



B.K. BIRLA CENTRE FOR EDUCATION

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

MID-TERM EXAMINATION 2025-26

PHYSICAL EDUCATION-048 SET-3 (Marking Scheme)

Class: XII A & B
Date: XX/XX/2026

Duration: 3 Hrs
Max. Marks: 70

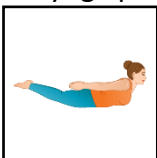
General Instructions:

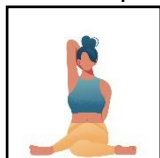
1. The question paper consists of 5 sections and 37 Questions.
2. Section A consists of question 1-18 carrying 1 mark each and is multiple choice questions. All questions are compulsory.
3. Sections B consist of questions 19-24 carrying 2 marks each and are very short answer types and should not exceed 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 these is needed for Eight Foot Up and Go Test? 1
[a] Shoes [b] Stop watch [c] Walking stick [d] Obstacles
2. Low levels of this mineral will lead to Anaemia. 1
[a] Copper [b] Sodium [c] Iron [d] Calcium
3. Which of the following is the international governing body for the Paralympic Games? 1
[a] International Olympic Committee (IOC) [b] International Paralympic Committee (IPC)
[c] Deaflympic Committee [d] World Disability Sports Federation
4. Which yoga pose is considered helpful for a person with diabetes by improving abdominal function? 1


[a]


[b]


[c]


[d]
5. In which kind of deformity, the gap between ankles goes on increasing and an individual faces difficulty during walking and running. 1
[a] Bow legs [b] Knock knee [c] Flat foot [d] Scoliosis
6. In a knock-out tournament 4th Bye will be given to: 1
[a] Last team of lower half [b] Last team of upper half
[c] First team of upper half [d] First team of lower half

7. Back scratch test is used to measure? 1
 [a] Overall Speed **[b] Upper body Flexibility**
 [c] Lower body Power [d] Whole body Movement
8. Skimmed milk has more _____ than ordinary milk. 1
 [a] Sodium [b] Potassium **[c] Calcium** [d] Magnesium
9. In which year were the first Special Olympics Games held? 1
 [a] 1962 **[b] 1968** [c] 1972 [d] 1980
10. What is the formula to divide an odd number of teams in the upper half for a knock-out fixture? 1
[a] $N+1/2$ [b] $N-1/2$ [c] $N(N-1)/2$ [d] $N(N+1)/2$
11. Match the asanas in Column I with their contraindications in Column II. 1

Column - I		Column - II	
I	Trikonasana	1	Person suffering from Bleeding piles
II	Ardh-matseyendrasana	2	Person suffering from Arthritis
III	Sukhasana	3	Person suffering from Hernia
IV	Gomukhasana	4	Person suffering from Asthma

Code				
	I	II	III	IV
a	(ii)	(iv)	(iii)	(i)
b	(ii)	(iv)	(i)	(iii)
c	(iv)	(iii)	(ii)	(i)
d	(iv)	(i)	(ii)	(iii)

12. Who founded the Special Olympics? 1
 [a] Sir Ludwig Guttmann **[b] Eunice Kennedy Shriver**
 [c] Helen Keller [d] Pierre de Coubertin
13. Match the following: 1

Column - I		Column - II	
A	Technical committee	i	To provide shifting facility
B	Finance committee	ii	To resolve dispute
C	Transport committee	iii	To deals with money and expenditure
D	First Aid committee	iv	To provide medical facility

- a. a–ii, b–iii, c–i, d–iv
 b. a–iii, b–ii, c–i, d–iv
 c. a–ii, b–iii, c–iv, d–i
 d. a–iv, b–iii, c–i, d–ii

14. Which of the following methods will be most appropriate for increasing the participation of women in sports. 1
 [a] Development of community sports
 [b] Infrastructure development of changing infrastructure
 [c] Reducing the participation fee for women in sports institute
[d] All of the above
15. Which of the following conditions is characterized by difficulty in breathing due to airway constriction, which specific asanas can help manage? 1
 [a] Diabetes [b] Asthma [c] Hypertension **[d] Obesity**

16. What is the primary focus of the Deaflympics? 1
 [a] To showcase athletes with physical disabilities
 [b] To promote sports for people with intellectual disabilities
[c] To provide an international sports competition for athletes with hearing impairments
 [d] To encourage participation in non-competitive sports
17. Which of these is not an element of a balanced diet? 1
 [a] Proteins [b] Water [c] Minerals **[d] Roughage**
18. Arm Curl Test measures _____. 1
[a] Upper body Strength [b] Lower body Strength
 [c] Limb Strength [d] Head Strength

SECTION – B

Section B consist of 6 questions attempt any 5

19. Explain about Paralympic Games. 2

Ans: The **Paralympic Games** are a major international multi-sport event for athletes with physical, visual, and intellectual impairments. They are held every four years, shortly after the Olympic Games, and usually in the same host city and venues.

The Paralympic Games are organized by the International Paralympic Committee (IPC), which oversees the competitions and promotes opportunities for athletes with disabilities worldwide.

Key facts:

- **Started:** The modern Paralympic Games began in **1960** in Rome.
- **Winter Paralympics:** The first Winter Paralympic Games were held in **1976** in Örnsköldsvik.
- **Sports:** Events include athletics, swimming, wheelchair basketball, wheelchair rugby, para cycling, sitting volleyball, goalball, para archery, and many others.
- **Classification:** Athletes compete in classification groups based on the type and extent of their impairment so that competition is as fair as possible.
- **Motto:** "Spirit in Motion."
- The Paralympic Games showcase exceptional athletic skill, determination, and sportsmanship. Many athletes set world records and inspire millions through their achievements.
- For example, a Paralympic athlete may compete in:
 - Wheelchair racing in athletics.
 - Para swimming events.
 - Wheelchair basketball.
 - Goalball, a sport designed specifically for athletes with visual impairments.

The Paralympic Games are now one of the world's largest sporting events, attracting thousands of athletes from over 100 countries.

20. How can Lordosis be corrected? 2

Ans: **Correction of Lordosis**

Lordosis is a postural deformity in which there is an excessive inward curvature of the lumbar (lower back) region of the spine. It can often be improved through appropriate exercises, posture correction, and healthy lifestyle habits.

Remedial Measures to Correct Lordosis

- **Strengthen the abdominal muscles**
 - Perform exercises such as curl-ups, pelvic tilts, and planks to improve core strength.
 - Strong abdominal muscles help support the spine and reduce excessive curvature.
- **Stretch the hip flexor muscles**
 - Tight hip flexors contribute to increased lumbar curvature.

- Gentle lunges and hip flexor stretches help improve flexibility.
- **Strengthen the hamstring and gluteal muscles**
- Exercises like bridges, squats (with proper technique), and hamstring curls help stabilize the pelvis.
- **Maintain correct posture**
- Stand and sit with the back straight and shoulders relaxed.
- Avoid prolonged slouching or standing with the abdomen pushed forward.
- **Maintain a healthy body weight**
- Excess abdominal fat increases stress on the lower back and may worsen lordosis.
- **Regular physical activity**
- Walking, swimming, and yoga help improve flexibility, posture, and muscle balance.
- **Practice corrective exercises**
- Pelvic tilt exercises
- Knee-to-chest stretches
- Cat-Cow stretch
- Plank exercises
- **Use proper ergonomics**
- Sit on a chair with adequate lumbar support.
- Keep feet flat on the floor and avoid prolonged sitting.
- **Seek professional guidance**
- A physiotherapist can prescribe individualized corrective exercises.
- In severe cases, medical evaluation may be required.

Conclusion

Lordosis can often be corrected or significantly improved through regular corrective exercises, strengthening of the core muscles, stretching of tight muscles, maintaining proper posture, and adopting a healthy lifestyle. Early identification and consistent practice of these measures provide the best results.

21. Explain briefly which type of nutrients are advisable for the player?

2

Ans: For good performance, a player needs a **balanced diet** that provides all the essential nutrients in the right amounts. The following nutrients are advisable:

- **Carbohydrates**
- Main source of energy for muscles during exercise.
- Should form the largest part of a player's diet.
- **Sources:** Rice, wheat, bread, potatoes, fruits, oats.
- **Proteins**
- Help in muscle growth, repair of tissues, and recovery after exercise.
- Essential for strength and endurance athletes.
- **Sources:** Milk, eggs, fish, chicken, pulses, soybeans, paneer.
- **Fats**
- Provide concentrated energy and help absorb vitamins A, D, E, and K.
- Healthy fats should be preferred over saturated and trans fats.
- **Sources:** Nuts, seeds, olive oil, fish, avocado.
- **Vitamins**
- Regulate body functions, improve immunity, and support energy production.
- **Sources:** Fresh fruits, green leafy vegetables, milk, eggs.
- **Minerals**
- Important for bone health, oxygen transport, muscle contraction, and fluid balance.
- **Sources:** Milk (calcium), spinach (iron), bananas (potassium), nuts.
- **Water**

- Prevents dehydration, regulates body temperature, and transports nutrients.
- Players should drink water before, during, and after exercise.
- **Dietary Fibre (Roughage)**
- Aids digestion and helps maintain a healthy digestive system.
- **Sources:** Whole grains, fruits, vegetables, legumes.

Conclusion

A player's diet should be rich in **carbohydrates for energy, proteins for muscle repair and growth, healthy fats for long-lasting energy**, along with adequate **vitamins, minerals, water, and fibre** to maintain overall health and achieve optimum sports performance. Top of Form

22. Write any two advantages and disadvantages of league tournaments.

2

Ans: **Advantages:**

- **Accurate ranking:** The true merit of a team is decided because every team gets ample opportunities to play against all opponents.
- **Maximum participation:** Teams stay engaged throughout the entire season since they are not eliminated after a single loss.

Disadvantages:

- **Time-consuming:** It takes a long period to complete the tournament due to the high number of total matches.
- **Higher cost:** Organizers and teams spend more money on logistics, venues, and officiating over the extended schedule.

23. How can one recognize a person suffering from hypertension?

2

Ans: A person with **hypertension (high blood pressure)** may not always show symptoms, which is why it is often called the "**silent killer**." However, some people may experience the following signs and symptoms:

- **Frequent headaches**, especially in the morning.
- **Dizziness or light-headedness.**
- **Blurred vision** or difficulty seeing clearly.
- **Shortness of breath**, especially during physical activity.
- **Chest pain** or discomfort.
- **Nosebleeds** (in some cases).
- **Fatigue or weakness.**
- **Irregular heartbeat (palpitations).**

Important Note

The **only reliable way to recognize hypertension is by measuring blood pressure** with a sphygmomanometer (blood pressure monitor). Normal blood pressure is around **120/80 mmHg**, while consistently higher readings (such as **140/90 mmHg or above**) indicate hypertension.
(Any two)

24. What do you mean by Flamingo balance test?

2

Ans: The **Flamingo Balance Test** is a **test of static balance** that measures a person's ability to maintain balance while standing on one leg. It is commonly used in **Class XII Physical Education** and in fitness assessment batteries such as the **Eurofit Test Battery**.

- **Procedure**
- Stand on a narrow wooden beam or balance beam with your **preferred foot**.
- Bend the other leg backward and hold the ankle with the hand on the same side.
- Balance on one leg for **60 seconds**.

- Every time you lose balance (e.g., touch the ground, let go of the foot, or fall off the beam), it is counted as **one attempt**. The test continues until 60 seconds are completed.
- **Scoring**
- The **score is the total number of attempts** needed to maintain balance during the 60-second period.
- **Fewer attempts indicate better balance.**
- **Purpose**
- To assess **static balance** and postural control.
- To evaluate coordination and stability, which are important for sports and daily activities.
- **Example**
- If a student loses balance **8 times** during the 60-second test, the Flamingo Balance Test score is **8**. A student who loses balance only **3 times** has **better static balance**.

One-mark definition:

Flamingo Balance Test is a test used to measure **static balance** by counting the number of times a person loses balance while standing on one leg on a narrow beam for **60 seconds**.

SECTION – C

Section C consist of 6 questions attempt any 5

25. What is the procedure to assess abdominal strength of the body?

3

Ans: The **procedure to assess abdominal strength** is commonly done using the **Partial Curl-Up Test**, which measures the strength and endurance of the abdominal muscles.

Procedure

- The participant lies on their back (supine position) on a mat.
- Knees are bent at about **90°**, with feet flat on the floor.
- Arms are kept straight alongside the body, with palms facing downward.
- A measuring strip or marker is placed so that the fingertips move about **8–12 cm** (depending on age) during each curl-up.
- On the command "Go," the participant slowly curls the upper body until the fingertips reach the marker, then returns to the starting position.
- The movement is performed in rhythm, usually at a set pace (about **20 curl-ups per minute**), until the participant can no longer maintain the correct technique or reaches the maximum prescribed number.

Scoring

- The score is the **total number of correctly performed curl-ups** completed without breaking the rhythm or using improper technique.
- Higher scores indicate **better abdominal muscle strength and endurance**.

Precautions

- Avoid jerky or rapid movements.
- Keep the feet on the floor throughout the test.
- Maintain the correct pace and posture.

Stop the test if the participant experiences pain or discomfort.

26. Write down the symptoms of obesity.

3

Ans: Obesity is a condition in which excessive body fat accumulates and affects health. Common symptoms include:

- **Excess body fat** – Visible accumulation of fat around the abdomen, hips, thighs, and other parts of the body.
- **Shortness of breath** – Difficulty in breathing, especially during physical activity.
- **Easy fatigue** – Feeling tired quickly even after doing simple daily activities.
- **Joint and back pain** – Extra body weight puts pressure on the knees, hips, ankles, and lower back.
- **Difficulty in movement** – Reduced flexibility and problems in walking, climbing stairs, or exercising.

- **Excessive sweating** – Sweating more than usual due to increased body weight.
- **Snoring and disturbed sleep** – Obesity may lead to sleep problems such as sleep apnea.
- **High blood pressure** – Often associated with obesity and increases the risk of heart disease.

Conclusion:

Recognizing these symptoms early helps in preventing serious health problems. A balanced diet, regular physical activity, and a healthy lifestyle are essential for managing and preventing obesity.

27. Draw a fixture of eight teams using Tabular method.

3

Ans: A **Tabular Method** fixture is used in a **league tournament**, where each team plays against every other team once.

For **8 teams (A, B, C, D, E, F, G, H)**, the fixture is as follows:

Teams	A	B	C	D	E	F	G	H
A	–	✓	✓	✓	✓	✓	✓	✓
B		–	✓	✓	✓	✓	✓	✓
C			–	✓	✓	✓	✓	✓
D				–	✓	✓	✓	✓
E					–	✓	✓	✓
F						–	✓	✓
G							–	✓
H								–

➤ **Matches**

- A vs B
- A vs C
- A vs D
- A vs E
- A vs F
- A vs G
- A vs H
- B vs C
- B vs D
- B vs E
- B vs F
- B vs G
- B vs H
- C vs D
- C vs E
- C vs F
- C vs G
- C vs H
- D vs E
- D vs F
- D vs G
- D vs H
- E vs F
- E vs G
- E vs H

- F vs G
- F vs H
- G vs H

Total number of matches = $\frac{8(8-1)}{2} = 28$

28. Mention the sources of protein and its functions.

3

Ans: **Sources of Protein**

- Proteins are obtained from both **animal** and **plant** sources.
- Animal Sources
 - Milk and milk products (curd, cheese, paneer)
 - Eggs
 - Fish
 - Chicken
 - Meat
- Plant Sources
 - Pulses (lentils, gram, peas)
 - Soybean and soy products
 - Beans
 - Nuts and seeds (almonds, peanuts, sunflower seeds)
 - Whole grains
- Functions of Protein

Body Building: Helps in the growth and development of muscles, bones, skin, and other body tissues.

Repair of Tissues: Repairs worn-out and damaged body cells and tissues.

Enzyme and Hormone Formation: Helps in the production of enzymes and hormones essential for body functions.

Immunity: Forms antibodies that protect the body against diseases and infections.

Energy Source: Provides energy (4 kcal per gram) when carbohydrates and fats are insufficient.

Maintenance of Body Functions: Supports normal growth, muscle contraction, and proper functioning of organs.

Transportation of Nutrients: Certain proteins help transport oxygen and nutrients throughout the body (e.g., hemoglobin).

Conclusion:

Proteins are known as the **body-building nutrients** because they are essential for growth, tissue repair, immunity, and the overall maintenance of the body. A balanced diet should include adequate protein from both plant and animal sources.

29. Explain the causes, precautions and remedies of Bow legs.

1+1+1

Ans: Bow Legs (Genu Varum)

Bow legs (Genu Varum) is a postural deformity in which the legs curve outward at the knees while the ankles remain close together, creating a bow-like appearance.

- Causes of Bow Legs
 - **Vitamin D deficiency (Rickets):** Weakens bones, causing them to bend.
 - **Calcium and phosphorus deficiency:** Leads to poor bone development.
 - **Congenital (birth) defects:** Some children are born with bow legs.
 - **Improper posture or walking habits:** May contribute to the deformity.
 - **Bone diseases or injuries:** Fractures or infections affecting bone growth.
 - **Excess body weight:** Puts extra pressure on the legs, especially during growth.
- Precautions
 - Ensure a **balanced diet** rich in calcium, phosphorus, and vitamin D.
 - Encourage **regular sunlight exposure** for natural vitamin D synthesis.

- Maintain **proper body weight** to reduce stress on the legs.
- Avoid prolonged standing with incorrect posture.
- Seek **early medical advice** if the deformity is noticed in children.
- Perform regular **strengthening and stretching exercises** under guidance.
- **Remedies**
- **Corrective exercises:** Strengthening the leg muscles and improving posture.
- **Physiotherapy:** Helps improve muscle balance and joint alignment.
- **Use of braces or orthotic devices:** Recommended for growing children when required.
- **Nutritional treatment:** Adequate intake of calcium, vitamin D, and other essential nutrients.
- **Medical treatment:** Treat underlying conditions such as rickets or bone disorders.
- **Surgery:** In severe cases where the deformity is significant and does not improve with conservative treatment.

Conclusion

Bow legs can often be prevented or corrected if detected early. A nutritious diet, proper exercise, good posture, and timely medical intervention play an important role in managing this condition.

30. Briefly discuss about Deaflympics.

3

Ans: **Deaflympics**

International Committee of Sports for the Deaf

The **Deaflympics** are an international multi-sport event organized exclusively for **deaf and hard-of-hearing athletes**. They are conducted under the supervision of the International Committee of Sports for the Deaf (ICSD). The first Deaflympics were held in **1924 in Paris, France**, making them one of the oldest international multi-sport events.

Key Points

- It is organized **every four years**, similar to the Olympic Games.
- Only athletes with a **hearing loss of at least 55 decibels (dB) in the better ear** are eligible to participate.
- Participants are **not allowed to use hearing aids or cochlear implants during competitions**.
- Visual signals such as **lights and flags** are used instead of whistles or sound signals.
- The event promotes **equality, inclusion, sportsmanship, and international friendship** among deaf athletes.
- Importance
- Provides equal opportunities for deaf athletes to compete at the highest level.
- Encourages physical fitness, confidence, and social integration.

Increases awareness about the abilities and achievements of people with hearing impairments.

Section-D

Section D consist of 3 questions

31. Read the below passage and answer the following questions:

Aman enjoys eating burgers, chips, soft drinks, and sweets every day. During football practice, he feels tired quickly and struggles to complete training sessions.

4

[i] Which eating habit is affecting Aman's performance?

[a] Balanced diet

[b] Healthy snacking

[c] Excessive junk food consumption

[d] High-protein diet

[ii] Which nutrient is the body's primary source of energy during exercise?

[a] Carbohydrates

[b] Proteins

[c] Vitamins

[d] Water

[iii] What is one possible consequence of consuming excessive junk food?

[a] Better endurance

[b] Improved concentration

[c] Obesity and poor fitness

[d] Increased flexibility

[iv] Suggest any two dietary changes Aman should make to improve his sports performance.

- Follow a balanced diet instead of eating junk food daily.
- Include carbohydrate- and protein-rich foods with adequate hydration.

32. Read the below passage and answer the following questions:

Riya is a para-athlete with a lower limb impairment. Before participating in an international competition, she undergoes a detailed assessment by experts to determine the category in which she can compete fairly against athletes with similar functional abilities. **4**

[i] Why does Riya undergo a detailed assessment before the competition?

[a] To improve her fitness

[b] To determine the category in which she can compete fairly

[c] To check her passport

[d] To select her coach

[ii] Riya has a lower limb impairment. During classification, experts mainly evaluate:

[a] Her educational qualifications

[b] Her functional abilities related to the sport

[c] Her financial background

[d] Her nationality only

[iii] Which organization governs the classification system for the Paralympic Games?

[a] FIFA

[b] International Paralympic Committee (IPC)

[c] ICC

[d] IOC only

[iv] Which of the following best describes classification in para-athletics?

[a] Grouping athletes by height

[b] Grouping athletes by age

[c] Grouping athletes based on the impact of their impairment on sports performance

[d] Grouping athletes by country

33. Read the below passage and answer the following questions:

Ram is going regularly to the park near his home in the morning. He found that many old people have some or the other type of fitness problem in terms of flexibility and strength. He decides to check the fitness level of such people in the park. **4**

[i] Which two components of fitness are mentioned in the passage?

[a] Speed and endurance

[b] Balance and coordination

[c] Flexibility and strength

[d] Agility and power

[ii] Why did Ram decide to check the fitness level of the old people?

[a] He wanted to win a competition.

[b] He noticed that many of them had fitness problems.

[c] He was asked by his teacher.

[d] He wanted to become famous.

[iii] The passage mainly focuses on:

[a] Children's games

[b] Morning exercises of athletes

[c] Fitness awareness among elderly people

[d] Building a new park

[iv] Which fitness test would be most appropriate to assess the flexibility of elderly people?

[a] 50 m Sprint Test

[b] Sit and Reach Test

[c] 600 m Run/Walk Test

[d] Standing Broad Jump

Section-E

Section E consist of 4 questions attempt any 3

34. Which are the Asanas practiced for preventing Asthma? Write in detail about any two of them.

Ans: The following **asanas (yoga postures)** are commonly recommended for helping prevent or manage asthma by improving lung capacity, strengthening respiratory muscles, and promoting relaxation:

1. Bhujangasana (Cobra Pose)
2. Gomukhasana (Cow Face Pose)
3. Matsyasana (Fish Pose)
4. Sukhasana (Easy Pose)
5. Ardha Matsyendrasana (Half Spinal Twist)
6. Setu Bandhasana (Bridge Pose)

1. Bhujangasana (Cobra Pose)

Procedure:

- Lie flat on your stomach with your legs together.
- Place your palms beside your shoulders.
- Inhale and slowly lift your head, chest, and upper abdomen by straightening your arms.
- Keep your elbows slightly bent and shoulders relaxed.
- Hold the position for **15–30 seconds** while breathing normally.
- Exhale and slowly return to the starting position.

Benefits:

- Expands the chest and improves lung capacity.
- Strengthens the back and abdominal muscles.
- Improves breathing efficiency.
- Helps reduce stress and fatigue, which can trigger asthma.

-
2. Gomukhasana (Cow Face Pose)

Procedure:

- Sit on the floor with both legs stretched forward.
- Bend the left leg under the right hip and place the right leg over the left so that both knees are stacked.
- Raise the right arm overhead and bend it behind the back.
- Bring the left arm behind the back from below and clasp both hands.
- Keep the spine straight and breathe normally.
- Hold the posture for **20–30 seconds**, then repeat on the opposite side.

Benefits:

- Expands the chest and improves respiratory function.
- Increases flexibility of the shoulders and chest muscles.
- Promotes deep breathing.
- Helps relieve stress and improves posture, supporting better lung function.

Conclusion:

Regular practice of these asanas, along with proper breathing exercises (Pranayama), can help improve respiratory health, increase lung capacity, and assist in the prevention and management of asthma. They should be practiced under proper guidance, especially by people with severe asthma.

Or

5

Describe the procedure for performing Gomukhasana along with its benefits and contraindications.

Ans: **Gomukhasana (Cow Face Pose)**

Gomukhasana is a seated yoga posture in which the legs and arms are positioned to resemble the face of a cow. It improves flexibility of the shoulders, hips, and spine and is commonly practiced for overall physical and mental well-being.

Procedure for Performing Gomukhasana

- Sit on the floor with both legs stretched forward.
- Bend the left leg and place the left foot beside the right hip.
- Bend the right leg and place it over the left leg so that the right knee is directly above the left knee. The right foot should rest beside the left hip.
- Raise the right arm overhead, bend it at the elbow, and bring the hand down the back.
- Take the left arm behind the back from below and try to clasp the fingers of both hands.
- Keep the head and spine straight and breathe normally.
- Hold the posture for **20–30 seconds** or as comfortable.
- Release the hands and legs gently, then repeat the pose on the opposite side.

Benefits of Gomukhasana

- Increases flexibility of the shoulders, arms, chest, hips, and thighs.
- Improves posture by stretching the spine and opening the chest.
- Strengthens the back muscles and enhances spinal mobility.
- Helps reduce stiffness in the shoulders and neck.
- Improves blood circulation and relieves stress and fatigue.
- Beneficial for people with mild backache and improves overall body coordination.

Contraindications

- Avoid Gomukhasana if you have a **serious knee injury** or severe knee pain.
- Do not practice if you have a **shoulder injury**, frozen shoulder, or recent arm injury.
- Avoid the pose in case of **severe hip pain** or hip injury.
- People with **slipped disc** or severe spinal disorders should practice only under expert supervision.
- Pregnant women should perform this pose only after consulting a qualified yoga instructor or healthcare professional.

Exam Tip:

When answering in examinations, write the **procedure (6–8 steps)**, **benefits (any 4–6 points)**, and **contraindications (3–5 points)** to score full marks.

35. Explain macro-nutrients and their role in our diet.

Ans: Macro-nutrients and Their Role in Our Diet

Macro-nutrients are nutrients that the body requires in **large amounts** to provide energy, support growth, repair tissues, and maintain normal body functions. The three main macro-nutrients are **carbohydrates, proteins, and fats**.

1. Carbohydrates

Definition:

Carbohydrates are the **primary source of energy** for the body. They are broken down into glucose, which is used by cells for energy.

Sources:

- Rice, wheat, bread
- Potatoes
- Fruits
- Sugar and cereals

Role in the Diet:

- Provide immediate energy for daily activities.
 - Fuel the brain and nervous system.
 - Help spare proteins for growth and repair.
 - Store excess energy as glycogen in the liver and muscles.
-

2. Proteins

Definition:

Proteins are known as the **body-building nutrients** because they help in the growth and repair of body tissues.

Sources:

- Milk and milk products
- Eggs
- Fish and meat
- Pulses, beans, soybeans, nuts

Role in the Diet:

- Build and repair muscles and tissues.
 - Support growth and development.
 - Help produce enzymes, hormones, and antibodies.
 - Aid in recovery from illness and injury.
-

3. Fats

Definition:

Fats are a **concentrated source of energy** and are essential for many body functions.

Sources:

- Butter and ghee
- Vegetable oils
- Nuts and seeds
- Cheese and avocados

Role in the Diet:

- Provide long-lasting energy (9 kcal per gram).
 - Protect vital organs from injury.
 - Help absorb fat-soluble vitamins (A, D, E, and K).
 - Maintain healthy skin and body temperature.
 - Support hormone production.
-

Importance of Macro-nutrients

- Supply energy for physical and mental activities.
- Promote growth and tissue repair.
- Support normal body functions.
- Help maintain overall health and fitness.
- Essential for proper development, especially in children and athletes.

Conclusion

Macro-nutrients are the major nutrients required by the body in large quantities. A **balanced diet** should include appropriate amounts of **carbohydrates, proteins, and fats** to ensure good health, adequate energy, proper growth, and efficient body functioning.

Or

5

What are fats? Write a detailed note on its types. Also mention its importance in the proper functioning of the body.

Ans: Fats: Definition, Types and Importance in the Body

What are Fats?

Fats are one of the **essential nutritive components** of a balanced diet. They are a concentrated source of energy, providing **9 kcal (calories) per gram**, which is more than carbohydrates and proteins. Fats are made up of **fatty acids and glycerol** and are necessary for the normal growth, development, and proper functioning of the human body.

Types of Fats

Saturated Fats

- These fats are usually **solid at room temperature**.
- Mainly obtained from **animal sources**.
- Excessive intake may increase bad cholesterol (LDL) and the risk of heart disease.

Sources:

- Butter
 - Ghee
 - Cheese
 - Cream
 - Fatty meat
 - Coconut oil
 - Palm oil
-

Unsaturated Fats

- These are considered **healthy fats** and are generally **liquid at room temperature**.
 - Monounsaturated Fats (MUFA)
- Help lower bad cholesterol (LDL).
- Improve heart health.

Sources:

- Olive oil
- Groundnut oil
- Mustard oil
- Avocados
- Almonds
- Peanuts

Polyunsaturated Fats (PUFA)

- Contain **Omega-3 and Omega-6 fatty acids**, which are essential for the body.
- Promote brain and heart health.

Sources:

- Sunflower oil
 - Soybean oil
 - Flaxseeds
 - Walnuts
 - Fatty fish (salmon, sardines)
-

Trans Fats

- Formed by the **hydrogenation of vegetable oils**.
- These are the **most harmful fats**.
- Increase bad cholesterol (LDL) and decrease good cholesterol (HDL).

Sources:

- Cakes
- Biscuits
- Pastries
- Chips

- Fried fast foods
- Packaged snacks

Importance of Fats in the Proper Functioning of the Body

- **Provide Energy:** Fats are the richest source of energy, supplying **9 kcal per gram**.
- **Energy Storage:** Excess energy is stored as fat and used when the body needs extra energy.
- **Protect Internal Organs:** Fat cushions and protects vital organs such as the heart and kidneys from injury.
- **Maintain Body Temperature:** Fat under the skin acts as an insulator and helps keep the body warm.
- **Absorption of Vitamins:** Essential for the absorption of **fat-soluble vitamins A, D, E, and K**.
- **Support Brain and Nervous System:** Healthy fats are important for brain development, memory, and nerve function.
- **Cell Structure:** Fats are a major component of cell membranes and help maintain healthy cells.
- **Hormone Production:** Required for the production of several hormones that regulate body functions.
- **Provide Essential Fatty Acids:** Supply Omega-3 and Omega-6 fatty acids, which the body cannot produce on its own.
- **Improve Satiety:** Slow digestion and help keep a person full for a longer time.

Conclusion

Fats are an essential part of a balanced diet and play a vital role in providing energy, protecting organs, supporting brain function, and helping absorb vitamins. **Unsaturated fats** should be preferred for good health, while **trans fats** and excessive **saturated fats** should be limited to reduce the risk of obesity and cardiovascular diseases.

36. Explain the Senior Citizen Fitness Test in detail.

Ans: The **Senior Citizen Fitness Test (SCFT)**, also known as the **Fullerton Functional Fitness Test**, is a battery of tests designed to assess the **functional fitness** of adults aged **60 years and above**. It measures the physical abilities required for performing daily activities independently and safely.

Objectives of the Senior Citizen Fitness Test

- To evaluate the overall functional fitness of older adults.
- To identify strengths and weaknesses in physical fitness.
- To monitor changes in fitness over time.
- To help design suitable exercise and rehabilitation programs.
- To reduce the risk of falls and improve independence.

Components of the Senior Citizen Fitness Test

Test	Purpose	Procedure
1. Chair Stand Test	Measures lower body strength	The participant sits on a chair with arms crossed over the chest and stands up and sits down as many times as possible in 30 seconds .
2. Arm Curl Test	Measures upper body strength	Sitting on a chair, the participant performs as many bicep curls as possible in 30 seconds using a 2.3 kg (5 lb) dumbbell for women and 3.6 kg (8 lb) dumbbell for men .
3. Chair Sit-and-Reach Test	Measures lower body flexibility	The participant sits on the edge of a chair, extends one leg forward, and reaches toward the toes. The distance between the fingers and toes is measured.
4. Back Scratch Test	Measures upper body (shoulder) flexibility	One hand reaches over the shoulder and the other up the middle of the back. The distance between the middle fingers is measured.
5. Eight-Foot Up-and-Go Test	Measures agility and dynamic balance	The participant starts seated, stands up, walks 8 feet (2.44 m) around a cone, returns, and sits down. The time taken is recorded.

Test	Purpose	Procedure
6. Six-Minute Walk Test	Measures aerobic endurance	The participant walks continuously for 6 minutes , and the total distance covered is recorded. (If space is limited, a 2-Minute Step Test may be used as an alternative.)

Importance of the Senior Citizen Fitness Test

- Assesses the ability to perform daily activities independently.
- Detects early decline in physical fitness.
- Helps prevent falls and injuries.
- Encourages active and healthy ageing.
- Assists fitness professionals in planning individualized exercise programs.
- Tracks improvements after regular exercise or rehabilitation.

Advantages

- Easy to administer.
- Safe and suitable for older adults.
- Requires minimal equipment.
- Provides a comprehensive assessment of functional fitness.
- Widely used in community health and fitness programs.

Conclusion

The **Senior Citizen Fitness Test** is a simple, reliable, and comprehensive assessment tool for evaluating the functional fitness of elderly individuals. By measuring **strength, flexibility, balance, agility, and endurance**, it helps maintain independence, improve quality of life, and promote healthy ageing.

Or

5

Explain the purpose and procedure of the 8-Foot Up and Go Test.

Ans: 8-Foot Up and Go Test

The **8-Foot Up and Go Test** is a component of the **Senior Citizen Fitness Test (SCFT)**. It is used to assess an older adult's **agility, dynamic balance, speed, and mobility**, which are important for performing daily activities safely and independently.

Purpose

- The test is conducted to:
- Measure **agility and dynamic balance** in senior citizens.
- Assess the ability to **move quickly and safely** while changing direction.
- Evaluate the risk of **falls** among older adults.
- Monitor changes in mobility and functional fitness over time.

Equipment Required

- A standard chair (approximately 43–45 cm high) placed against a wall.
- A cone or marker.
- Measuring tape.
- Stopwatch.

Procedure

- Place the chair against a wall to prevent movement.
- Mark a point **8 feet (2.44 metres)** in front of the chair and place a cone there.
- The participant sits comfortably on the chair with their back straight and hands resting on their thighs.
- On the command "**Go**", the participant:
- Stands up from the chair.
- Walks as quickly and safely as possible to the cone.
- Goes around the cone.
- Returns to the chair and sits down.
- The stopwatch starts on the command "**Go**" and stops when the participant is seated again.
- Usually, **one practice trial** and **two test trials** are given. The **best (fastest) time** is recorded in **seconds**.

Scoring

- The score is the **time (in seconds)** taken to complete the test.
- **Lower time indicates better agility, balance, and mobility.**

Precautions

- Ensure the floor is dry and free from obstacles.
- The chair should remain stable and not slide.
- Participants should wear comfortable clothing and appropriate footwear.
- Allow the participant to walk at a safe speed if they have balance issues.

Conclusion

The 8-Foot Up and Go Test is a simple, reliable, and effective test for evaluating **functional mobility, agility, and dynamic balance** in senior citizens. It helps identify individuals who may be at a higher risk of falling and assists in planning suitable fitness and rehabilitation programs.

37. Write down the introduction, objectives, eligibility, features and importance of the Deaflympics.

Ans: **Deaflympics: Introduction:**

The **Deaflympics** is an international multi-sport event organized exclusively for athletes with hearing impairment. It is recognized by the **International Olympic Committee (IOC)** and governed by the **International Committee of Sports for the Deaf (ICSD)**. The first Deaflympics were held in **1924** in Paris, France, making them one of the oldest international multi-sport events. The games are conducted every four years and promote equal opportunities, friendship, and excellence among deaf athletes.

Objectives

- To provide an international platform for athletes with hearing impairment to compete.
- To encourage participation in sports among deaf individuals.
- To promote equality, inclusion, and fair competition.
- To develop physical fitness, confidence, and leadership qualities.
- To strengthen friendship and cultural exchange among participating nations.
- To create awareness about the abilities and achievements of deaf athletes.

Eligibility

- Athletes must have a **hearing loss of at least 55 decibels (dB)** in the better ear.
- Hearing aids, cochlear implants, or other hearing assistance devices are **not permitted during competition**.
- Athletes must comply with the eligibility rules of the **International Committee of Sports for the Deaf (ICSD)**.
- Participants must be selected by their respective national deaf sports organizations.
- Athletes must meet the age and qualification criteria for their respective sports.

Features

- Organized every **four years**.
- Recognized by the **International Olympic Committee (IOC)**.
- Governed by the **International Committee of Sports for the Deaf (ICSD)**.
- Competitions use **visual signals** (such as lights and flags) instead of sound signals like whistles or starting guns.
- Athletes compete in a wide range of individual and team sports.
- Encourages international friendship, sportsmanship, and cultural exchange.
- Promotes equal opportunities for deaf athletes at the highest level of competition.

Importance

- Provides equal opportunities for deaf athletes to compete internationally.
- Boosts self-confidence, independence, and social inclusion.
- Encourages a healthy and active lifestyle among people with hearing impairment.
- Increases public awareness about the abilities of deaf individuals.
- Promotes the values of discipline, teamwork, and sportsmanship.
- Inspires young athletes with hearing impairment to participate in sports.
- Strengthens global unity and understanding through sports.

Conclusion

The **Deaflympics** is a prestigious international sporting event that celebrates the talent and determination of athletes with hearing impairment. It promotes equality, inclusion, excellence, and international friendship while providing deaf athletes with an opportunity to compete at the highest level.

Or

5

What is the difference between the Special Olympics, Deaflympics and the Paralympics?

Ans: The **Special Olympics, Deaflympics, and Paralympics** are all international sporting events for athletes with disabilities, but they differ in the type of disability, eligibility criteria, and purpose.

Basis	Special Olympics	Deaflympics	Paralympics
Participants	Athletes with intellectual disabilities	Athletes with hearing impairment (deafness)	Athletes with physical, visual, or certain eligible intellectual disabilities , depending on sport classification
Eligibility	Must have an intellectual disability or developmental disability	Must have a hearing loss of at least 55 dB in the better ear	Must meet sport-specific disability classification and qualification standards
Level of Competition	Open to athletes of all ability levels	Elite international competition	Elite international competition
Selection Process	No qualifying standard; participation is encouraged for all eligible athletes	Athletes qualify through national and international standards	Athletes qualify through international rankings and qualifying events
Main Objective	Participation, inclusion, confidence, and skill development	Fair competition for deaf athletes using visual communication	High-performance competition among elite athletes with disabilities
Communication	Standard competition rules	Uses visual signals instead of sound (e.g., lights instead of starting pistols)	Standard competition rules with adaptations based on the sport and disability
Organizing Body	Special Olympics International	International Committee of Sports for the Deaf	International Paralympic Committee
Frequency	World Games held every 4 years (Summer and Winter alternate every 2 years)	Every 4 years	Every 4 years , immediately after the Olympic Games

Key Differences

- **Special Olympics** focuses on **athletes with intellectual disabilities** and emphasizes participation, inclusion, and personal development rather than only elite performance.
- **Deaflympics** is exclusively for **deaf athletes** and modifies competition by replacing sound-based signals with visual cues while maintaining high-level international competition.
- **Paralympics** is for **elite athletes with eligible physical, visual, and certain intellectual impairments** who meet strict qualification and classification standards.

In summary:

- **Special Olympics** → Intellectual disabilities; participation for all skill levels.
- **Deaflympics** → Hearing impairment; elite competition using visual communication.
- **Paralympics** → Physical, visual, and some intellectual disabilities; elite, qualification-based competition.

*******ALL THE BEST*******