

Physical Education Grade 11 Answer Week1

1. (i) Ball and socket (shoulder, hip) or, Hinge (knee, elbow) or, Saddle (Thumb) or, Pivot (Top of the neck) or, Gliding (carpal).

(ii) Secretes synovial fluid.

(iii) Fills the joint capsule, nourishing the articular cartilage and preventing friction.

2. Cardiac muscle - Found in the heart.

Involuntary muscle - Muscles that contracts on their own. (E.g. Walls of intestine, blood vessels)

Voluntary muscle - Muscles that we have direct control on. (E.g. Bicep, Tricep, etc.)

3. Synergists muscles help in assisting movement produced by prime movers.

4. Carbohydrates - Source of energy.

Proteins - For growth and repair of tissues.

Fats - Sources of energy.

Vitamins - Needed for chemical reactions.

Minerals - For healthy bones and teeth.

Water - Helps to remain hydrated.

Fibre - Keeps digestive system working properly.

5. Balance - is the ability to maintain equilibrium.

Co-ordination - Helps to synchronise movements of different body parts.

6. Increases range of movements at joints.

Prepare the body for the activity.

7. Introvert - Prefer individual sport

Get nervous before important competition

Dislike contact sports

Prefer a low level of excitement

Extrovert - Prefer team sports

Prefer a high level of excitement

Enjoy contact sports

Enjoy sports with lot of action

8. (i) Improvement in muscular endurance, muscular strength, cardiovascular fitness.

Increase social interaction during workout.

Increase adherence to exercise.

(ii) Increase number of exercise.

Increase time at each spot.

Increase frequency.

9. Increased in respiratory rate.

Increased in heart rate.

Muscular tension.

10. Breaking down the skill into parts.

Proper demonstration.

Teach a little at a time to avoid confusion.

11. Adduction - Moving body parts towards the mid-line of the body.

Abduction - Moving body parts away from the mid-line of the body.

12. Slow twitch muscle fibres.

13. Stroke volume is the amount of blood pumped by the heart in one minute. If this is increased, amount of blood pumped also will be increased. Therefore increasing volume of

oxygen carried out to various parts of the body. With increased volume of oxygen, the performer is able to recover faster. This lead to an improvement in performance.

14. Age - Growing children and teenagers need more food than most adults.

Sex - Men usually need more food than women.

Lifestyle - Those with job involving sitting down won't need as much energy as those who move around all day.

Size - The bigger who are, the more food you will need.

15. Cooper's Test

Requirements: 400 m track - marked every 100m.

Stopwatch.

Assistant.

The athlete starts running or walking when the signal is given for 12 minutes. After the 12 minutes, the distance covered is recorded by the assistant.

Or Multistage Fitness test.