

The aim of Adaptive Physical Education is to provide suitable physical activities and sports

opportunities to children with disabilities or special needs so that they can improve their physical fitness, motor skills, social adjustment, and overall development.

Or

Describe any two movements possible in human body.

Ans. Two movements possible in the human body are-

(i) Flexion:

Flexion is the bending movement that decreases the angle between two body parts, such as bending the elbow or knee.

(ii) Extension:

Extension is the straightening movement that increases the angle between two body parts, such as straightening the elbow or knee.

Other movements may be Abduction, Adduction, Circumduction, Elevation, Depression etc.

Q17. Define Physical Fitness. Explain any two components of Physical Fitness.

Ans. Physical Fitness:

Physical fitness is the ability of an individual to perform daily activities efficiently without undue fatigue and with enough energy for leisure and emergencies.

Physical fitness is composed of health-related and skill-related components, each contributing to overall body performance and well-being.

Components:

(i) Strength:

The ability of muscles to exert force against resistance.

(ii) Endurance:

The ability of the body to perform an activity for a long period without becoming tired.

Other components may be Speed, Flexibility, Agility, Coordination etc.

Or

What do you mean by learning? Name the primary laws of learning.

Ans. Learning- Learning is a relatively permanent change in behavior, knowledge, or skill that occurs through practice and experience.

Primary Laws of Learning (Thorndike):

1. Law of Readiness
2. Law of Exercise (Practice)
3. Law of Effect

Q18. Write the role of any two professionals for children with special needs (CWSN).

Ans. The role of any two professionals for Children With Special Needs (CWSN).

(i) Special Educator:

- Assesses learning needs of children.
- Designs individualized educational programs.
- Helps children develop academic and social skills.

(ii) Physiotherapist:

- Improves movement and motor abilities.
- Enhances strength, balance, and coordination.
- Helps children perform daily activities independently.

Other professionals can be- Special Education Counsellor, Occupational Therapist, Physical Education Teacher, Speech Therapist.

Q19. Explain the concept of test and measurement in sports.

Ans. Concept of test and measurement in sports.

Test- A test is a tool or procedure used to evaluate a player's skill, fitness, knowledge, or performance.

Measurement- Measurement is the process of collecting numerical data from a test.

Concept- Test and measurement help coaches and teachers assess performance, identify strengths and weaknesses, monitor progress, and plan training programs effectively.

Q20. What do you understand by warming up and cooling down in sports?

Ans. Warming Up- Warming up consists of light exercises performed before sports activities to prepare the body for physical exertion. It increases body temperature, blood circulation, and flexibility.

Cooling Down- Cooling down consists of light activities and stretching performed after exercise to gradually return the body to its normal state. It helps reduce muscle soreness and prevents sudden fatigue.

Q21. Explain growth and development with the help of two examples.

Ans. Growth- Growth refers to an increase in the size, height, weight, or structure of the body.

Development- Development refers to progressive changes in abilities, functions, and skills of an individual.

Examples-

1. An increase in a child's height and weight with age is **growth**.
2. Learning to walk, speak, or ride a bicycle is **development**.

Short answer type questions (22 to 27) Three marks

Q22. Explain the newly changing trends in the playing surface then the past years?

Ans. Modern sports surfaces have changed significantly compared to traditional playing surfaces-

1. **Synthetic Turf or Astroturf-** Artificial grass is widely used in football, hockey, and other sports due to its durability and low maintenance.
2. **Polyurethane Tracks-** Modern athletics tracks are made of synthetic materials that provide better grip, cushioning, and performance.
3. **Shock-Absorbing Floors-** Indoor courts use wooden or synthetic shock-absorbing surfaces to reduce injuries.
4. **Weather Resistance-** Modern surfaces can withstand different weather conditions and require less maintenance.
5. **Eco-Friendly Materials-** Many sports facilities now use sustainable and recyclable materials.

Or

Astanga Yoga is an eight-limbed path of yoga described by Maharishi Patanjali in the Yoga Sutras. It includes Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana, and Samadhi. The practice of Astanga Yoga helps in achieving physical health, mental peace, self-discipline, and spiritual growth.

(i) What are the different types of asanas?

(ii) Explain the phases of Pranayama.

(iii) Non-violence a part of which limb of Ashtang Yoga?

Ans. (i) The different types of Asanas are-

1. **Meditative Asanas** – Used for concentration and meditation (e.g., Padmasana, Sukhasana).
2. **Relaxative Asanas** – Used for relaxation and recovery (e.g., Shavasana, Makarasana).
3. **Cultural Asanas** – Improve strength, flexibility, and overall fitness (e.g., Bhujangasana, Trikonasana).

(ii) The four phases of Pranayama are-

1. **Puraka** – Inhalation of breath.
2. **Antar Kumbhaka** – Retention of breath after inhalation.
3. **Rechaka** – Exhalation of breath.
4. **Bahya Kumbhaka** – Retention of breath after exhalation.

(iii) **Non-violence (Ahimsa)** is a part of **Yama**, the first limb of **Ashtanga Yoga** described by Patanjali.

Q23. Write a short note on Khelo India Program.

Ans. The **Khelo India Programme** was launched by the Ministry of Youth Affairs and Sports in 2018 to promote sports culture and identify talented athletes across India.

Objectives are-

- Encourage mass participation in sports.
- Develop sports infrastructure.
- Identify and nurture young talent.
- Improve India's performance in international competitions.
- Promote fitness and healthy lifestyles among youth.

Main Features-

- Khelo India Youth Games.
- Khelo India University Games.
- Financial support and scholarships for talented athletes.
- Development of sports academies and training centers.

Or

Write short note on Indian Olympic Association.

Ans. The **Indian Olympic Association (IOA)** is the apex body responsible for managing India's participation in the Olympic Games and other international sporting events. The IOA was established in **1927** and is affiliated with the International Olympic Committee.

Functions:

- Selects Indian teams for the Olympics, Asian Games, and Commonwealth Games.
- Promotes Olympic values and sports development.
- Coordinates with national sports federations.
- Supports athletes and coaches for international competitions.

Q24. Briefly explain the importance of yoga in life.

Ans. Yoga is a holistic practice that promotes physical, mental, emotional, and spiritual well-being. **Importance of Yoga-**

1. Improves flexibility and strength.
2. Enhances concentration and memory.
3. Reduces stress, anxiety, and depression.
4. Improves posture and balance.
5. Promotes better breathing and circulation.
6. Helps maintain a healthy lifestyle.
7. Increases self-discipline and self-awareness.
8. Contributes to overall wellness and quality of life.

Q25. Explain the difference between wellness and lifestyle with examples.

Ans.

Wellness	Lifestyle
Wellness is a state of overall physical, mental, and social well-being.	Lifestyle refers to the way a person lives and behaves daily.
It is an outcome or condition of good health.	It is a pattern of habits and choices.
Focuses on achieving optimum health.	Focuses on daily activities and behaviors.
Example: A person who is physically fit, mentally healthy, and socially active has good wellness.	Example: Regular exercise, balanced diet, and adequate sleep constitute a healthy lifestyle.

Example- Wellness: A student feels energetic, healthy, and emotionally balanced. And

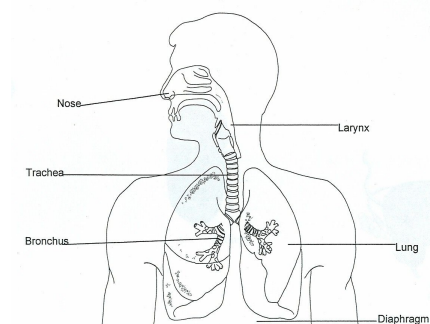
- **Lifestyle:** The same student follows regular exercise, healthy eating habits, and proper sleep schedules to achieve wellness.

Q26. Draw a neat and clean labeled diagram of human respiratory system.

Ans. **Function:** The respiratory system helps in breathing by taking in oxygen and removing carbon dioxide from the body.

Nose / Nasal Cavity
Pharynx
Larynx

Respiratory System



	Trachea	
Right Bronchus		Left Bronchus
Right Lung		Left Lung
(Bronchioles)		(Bronchioles)
Alveoli		Alveoli
Diaphragm		

Q27. What do you understand by Adolescence. Discuss any two problems faced by Adolescence with their solution according to you.

Ans. Adolescence- Adolescence is the transitional stage between childhood and adulthood, generally ranging from **10 to 19 years of age**. During this period, rapid physical, mental, emotional, and social changes occur.

Problems Faced by Adolescents and Their Solutions

1. Emotional Stress and Anxiety-

- Pressure of studies and examinations.
- Family and peer expectations.
- Mood swings due to hormonal changes.

Solutions:

- Practice yoga, meditation, and physical activities.
- Maintain open communication with parents and teachers.
- Seek counseling when required.

2. Peer Pressure

- Pressure to adopt unhealthy habits.
- Desire to fit into a social group.
- Influence of social media and friends.

Solutions:

- Develop self-confidence and decision-making skills.
- Choose positive friends and role models.
- Learn to say "No" to harmful activities.

Conclusion- Adolescence is a crucial stage of life. Proper guidance from parents, teachers, and society helps adolescents overcome challenges and develop into healthy and responsible adults.

Long answer type questions (28 to 30) Five marks

Q28. What do you mean by disability? Explain different causes of disabilities.

Ans. **Disability** is a physical, mental, sensory, or intellectual condition that limits a person's ability to perform daily activities in the same way as others.

Causes of Disabilities

1. Genetic Causes

- Disabilities caused by hereditary factors or chromosomal abnormalities.
- Example: Down Syndrome.

2. Prenatal Causes (Before Birth)

- Poor nutrition of the mother.
- Infections during pregnancy.
- Consumption of alcohol, tobacco, or drugs.

3. Perinatal Causes (During Birth)

- Premature birth.
- Lack of oxygen during delivery.
- Birth injuries.

4. Postnatal Causes (After Birth)

- Accidents and injuries.
- Malnutrition.
- Diseases such as polio, meningitis, or cerebral malaria.

5. Environmental Causes

- Pollution.
- Exposure to harmful chemicals.
- Unsafe living conditions.

Conclusion- Disabilities may occur before birth, during birth, or after birth due to genetic, medical, environmental, or accidental factors.

Or

Define the term 'Psychology'. Explain the role of Psychology in the field of Physical Education and Sports?

Ans. **Psychology** is the scientific study of human behavior, mental processes, emotions, and experiences.

Role of Psychology in Physical Education and Sports

- 1. Enhances Motivation-** Helps athletes remain focused and dedicated to training.
- 2. Improves Learning of Skills-** Assists in acquiring and mastering sports techniques.
- 3. Builds Self-Confidence-** Increases belief in one's abilities and performance.
- 4. Controls Stress and Anxiety-** Helps athletes manage competitive pressure.

5. Develops Team Spirit- Improves cooperation and communication among players.

6. Improves Concentration- Helps athletes maintain focus during performance.

7. Enhances Performance- Mental training contributes to better sports achievements.

Q29. What is Sports Training? Explain the Principles of Sports Training with example.

Ans. Sports training is a systematic and scientific process of preparing athletes to achieve maximum performance through planned exercises and practice.

Principles of Sports Training

1. Principle of Overload- The body improves when it is subjected to greater demands than normal. **Example:** A runner gradually increases running distance.

2. Principle of Progression- Training load should increase gradually. **Example:** Increasing weight from 5 kg to 10 kg over time.

3. Principle of Specificity- Training should be specific to the sport. **Example:** A swimmer practices swimming drills rather than cycling.

4. Principle of Individual Differences- Training programs should suit individual abilities.

Example: Different fitness plans for beginners and advanced athletes.

5. Principle of Continuity- Training should be regular and uninterrupted. **Example:** Daily practice improves performance more than occasional training.

6. Principle of Reversibility- Fitness decreases when training stops. **Example:** An athlete loses endurance after a long break.

Or

What is physiology? Explain the types of bones in detail.

Ans. Physiology is the branch of science that studies the normal functions and activities of living organisms and their body systems.

Types of Bones are-

1. Long Bones

- Longer than they are wide.
- Provide support and movement.
- Examples: Femur, Humerus, Tibia.

2. Short Bones

- Nearly equal in length and width.
- Provide stability and support.
- Examples: Carpals and Tarsals.

3. Flat Bones

- Thin and broad.
- Protect internal organs.
- Examples: Skull, Sternum, Ribs.

4. Irregular Bones

- Have complex shapes.
- Perform specialized functions.
- Examples: Vertebrae, Hip Bones.

5. Sesamoid Bones

- Embedded within tendons.
- Reduce friction and improve movement.
- Example: Patella (Kneecap).

Q30. What is Lever? Explain the types of Lever with suitable examples from daily life.

Ans. A lever is a rigid bar that rotates around a fixed point called the fulcrum to move a load with the application of effort.

Components of a Lever- 1. Fulcrum (Pivot Point), 2. Effort (Applied Force) and 3. Load (Resistance).

Types of Lever

1. First-Class Lever- Fulcrum lies between effort and load.

Examples- Seesaw, Scissors, Crowbar.

Human Body Example- Neck joint during head movement.

2. Second-Class Lever- Load lies between fulcrum and effort.

Examples- Wheelbarrow, Nutcracker and Bottle opener.

Human Body Example- Standing on toes.

3. Third-Class Lever- Effort lies between fulcrum and load.

Examples- Tweezers, Fishing rod and Broom.

Human Body Example- Biceps curl at the elbow joint.

Or

Explain about Shatkarma in detail.

Ans. **Shatkarma (Shatkriya)** refers to the six purification techniques of Hatha Yoga used to cleanse the body and prepare it for higher yogic practices.

Six Shatkarmas are-

1. Neti- Cleaning of the nasal passages.

Types- Jal Neti, Sutra Neti, dugdh neti, Ghrit neti.

Benefits- Improves breathing, Prevents sinus problems.

2. Dhauti- Cleansing of the digestive tract.

Benefits- Improves digestion, Removes toxins.

3. Basti- Yogic cleansing of the large intestine.

Benefits- Relieves constipation, Purifies the colon.

4. Nauli- Abdominal churning exercise.

Benefits- Strengthens abdominal muscles, Improves digestion.

5. Kapalabhati- Forceful exhalation and passive inhalation.

Benefits- Cleanses respiratory passages, Enhances lung efficiency.

6. Trataka- Steady gazing at a fixed object.

Benefits- Improves concentration, Strengthens eye muscles.

Importance of Shatkarma

- Purifies body and mind.
- Improves health and immunity.
- Prepares the practitioner for Pranayama and Meditation.

- Enhances concentration and mental clarity.

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