

KVS REGIONAL OFFICE GUWAHATI

Total Pages : 12

IMPORTANT QUESTIONS WITH ANSWER FOR C.B.S.E. EXAMINATION**(PHYSICAL EDUCATION)****SHORT ANSWER TYPE QUESTIONS (2 AND 3 MARKS EACH)**

1. Explain briefly the role of educational institutions in improving sports environment.

Ans. Creation of proper environment for positive and appropriate, that may be a negative physical education programmes in a state important for raising the standard of sports is role of spectators.

Q. 2. What is physical environment of sports?

Ans. Physical environment of sports includes natural and artificial or man-made environments, which further consist of playgrounds, courts, gyms, climate, weather, altitude, mountains, stadiums, sports complexes, indoor halls, swimmingpools, sports equipments and the surroundings of that area.

Q. 3. Discuss the need of proper sports environment.

Ans. The proper sports environment is needed for proper growth and development of sportspersons who are engaged in various sports. In the absence of proper sports environment, the growth and development of sportspersons is impossible.

Q. 4. Briefly explain about any two essential elements of positive sports environment.

Ans. Playground/Courts : For the positive sports environment, playground/courts should have enough open space. The playfields, court or track, etc. should be well-laid, levelled and pleasing to encourage their use. They should be neat and clean. The artificial playfields, courts and track must be of good quality and as per international standards. They should be maintained properly.

Q. 5. What do you say about the presence of spectators ?

Ans. The presence of spectators is essential for creating positive sports environment. Thebehaviour and attitude of spectators are not positive and appropriate, that may be a negativeroles of spectators.

Q6. Discuss the role of climatic condition in creating a sports environment?

Ans. Normal climatic conditions for positive sports environment, there should be normal climatic conditions. It differs sports to sports. They should do their practice in early morning or late evening during hot seasons. During winter season, they should use indoor stadiums. Extreme heat and cold conditions may cause the normal climatic conditions.

Q7. Describe the main reasons of sports injuries.

Ans. Different types of injuries may occur to sports persons if playgrounds, courts, sports equipments, training equipments and protective equipments are not proper. So, proper sports environment in terms of sports grounds, courts and equipments, etc. is needed for avoiding injuries to participants.

Q8. What is the role of media in creating positive sports environment?

Ans. The media, whether it is print media or electronic media, plays a significant and effective role in creating positive sports environment. Media is providing its valuable contribution for the encouragement and promotion of sports and games. Millions of people watch the various tournaments like World Cups and Olympic games with the help of electronic media.

Q. 9. What are the main objectives of camping?

Ans. Objectives of camping :

- (i) To develop self-confidence and satisfaction.
- (ii) To develop skills of self-expression and communication.
- (iii) To provide an opportunity to students or individuals to be independent and develop self-discipline.
- (iv) To provide a social environment on a small scale for learning social qualities.
- (v) To develop team spirit and a sense of belonging to the group.
- (vi) To develop healthy personal relationship with others.
- (vii) To develop the qualities of responsibility and leadership.
- (viii) To get the benefits of a clean, healthy and aesthetic environment.

Q. 10. What are the main objectives of adventure sports? (CBSE 2011)

Ans. Some of the objectives of participation in adventure sports are:

- (i) To test one's strength and other capabilities in difficult and dangerous situations.
- (ii) To face and deal effectively with challenging situations.
- (iii) To experience a sense of achievement.
- (iv) To satisfy one's self-esteem.
- (v) To accept the challenges posed by nature and natural surroundings.
- (vi) To indulge in an activity that is exciting and satisfying.
- (vii) To do something unique and daring in the field of sports.
- (viii) To satisfy the strong desire for adventure.

Q. 11. Discuss value of a student leader or captain.

Ans. (i) Leader is the representative of the group. It expresses the ideas, thoughts and interests of the group. He represents group in various delegations, occasions and meetings. Leader takes decision on behalf of group.

(ii) It provides opportunity to improve his own command, class or team control and excel in every sphere.

(iii) It enables a teacher or coach to spend more time for teaching or coaching or other important works. Thus, acts as planner and organiser.

(iv) A student leader helps in better utilisation of class time as he assists the teacher or coach in class discipline.

(v) A leader develops good social qualities and encourages others, thus acts as role model.

(vi) Student leader inspires others to perform better, thus leader acts as example setter.

(vii) A student leader provides close relationship of a student with the teacher or coach.

(viii) A leader ensures better adjustment of a student with teacher.

Q. 12. Prepare a checklist for camping.

Ans. Camping Checklist: Preparation is very essential for any adventurous sports. Checklists are great tools to organise the things. Your camping list may vary according to the types of camping. But the essential items for camping are enlisted ahead :

- (i) Shelter : Tent, ground cloth, extra stakes, Axe or hammer, Mat, Dust pan/brush.

- (ii) Bedding: Sleeping bag, blanket, sheets, pillow, sleeping pad, air pump, utility bag for storage.
- (iii) Cooking items: Jug, bucket, mug, thermos, stove with fuel, matches, burner, pan, cups, paper towels, utensils etc.
- (iv) Clothes : Shirts, T-shirts, jeans, shoes, jacket, underwear, towel, rain gear, swimsuit, laundry bag etc.
- (v) Personal items : Soap, shampoo, tooth brush, toothpaste, comb, oil, cream, lotion etc.
- (vi) First aid kit: Personal medicines, bandages, antiseptics, adhesive tape, cotton, scissors, tissues etc.

Q.13. Briefly explain about the conservation of water.

Ans. Conservation of water :

- (i) Lay stress on rain water harvesting.
- (ii) Use the ground water in a fair way. The misuse can be prevented by drip irrigation and sprinkle agriculture.
- (iii) Set up water purifying plants which purifies water flowing out of industries.
- (iv) Efforts should be made to stop all the processes causing water pollution.
- (v) Don't keep the water taps open while washing clothes, shaving and brushing teeth etc.
- (vi) Check and stop any leakage in water taps/pipes.

Q.14. Briefly explain about the conservation of energy.

Ans. Conservation of energy:

- (i) Switch off bulbs, tubelights, fans and other electric appliances when they are not in use.
- (ii) Use the solar water heater, solar cooker and solar lights instead of coal, LPG and woods.
- (iii) Try to use other sources of energy such as wind energy, hydro-electric energy, tidal energy, sea-thermal energy, geothermal energy and biogas etc. instead of fossil fuels for various purposes.
- (iv) Wear more warm clothes instead of using heater to keep you warm.
- (v) If destination of members of a family is same, use only one vehicle.

Q. 15. Write the safety measures for rock climbing.

Ans. Safety measures for rock climbing:

- (i) Prior to going on rock climbing, get a proper training from professional rock climber.
- (ii) To prevent the sprains stretch and condition your body before beginning to climb.
- (iii) When choosing a mountain, be careful not to choose a very steep mountain keeping the safety point in view.
- (iv) In case of slip or slide, be relaxed and grab your bungee cord then slowly slide down the mountain.
Do not create panic.
- (v) Wear all safety equipments like elbow pads, knee pads, safety tape, chalk, climbing shoes, helmet, harness etc.
- (vi) Do not take any daredevil step to impress the people, it may be dangerous for your life.

- (vii) Don't throw loose rocks down.
- (viii) Ensure to keep your handholds and foot holds safe.
- (ix) Keep the first aid box with you.
- (x) In case of any mishappening call for help.

Q. 16. Write the safety measures for rafting.

Ans. Safety measures for rafting :

- (i) Accompany the trained and expert staff or guide during rafting.
- (ii) The equipments required for rafting should be of highest quality.
- (iii) Always attend a short training prior going on rafting on the spot.
- (iv) Wear life jacket and safety helmet.
- (v) Don't use alcohol during rafting because alcohol affects judgment and may lead to accident.
- (vi) Children below 10 years should accompany their parents or guardian

Q. 17. Clarify the meaning of balanced diet in brief.

Ans. Human beings take different types of food in their diet; it may be liquid food or solid (hard) food. These matter which we eat give us energy to our body for performing work in a proper way.

Q. 18. What is difference between macro and micro nutrients ? (CBSE 2011)

Ans. Macro nutrients constitute the majority of individuals' diets. It can be said that they are taken in large amounts and micro nutrients are required in very small amounts. These nutrients are extremely significant for normal functioning of the body.

Q. 19. Explain the role of carbohydrates in food.

Ans. These carbohydrates contain vitamins and minerals. They are also called quick energy food. They are also good sources of vitamins and minerals. Carbohydrates are straches which contain various types of sugar molecule combined chemically to form glycogen.

Q. 20. Discuss the role of fats in diet.

Ans. Fats contain carbon, oxygen an hydrogen in the percentage of 76, 12 and 1' respectively. Fats are necessary for many body functions. Fats keep us warm and give protectioc. to organs. Fats also help in the production *al* different harmones.

Q. 21. What are vitamins? Name two groups of vitamins.

Ans. Vitamins are chemicals which are required in very small amount to keep our body healthy. If a particular vitamin is not taken is diet it may cause a deficiency disease. For example, if vitamin C is not taken in diet, it will cause the scurvy disease. There are two groups of vitamins which are mentioned below:

- (i) Fat Soluble Vitamins
- (ii) Water Soluble Vitamins

Q. 22. Discuss the type of eating disorders.

Ans. Two types of eating disorders are :

(i) Anorexia Nervosa : Anorexia Nervosa is a type of eating disorder that affects women and men of all ages.

(ii) Bulimia Nervosa : In this disorder a person eats excessive amount of food and then vomits it in order not to gain weight.

Q.23. Discuss effect of diet on performance of a sportsperson.

Ans. A diet with all the necessary constituents for the maintenance and growth of body in adequate amount is essential for every individual. The requirement of diet varies from individual to individual. All agree that an imbalanced and improper diet affects the health and performance of a sportsman.

Q. 24. Discuss any four pitfalls of dieting.

Ans. The dieting has harmful effects on our body system.

(i) What you can't eat: You have a long list of the items. You can't eat like rich calories, fats, fruits etc.

(ii) Lack of proper nutrients: Dieting leads to limit major nutrients severely.

(iii) Liquid calories: Alcohol, fizzy drinks, cold drinks, packed juices etc. add a lot of calories. Be very careful by sticking to diet drinks.

(iv) Not performing exercise : If you go on dieting and do not perform exercise it will not work properly.

Q. 25. Discuss the management of food intolerance.

Ans. Guidance can be provided by your general practitioner to assist in diagnosis and management. For managing food intolerance fructose intolerance therapy, lactose intolerance therapy and histamine intolerance can be applied.

Q. 26. Briefly explain any two food myths.

Ans. It is a traditional or legendary story about the food with or without a determinable basis of fact or natural explanation.

These are two following myths about the food :

(i) Potatoes make you fat : Earlier, people used to think that carbohydrate rich foods such as rice and potato etc., increase body weight. In fact potatoes do not automatically make you fat.

(ii) Drinking while eating makes you fat:

The actual fact behind this misconception is that enzymes and their digestive juices will be diluted by drinking water while eating.

Q. 27. Explain the importance of play and recreation.

Ans. Play is the inborn tendency which motivates our behaviour to do enjoyable activity for growth and development. In other words, it is the urge to perform joyful activity. Recreation is light playful activity which gives us enjoyment, fun and pleasure. It recreates our lost energy. During recreation, the effect of fatigue on various parts of body is minimised.

Q. 28. What are the risks of food supplement ?

Ans. For proper growth and development of children there are wide range of food supplements. The markets are flooded with various types of food supplements for children. These supplements provide essential nutrients that the body requires. These food supplements may act as a blessing to such children who are not taking balanced or healthy diet.

Q. 29. What do you mean by activities and quality of life ?

Ans. Activities mean physical activities such as running, jumping, walking, cycling, jogging, exercises, games and sports etc. Quality of life means how you live your life, what type of health you are having. If you are healthy and enjoying your life then it can be said that you have a good quality of life. In contrast, if you are diseased or ill or in the hospital on life support system and can't function properly then you are said to have a poor quality of life. Quality of life depends on how well an individual is living not existing.

Q. 30. What do you mean by gross motor development and fine motor development?

Ans. **Gross Motor Development** : It involves development of large or big muscles in body. These big muscles help them to stand, sit, run, jump, etc.

Fine Motor Development : It involves development of small muscles (especially hands and fingers) in body. These muscles help them to do fine works like catching, throwing, picking, kicking, dancing, balancing, skill perfection writing, etc.

Q. 31. Explain the motor development in late childhood.

Ans. In this stage of childhood cross and fine motor development activities are performed. The activities like Yoga asanas, Gymnastics, Athletic, Swimming are good sports activities for this agegroup. Ball games like Football, Basketball, Handball, Volleyball, Kho-Kho, etc., are helpful. Racket games like Badminton, TableTennis. Tennis also help to develop finemotor development skills. Calisthenicexercises, Rhythmic exercises also help to attain motor development along with physical fitness and team work.

Q. 32. Explain any two factors affecting motor development.

Ans. **Nutrition** : Nutrition is also liable to affect the motor development. Indeed, nutritious food promotes good motor development. Sensory motor development is dependent upon nutrition. If children get nutritious food they get stronger which ultimately leads to good motor development. On the other hand, if children do not get proper nutrition they are found to be less energetic and owing to that their motor development takes place slowly.

Physical Activities : Performing regular physical activities, enhances the motor development at a faster rate. However, the physical activities must be according to the capabilities of children. Those children, who do not perform or practise physical activities regularly their motor development becomes slow. If they do not perform even minor activities, their motor development also becomes so slow that they take a long time for motor development.

. Q 33 Define Arm Curl (Biceps) Test. Write procedure of Test.

Ans. This test measures upper body strength and endurance. Equipments required are 4 pound dumb-bell/weight (or women) or 8 pound dumb-bell/weight (for men), a chair without armrest and stopwatch.

Administration and Procedure of Test :

(i) The aim of test is to do as many arm curls as possible in 30 seconds. This test is conducted on the stronger/dominant arm side.

(ii) The person sits on the chair holding the dumb-bell/weight and arm is vertically down position beside chair.

(iii) Brace the upper arm against the body so that only the lower arm is moving.

(iv) Curl the arm up through a full range of motion (flexion of arm) and afterward arm down (extension of arm). Repeat this action as many times as possible within 30 seconds.

(v) The number of complete curl actions (up and down considered as one) is score.

Q. 34. Discuss the method of calculation of VO2 max.

Ans. Calculation of VO2 max : This calculation of VO2 max can be determined with the help of the following formula := $132.853 - (0.0769 \times \text{body weight}) - [0.3871 \times \text{Age} + (6.135 \times \text{Gender}) - 3.2649 \times \text{Time}] - (0.1565 \times \text{Heart Rate})$ where, Body weight is in pounds (lbs) Gender = Male = 1 and Female = 0 Time is in minutes and 100ths of minute Heart Rate is in beats per minute Age is in years After calculating the VO2 max, the comparison of the individual can be done with the results of previous tests. It is expected that with the appropriate training between each test the analysis would surely indicate the improvement of the individual.

Q. 35. Discuss the method for Back Scratch Test for Upper Body Flexibility.

Ans. (i) Stand in a straight position.

(ii) Put one hand behind the head and back over the shoulder and reach as far as possible down the middle of the back.

(iii) Palm should touch the body and the fingers be directed towards downward.

(iv) Place the other arm behind the back, palm facing outward and fingers upward.

(v) Reach up as far as possible attempting to touch or overlap the middle fingers of both hands.

(vi) Practice twice and then test twice.

(vii) The assistant will measure the distance between the tips of the middle fingers to the nearest half inch.

(viii) If fingers touch, the score is zero.

(ix) If they do not touch, measure the distance between the finger tips and give positive score.

(x) If they overlap, measure it is a negative score.

(xi) Stop the test, if the subject experiences a pain.

Q. 36. Discuss the Back Scratch Test for Upper Body Flexibility.

Ans. Procedure: This test is performed in standing position. Keep one hand behind the head and back over the shoulder and reach as far as possible down middle of your back. Your palm should touch your body and the fingers should be downwards. Then carry your other arm behind your back palm facing outward and fingers upward and reach up as far as possible trying to touch or overlap the middle fingers of both hands.

Fingers should be aligned. Measure the distance between the tips of the fingers. If the finger tips touch then the score is zero. If they do not touch measure the distance between the fingertips (—ive score). If they overlap measure by how much (+ive score). Practice two times and then test two times.

Q. 37. How would you perform Harvard Step Test on individual ?

Ans. This test was developed in 1943 by Brouha to measure the cardiovascular fitness of the individual. Requirements of Test : (i) Gym Bench (45 cm high), (ii) Stopwatch, (iii) Assistant/Helper.

Administration and Procedure of Test:

In this test the student step-up and step-down on to the gym bench for 5 minutes or until exhaustion at a rate of 30 steps/minute.

(i) Firstly, the student performs warm-up and comes near the gym bench.

(ii) At the command of 'GO' the student starts to step-up and step-down on to the gym bench whereas assistant starts the stopwatch at same time.

(iii) This goes on for five minutes or until exhaustion.

(iv) The assistant measures the heart rate (beats per minute) after one minute of test finish as pulse 1.

(v) The assistant measures the heart rate (beats per minute) after two minutes of test finish as pulse 2.

(vi) The assistant again measures the heart rate (bpm) after three minutes of test finish as pulse 3.

Q. 38. Explain blood vessels.

Ans. The size of blood vessels depend upon *the* amount of blood that passes through them. All blood vessels have a hollow area called the Lumen through which blood is able to flow. Around the lumen is the wall of vessel, which may be thin in case of capillaries and very thick in the case of arteries.

Q. 39. What are Arteries ? (CBSE 2013)

Ans. Arteries and Arterioles : Arteries carry highly oxygenated blood from the heart to the various body parts. They are more elastic and muscular with thick walls. Arterioles are narrower arteries that branch off from the ends of arteries and carry blood to capillaries.

Q. 40. What are the effects of respiratory system ? (CBSE 2011)

Ans. (i) Increase in tidal air capacity:

Tidal air is the amount of air that flows in and out of the lungs in each quiet respiratory movement. But tidal air capacity is the amount of air that can be breathed in and breathed out, over and above the tidal air by the deepest

possible inspiration/expiration respectively. It is estimated at about 500 to 800 cc. After doing regular exercise, it has been noted that this tidal air capacity can be increased.

(ii) Decrease in rate of respiration : It is certain that when a beginner starts exercise, his rate of respiration increases. But when the same individual performs exercise daily, his rate of respiration decreases in comparison to the beginning stage at rest.

Q. 41. Discuss any two effects of exercise on circulatory system.

(i) By diverting blood from places where the need is less on the place of activity where there is a greater demand of blood.

Q. 42. Discuss the circulatory system.

Ans. (i) By the quicker contractions of the heart or increase in pulse rate that enables the heart to pump more blood into circulation. Circulatory system is a biological phenomenon which circulates the blood and lymph through the body. It consists of heart, blood, lymph, lymphatic vessels and glands.

Q. 43. Explain respiratory system.(CBSE 2012)

Ans. Respiratory system is a mechanism to take oxygen inside and throw away carbon dioxide. This system consists of nose, pharynx, larynx, trachea or wind pipe and the lungs. Apart from the knowledge of the process of respiration, the knowledge of some technical terms used in the explanation of the effects this process is required.

Q. 44. What are the effects of Cardio-vascular system ?

Ans. (i) Heart muscles become strong and on account of this change the stroke volume of heart increases.

(ii) As a result of regular exercise, new capillaries are formed in the body. On account of this change the colour of skin improves. It becomes reddish.

(iii) The flexibility of blood vessels improves.

(iv) The risk of high blood pressure and other heart problems decreases.

(ii) By diverting blood from places where the need is less to the place of activity where there is a greater demand of blood.

Q. 45. Discuss the circulatory system.

Ans. Circulatory system is a biological phenomenon which circulates the blood and lymph through the body. It consists of heart, blood, lymph, lymphatic vessels and glands.

Q. 46. Explain respiratory system.(CBSE 2012)

Ans. Respiratory system is a mechanism to take oxygen inside and throw away carbon dioxide. This system consists of nose, pharynx, larynx, trachea or wind pipe and the lungs. Apart from the knowledge of the process of respiration, the knowledge of some technical terms used in the explanation of the effects this process is required.

Q. 47. What are the effects of Cardio-vascular system?

Ans. (i) Heart muscles become strong and on account of this change the stroke volume of heart increases.

(ii) As a result of regular exercise, new capillaries are formed in the body. On account of this change the colour of skin improves. It becomes reddish.

(iii) The flexibility of blood vessels improves.

(iv) The risk of high blood pressure and other heart problems decreases.

Q. 49. Elucidate Kinetic energy and Potential energy.

Ans. (i) Kinetic energy : It is defined as the energy possessed by a body as a result of motion. The faster a body moves greater is its kinetic energy.

(ii) Potential energy : It is the energy that is stored up in a body because of its position. The higher the body is the greater its potential.

Q. 50. Elucidate energy types of friction.(CBSE 2010)

Ans. Generally there are two types of friction :

(1) **Static friction** : The opposing force that comes into play when one body tends to move over the surface of another but the actual motion has yet started is called static friction.

(2) **Dynamic friction** : Dynamic friction is the opposing force that comes into play when one body is actually moving over the surface of another body.

Q. 51. What is a Projectile ?

Ans. Projectile is a motion which an object is thrown/launched into air and a distinct path which looks like a curve.

Q. 52. What is Angular motion ?

Ans. Angular or rotary movement consists of motion in a circle around a centre of rotation. For example throwing of a discus, putting the shot, throwing a javelin and kicking a ball.

Q. 53. What is a Linear motion?

Ans. Linear motion means moving in a straight line from one point to the other. In linear movements, there should not only be no change in the direction of movement of an athlete, but it is also important that the movements of his body parts such as shoulders, arms or hips etc. should also be in coordination, in order to prevent any sideward movement of the body.

Q. 54. Explain Potential energy.

Ans. Potential energy is the energy stored in an object because of its position or condition.

Q. 55. Define Power with example.

Ans. Power is the rate of doing work or the rate of using energy. The above definition can be expressed as an equation :

Power = Work done/time taken to do work

or

$P = \frac{W}{T}$

Where P = Power in watts (w)

W = Work done in joules (J)

T = Time taken in seconds (S)

Q. 56. Write three ways to improve self-esteem.

Ans. Three ways to improve self-esteem are :

1. Welcome the frankness and truth telling of children.
2. Teach adolescents to maintain healthy self-esteem.
3. Encourage expressions of love into the family atmosphere and relations.

Q. 57. Write three types of coping strategies.

Ans. 1. Problem focused coping strategies.

2. Emotional focused coping strategies.

3. Appraisal focused coping strategies.

Q.58. List down the symptoms of stress.

Ans. Symptoms of Stress : Memory problem; inability to concentrate; poor judgement; anxious; constant worrying; irritability; short temper; agitation; unhappy; aches and pain; rapid heartbeat; sleeping variation.

Q. 59. Briefly state about emotion focused coping strategies.

Ans. Emotional focused coping strategies involve releasing and controlling emotions like distracting oneself, managing hostile feelings, meditating or using systematic relaxation procedures. These strategies are oriented towards managing the emotions that accompany the perception of stress. Emotional focused coping strategies are used to handle feeling of distress, rather than actual problem situation. The main focus is on emotions like accept new task rather saying 'no' to new task; imagine or dream about better situation; plan yourself for the situation avoid everything that is related to stress; get social support to reduces stress.

Q. 60. State any one dimension of personality in brief.

Ans. Conscientiousness : Common features of this dimension include high level of thoughtfulness, with good impulse control. and goal directed behaviours. Those high in conscientiousness tend to be organized and mindful of details. Such people are efficient, careful and vigilant. They exhibit a tendency to show self-discipline, act dutifully and aim for achievement. They remain planned, systematic, neat, through, self organized and think very carefully before act. Conscientious individuals are generally hard working and reliable. Individuals with high conscientious are painstaking, motivated, workaholic, compulsive, punctual and perfectionist.

Q. 61. What is Intrinsic Motivation ?(CBSE 2012)

Ans. Intrinsic Motivation: Intrinsic motivation is internal. It occurs when people are compelled to do something out of pleasure, importance or desire. Motivation is always intrinsic when the force comes from within oneself. For example, when a person indulges in any sports to have mastery, to display superiority or to gain social approval, is an intrinsic motivation. He/she participates in sports for his/her own sake.

Q. 62. What is extrinsic motivation?(CBSE 2011)

Ans. Extrinsic Motivation : Extrinsic motivation is external. It occurs when external factors compel the person to do something. Motivation is always extrinsic, when external forces, positive or negative produce a behavioural change. Reward, punishment, praise, blame or cash prize are examples of extrinsic motivation. It has been found that such devices motivate some persons more strongly than others. In fact, extrinsic motivation includes factors that motivate the individual in achieving the goals.

Q. 63. What do you understand by Acceleration Running ?

Ans. This type of runs is employed to increase speed, specially in attaining maximum speed from a stationary position. Before employing acceleration runs for training, it is very important to develop the techniques involved in the event at a slower speed.

Q. 64. State the types of Coordinative Abilities.

Ans. Coordinate abilities in an individual can be of the following types : Reaction time.

(ii) Kinesthesia or Kinesthetic impressions formation.

(iii) Body balance.

(iv) Neuromuscular coordination.

(v) Eye muscle coordination

Q. 65. Explain types of flexibility. (CBSE 2012)

Ans. **Starting Speed** : It is the ability of an athlete to go from a stopped or non moving state to a moving or mobile state. Starting speed is a crucial opponent of sports and it is always considered as the 'first step'. For many sports, it is the first step to blow by your opponent. So, proper training for starting speed is very important in sports.

Speed Endurance : It is the ability of athlete to maintain top levels of speed while performing repeated bouts of your-sports skill without becoming fatigued. Usually, it is dictated by the three energy systems of the body.

Q. 66. Difference between Static flexibility and Dynamic flexibility.

Ans. **Static Flexibility** : Static flexibility is usually required by a sportsperson when he remains in static position, e.g., in diving, sitting, lying and starting position in various sports.

Dynamic Flexibility : Dynamic flexibility is needed for doing movements with greater distance when an individual is in motion. However, both types of flexibilities are essential for a general individual and for a sportsperson.

Q. 67. What is short term endurance and long term endurance?

Ans. (1) **Long-term/Aerobic/Cardio-Vascular Endurance**: This endurance is helpful when the activity is done for longer duration and the intensity or speed is slower. It is, in fact, the combination of circulatory with respiratory system which provides continuo energy for work out. In other words, this type of activity is of aerobic nature and speed is slow. It delays fatigue, thus it is required for long distance races, road cycling, cross country, marathon race, football, etc.

(2) **Short-term/Anaerobic/Muscul Endurance**: This component of endurance helpful to perform activity for longer duration with fast speed. This is the endurance where the anaerobic type of activity is done, when intensity or speed is very fast. This endurance is for shorter duration and also known muscular endurance as activity is performed' absence of oxygen with the help of stored enery in muscle glycogen. It produces a lot of fatigue and tiredness as it causes oxygen-debt. It required for almost all games and sports Tennis, Badminton, Handball, Basketbal Volleyball etc.

Q. 68. What is basic endurance?

Ans. Basic endurance is an ability perform movements in which large number body muscles are involved and the activitiy (movements) is performed at slow pace for long duration such as digging, walking, slow running and swimming at moderate speed for more the 30 minutes.

Q. 69. Mention any two advantages of weight training.

Ans. (i) Helpful in enhancing athletic performance:

A perfect weight training programme is helpful in enhancing athletic performance. The advantages of strength training to athletic performance are enormous. Weight training is one of the most significant components of conditioning programme for runners, throwers, jumpers, wrestlers, boxers and players of football, basketball and other games.

(ii) Best means to develop strength :

Today weight training is considered as the best means of securing strength but it requires proper guidance of coaches and expert physical trainers. The weight training exercises have value but have to be done carefully and systematically. In fact, there is no other better means to improve strength, speed and endurance for application to all sports and to all walks of life than by training with weights.
