. These devices accommodate the amount of resistance output by the athlete, evenly at all points of repetition (movement). These machines also duplicate common sports human movements such as throwing and kicking. Perfect for softball!

Improving Agility

There is no specific way to improve agility however there are a number of training methods where ones agility may improve through repetition and correct method. Any Callisthenic exercise that involves the whole body will improve agility. Circuit training which consists of a series of exercises arranged in order and designed to develop general body fitness or specific sport related fitness and skill will help to improve an athlete's agility.

An athlete may improve his or her agility through agility sprints. These are short shuttle runs, or obstacle course were the athlete runs around a series of cones or makers.

c) How would the principles of training be incorporated into these training methods to ensure improved performance in softball?

Training methods should be incorporated so that you train specific muscles and energy systems that are specific to your sport.

eg. In Isokinetic Weight Training, when you are training muscles such as shoulders, chest, biceps, triceps that all improve strength and power for batting and throwing in soft ball. Leg muscles can be trained using weights to increase anaerobic power. Fitness is specific to the type of exercise being performed, for instance; weight training develops anaerobic capacity. Specific exercise with the correct produce will cause a biological response of the body. The fibre size in the muscles will increase.