B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL

PRE BOARD - 1
PHYSICAL EDUCATION - 048

Class : **XII** | Duration: **3 Hrs**
Date : **xx/xx/2025** | Max. Marks: 70
Admission No.: | Roll No.:

General Instructions:

1. **The question paper consists of 5 sections and 37 Questions.**
2. **Section A consists of question 1-18 carrying 1 mark each and is multiple choicequestions. All questions are compulsory.**
3. **Sections B consist of questions 19-24 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. Attempt any 5.**
4. **Sections C consist of Question 25-30 carrying 3 marks each and are short answer types and should not exceed 100-150 words. Attempt any 5.**
5. **Sections D consist of Question 31-33 carrying 4 marks each and are case studies.There is internal choice available.**
6. **Sections E consists of Question 34-37 carrying 5 marks each and are long answer types and should not exceed 200-300 words. Attempt any 3**

Section-A

Section A consists of Multiple Choice Type questions of 1 mark each

1. Which of the following organizations helps promoting adaptive sports? 1
   a. Special Olympics b. Deaflympics c. Paralympics **d. All of these**

2. Assertion (A) Risk of cancer can be reduced by eating more colorful vegetables, fruits and other plant foods that have certain photochemical in them.

   Reason (R) Non-nutritive components of diet is a part of balanced diet. 1

   In the context of above two statements, which one of the following is correct?
   Codes:
   a. Both A and R are true and R is the correct explanation of A
   b. Both A and R are true, but R is not the correct explanation of A
   c. A is true, but R is false
   d. A is false, but R is true

3. While exercising on a multigym, the type of muscular contraction that occurs is _____. 1
   a. Isotonic **b. Isometric** c. Isokinetic d. Eccentric

4. What is the formula to determine number of matches in league fixture for even number of teams? 1
   a. N + ½ b. N – ½ **c. N (N – 1)/2** d. N (N + 1)/2

5. Which one of the following asanas is not a remedial asana for treating obesity? 1
   a. Vajrasana **b. Tadasana** c. Trikonasana d. Ardha Matseyendrasana

6. In which year the International Paralympic Committee was founded? 1
   a. 22nd September, 1989 b. 22nd September, 1990
   c. 20th September, 1989 d. 20th September, 1992

7. Ankit lives with his grandfather who is 65 years old and leads a sedentary lifestyle. Ankit is worried about his health. He would like to test his grandfather's functional fitness. Which test should Ankit administrate to check his grandfather's lower body flexibility? 1
   a. Chair stand test
   b. Arm curl test
   c. Back scratch test
   d. Chair sit and reach test

8. The behavior expressed out with intention of harming other person is known as _____. 1
   a. Stress b. Motivation **c. Aggression** d. Tension

9. In which type of Menstrual Dysfunction, light or infrequent menstruation is witnessed by the woman? 1
   a. Pre Menstrual Syndrome b. Amenorrhea
   c. Oligomenorrhea d. Premenstrual Dysphonic Disorder

10. Assertion (A) "A change in the acceleration of an object is directly proportional to the force producing it and inversely proportional to its mass."

    Reason (R) Lighter mass will travel at a faster speed. 1

    Codes:
    a. Both A and R are true and R is the correct explanation of A
    b. Both A and R are true, but R is not the correct explanation of A
    c. A is true, but R is false
    d. A is false, but R is true

11. The purpose of push ups is to measure the _____. 1
    a. Lower body strength **b. Upper body strength & endurance**
    c. Endurance d. All of the above

12. Which of this is not a function of sporting event management? 1
    a. **Creating a Manager** b. Selection of Staff
    c. Organizing d. Directing to members

13. Assertion (A) Person suffering from slipdisc can practice Katichakrasana.

    Reason (R) Katichakrasana helps to relieve back pain 1

    Codes:
    a. Both A and R are true and R is the correct explanation of A
    b. Both A and R are true, but R is not the correct explanation of A
    c. A is true, but R is false
    d. A is false, but R is true

14. Sprain is an injury of the _____. 1
    a. Muscle **b. Ligament** c. Joint d. Bone

15. Newton's which law states that every object will remain at rest or in motion until any external force is applied? 1
    a. Newton's first law of motion b. Newton's second law of motion
    c. Newton's third law of motion d. Both (a) and (b)

16. In bow-legs, there is/are _____. 1

a. wide gap between the knees

b. plain foot sole

c. knees colliding with each other

d. both legs curving inwards

17. Which one of the categories is included under Jung's classification of personality? 1

a. Introverts b. Extroverts c. Ambiverts **d. All of the above**

18. Match the following: 1

List – 1 (Type of Endurance)		List – 2 (Examples)	
A.	Short-term Endurance	i.	Marathon
B.	Speed Endurance	ii.	400 M Sprint race
C.	Medium-term Endurance	iii.	800 M race
D.	Long-term Endurance	iv.	1500 M race

	A	B	C	D
a.	**(iii)**	**(ii)**	**(iv)**	**(i)**
b.	(iii)	(iv)	(ii)	(i)
c.	(iv)	(iii)	(i)	(ii)
d.	(i)	(ii)	(iii)	(iv)

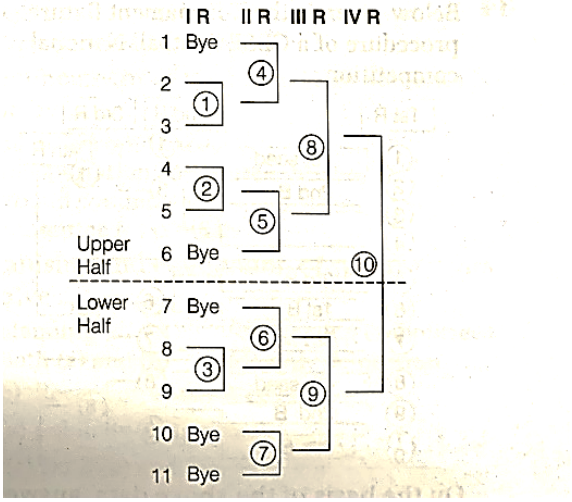
Section-B

Section B consists of 6 questions of 2 marks each. Attempt any 5.

19. Draw a fixture of 11 cricket teams participating in a tournament on the basis of knock-out.

Total number of teams = 11

- Total number of matches = $N-1$
  $=11-1=10$
- Teams in upper half $=\frac{N+1}{2}=\frac{11+1}{2}=6$
- Teams in lower half $=\frac{N-1}{2}=\frac{11-1}{2}=5$
- Number of byes = Next power of two − Total number of teams
  $=16-11=5$



20. What do you mean by Bulimia? 2

Bulimia is a type of eating disorder in which the affected person will eat a large amount of food in a short time and then do someting to get rid of the food. They may vomit, exercise too much or use laxatives.

21. Briefly write about Special Olympic symbol and Olympic flame. 2

The Special Olympic symbol (logo) is based on the sculpture 'Joy and Happiness to all Children of the World'.

The logo is a symbol of growth, confidence and joy among children and adult with disabilities who are learning coordination, mastery skill, participating in competitions and preparing themselves for richer and more productive lives.

Its Olympic flame is known as the 'Flame of Hope'. It is carried to and lit at Special Olympic games. It is used in the same spirit as the Olympic flame in the Olympic Games.

22. Explain the purpose and procedure of Plate Tapping Test. 2

Purpose of Plate Tapping Test is to measure speed and coordination of limb movement of children.

Procedure

- If possible, the table height should be adjusted so that the subject is standing comfortably in front of the discs. The two yellow discs are placed with their centers 60 cm apart on the table. The rectangle is placed equidistant between both discs.
- The non-preferred hand is placed on the rectangle. The subject moves the preferred hand back and forth between the discs over the hand in the middle as quickly as possible.
- This action is repeated for 25 full cycles (50 taps).

23. What is sports psychology? 2

Sports psychology is that branch of psychology which refers to the study of human behaviour on the playfield, both under-practice and competitive situations, with a view to bring about qualitative improvement in performance and maintain the same even during the stress of competition.

24. What are carbohydrates? 2

Carbohydrates are compounds of carbon, hydrogen and oxygen. The main function of carbohydrates is to provide energy for the body, brain and nervous system.

Section-C

Section C consists of 6 questions of 3 marks each. Attempt any 5.

25. Write any three benefits of the Gomukhasana. 3

The two benefits of Gomukhasana are as follows

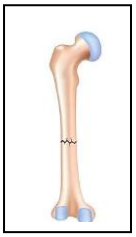
(i) It is helpful in curing sciatica.

(ii) It enhances the functioning of the kidneys by stimulating it, thus helping those suffering from diabetes.

26. Identify the bone fracture and give their name 3

(i) 

(ii) 

(iii) 

(i) Comminuted Fracture
(ii) Greenstick Fracture
(iii) Transverse Fracture

27. What is strength? What are the different types of strength? 3

Strength is the capacity to withstand force or pressure. It refers to muscular strength.

Types of strength are

(i) **Maximum Strength** It refers to the greatest force that is possible in a single maximum muscle contraction or one single effort.

(ii) **Explosive Strength** It refers to the ability to apply strength along with high speed.

(iii) **Strength Endurance** It refers to ability of the muscles to overcome resistance under fatigue.

28. What are the types of aggression? 3

There are three types of aggression in sports

(i) **Instrumental Aggression** The main aim is to achieve a goal by using aggression. For example, a footballer using aggression to tackle his opponent by high intensity play without harming anyone.

(ii) **Hostile Aggression** The main aim is to cause harm or injury to the opponent. It is usually unplanned, impulsive reaction. For example, a bowler throwing a bouncer to deliberately injure the batsman.

(iii) **Assertive Behaviour** It is also referred as assertive aggression. It is generally seen as a positive form of aggression. In ground, it simply means to stand up for your values in an unthreatening manner, and involves the use of legitimate physical or verbal force to achieve once's goals.

29. Explain the purpose and procedure of Flamingo Balance Test. 3

Flamingo Balance Test

Purpose It measures ability to balance successfully on a single leg. This single leg balance test assesses the strength of the leg, pelvic, and trunk muscle as well as static balance.

Equipments Required

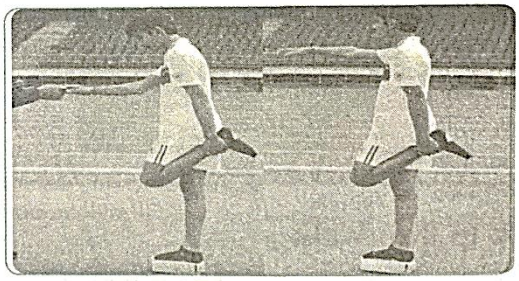
- Non- Slippery even surface
- Stopwatch
- Can be done on just standing on beam

Procedure

- Stand on the beam. Keep balance by holding the instructor's hand (if required to start).
- While balancing on the preferred leg, the free leg is flexed at the knee and the foot of this leg held close to the buttocks.
- Start the watch as the instructor lets go of the participant/subject.
- Pause the stopwatch each time the subject loses balance (either by falling off the beam or letting goes of the foot being held).
- Resume over, again timing until they lose balance. Count the number of falls in 60 seconds of balancing.
- If there are more than 15 falls in the first 30 seconds, the test is terminated.

Suggestion

Participants should be encouraged to eyes focused on stationary object straight ahead.



Flamingo

30. Write about the deformities of spinal curvature. 3

There are three types of spinal curvature

(i) **Lordosis** It is the inward curvature of the spine or a deformity of spinal curvature. It is an increased forward curve in the lumbar region. It creates problems in standing and walking.

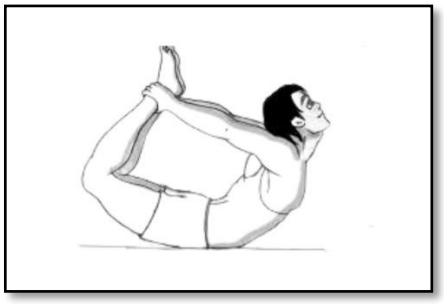
(ii) **Kyphosis** It is a deformity of the spinal curvature in which there is an increase or exaggeration of a backward curve or a decrease of a forward curve. It is also called as round upper back.

(iii) **Scoliosis** It is an abnormal curvature of the spine. It is a sideways curvature of the spine that occurs most often during the growth spurt before puberty.

Section-D

Section D consists of 3 case based questions of 4 marks each.

31. Look the picture given below and answer the questions that follow: 4



Q1. Identify the above pose from the asanas given below:

a. Dhanurasana
b. Chakrasana
c. Vajrasana
d. Vakrasana

Q2. This asana is used to cure _____.

a. Obesity
b. Hypertension
c. Asthma
d. 'a' and 'b'

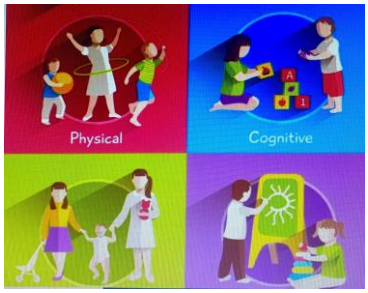
Q3. While performing this asana breathing should be _____.

a. Slow
b. Deep inhalation
c. Only inhalation
d. Only exhalation

Q4. Normal blood pressure of an adult should be _____.

a. 140/90 mm/Hg
b. 120/80 mm/Hg
c. 130/90 mm/Hg
d. 140/95 mm/Hg

32. School management needs to recognize the essential place of physical activity in the education of children with special needs. In order to develop lifelong habits for fitness and to provide them with many opportunities of socialization, schools need to understand that physical education is not a secondary subject but it is just important as other skills. 4



On the basis of above given picture answer the following questions:

Q1. Development of Gross Motor and Fine Motor skills are benefits which are part of **Physical Benefits**.

Q2. Graded activities as strategy for effective inclusive physical education program includes **simple to complex**.

Q3. **Space** for activities should be disturbance free (noise, heat, cold, texture of floor, audience etc.)

Q4. The activities that include running, jumping, hopping, galloping, rolling, leaping and dodging, horizontal jump, slide are **locomotor activities**.

33. Rajesh was a good thrower. When he joined a new training camp, where he observed that some athletes were running on uneven surfaces like bushes, rocks, pits, etc. He was in dilemma. Then the coach explained him about that type of training in detail. On the basis of above passage, answer the following questions: 4

Q1. What type of training were they doing?

a. Fartlek b. Ballistic method
c. Interval d. Continuous

Q2. Stretching exercise improves _____.

a. Flexibility b. Strength
c. Coordination d. Endurance

Q3. Fartlek Training is also known as _____.

a. Pace Runs **b. Speed Play**
c. Acceleration Run d. Interval Training

Q4. Fartlek Training method was developed in:

a. Sweden b. USA
c. UK d. Spain

Section-E

Section E consists of 4 questions of 5 marks each. Attempt any 3.

34. What do you understand by fracture? How can fractures be classified? Explain. 5

Fracture is defined as a loss of continuity in the substance of a bone. It is simply a break in the bone. It commonly happens because of accident, fall, or sport injuries. It is classified into different types, which are discussed below

1. **Greenstick Fracture** A greenstick fracture occurs when a bone bends and cracks, instead of breaking completely into separate pieces. Most greenstick fractures occur in children younger than 10 years of age. This type of broken bone most commonly occur in children because their bones are softer and more flexible than are the bones of adults.
2. **Comminuted Fracture** It is a break or splinter of the bone into more than two fragments. Since considerable force and energy is required to fragment bone, fractures of this kind occurs after high-impact trauma such as vehicular accidents.

   This type of fracture is usually challenging to freat because the breacke is so complex.
3. **Transverse Fracture** It is a fracture where the bone breaks at a right angle to the long axis of the bone. Transverse fractures most often occur as the result of strong force applied perpendicular to the long axis of a bone.
4. **Oblique Fracture** An oblique fracture is characterized by a break that is curved or at an angle to the bone. A sharp blow that comes from an angle (*i.e.*, above or below) may cause oblique fractures.
5. **Impacted Fracture** An impacted fracture is one whose ends are driven into each other. This commonly occurs with arm fractures in children and is sometimes known as a buckle fracture.

35. Suggest the formation of various committees for systematic and smooth conduct of sports day in your school. 5

43 Suggest the formation of various committees for systematic and smooth conduct of sports day in your school. **All India 2014**

Ans For the systematic and smooth conduct of sports day in the school, following committees are suggested

(i) **Ground and Equipment Committee** This committee prepares the ground as well as the equipment needed for various events. It is very important for systematic conduct of sports day.

(ii) **Committee for Officials** This committee selects the officials required in various events such as umpires, referees, recorders, clerks, timekeepers etc for athletic meet and other events. This committee is also essential for the smooth running of the events.

(iii) **Entertainment and Refreshment Committee** This committee will take the charge of receiving the guests, arrange the entire programme schedule of sports day and supply the refreshments.

(iv) **Announcement Committee** This committee makes different announcements regarding different events and the announcements in opening and closing ceremonies.

(v) **Award Committee** This committee takes care of the awards that are given to the participants and decides upon the medals, trophies and certificates.

In these, five committees will serve as five different heads or departments that will ensure the systematic and smooth conduct of sports day in school.

36. Explain any five essential elements of diet. 5

There are many nutrients in the food. These are known as elements. Essential elements of our diet are

(i) **Carbohydrates** These are the compounds of carbon, hydrogen and oxygen.
Sources Fruits, milk, vegetables, pulses, bajra, rice, cakes etc.
Function The main function of carbohydrates is to provide energy to the body, brain and nervous system.

(ii) **Proteins** Proteins are a chain of amino acids that contain carbon, oxygen, hydrogen and nitrogen.

Sources Eggs, milk, meat, beans and animal products.

Function Proteins are the main components of muscles, organs and glands. The cells of muscles and ligaments are maintained with protein and proteins are used for the growth and development of children.

(iii) **Fats** Fats contain carbon, hydrogen and oxygen.

Sources Animal products, milk, cream, cheese, butter, olive oil etc.

Function Fats are a source of energy. They are important for the proper functioning of the body. Fatty acids provide the raw materials which help in control of blood pressure.

(iv) **Vitamins** Vitamins are compounds of carbon. The important vitamins are A, B-complex, C, D E and K.

Sources Milk, butter, eggs, green vegetables, exposure to sunlight, oil, nuts, seeds, fish, amla etc.

Function Vitamins play an important role in many chemical processes in the body. Vitamins are essential for metabolism of fat and carbohydrate and are needed for healthy skin. They are helpful in RBC production.

(v) **Minerals** Minerals are iron, calcium, phosphorus, sodium, iodine, copper, chloride etc.

Sources Eggs, milk, meat, green vegetables, pulses, fish, salts, tea and coffee etc.

Function Minerals are essential for proper growth of the body. Calcium is needed for strong teeth and bones. It is also essential for proper thyroid functioning.

37. Elucidate the types of friction. 5

Ans Types of friction are as follows

(i) **Static Friction** The opposing force that comes into play when one body tends to move over the another, surface, but the actual motion has not yet started, is called static friction.

(ii) **Dynamic Friction** It is the friction between two surfaces that are in relative motion with respect to each other. It is the opposing force that comes into play when one body is actually moving over the surface of another body.

Dynamic friction may be of two types, *i.e.* sliding friction and rolling friction, which are as follows

- **Sliding Friction** The term sliding friction refers to the resistance created by two objects sliding against each other. This can be also called kinetic friction.

  Sliding friction is intended to stop an object from moving. It takes place due to interlocking between microscopic surfaces. For example, when an ice-skater is skating.

- **Rolling Friction** The force resisting the motion of a rolling body on a surface is known as rolling friction or rolling resistance.

  Rolling of ball or wheel is an example of rolling friction. It is considerably weaker than sliding friction. It takes place due to deformation of surfaces.

(iii) **Fluid Friction** It is a friction that occurs when objects move across or through a fluid. For example, in swimming, fluid friction is witnessed as when a person is going through water and the water pulls on it to slow it down, or grabs onto it to try and have a bigger force.

*******All the Best*******