



केन्द्रीय विद्यालय संगठन
Kendriya Vidyalaya Sangathan

शारीरिक शिक्षा
Physical Education

कक्षा/Class: XI
2024-25

विद्यार्थी अध्ययन सामग्री
Student Support Material





संदेश

विद्यालयी शिक्षा में शैक्षिक उत्कृष्टता प्राप्त करना केन्द्रीय विद्यालय संगठन की सर्वोच्च वरीयता है। हमारे विद्यार्थी, शिक्षक एवं शैक्षिक नेतृत्व कर्ता निरंतर उन्नति हेतु प्रयासरत रहते हैं। राष्ट्रीय शिक्षा नीति 2020 के संदर्भ में योग्यता आधारित अधिगम एवं मूल्यांकन संबन्धित उद्देश्यों को प्राप्त करना तथा सीबीएसई के दिशा निर्देशों का पालन, वर्तमान में इस प्रयास को और भी चुनौतीपूर्ण बनाता है।

केन्द्रीय विद्यालय संगठन के पांचों **आंचलिक शिक्षा एवं प्रशिक्षण संस्थान** द्वारा संकलित यह 'विद्यार्थी सहायक सामग्री' इसी दिशा में एक आवश्यक कदम है। यह सहायक सामग्री कक्षा 9 से 12 के विद्यार्थियों के लिए सभी महत्वपूर्ण विषयों पर तैयार की गयी है। केन्द्रीय विद्यालय संगठन की 'विद्यार्थी सहायक सामग्री' अपनी गुणवत्ता एवं परीक्षा संबंधी सामग्री-संकलन की विशेषज्ञता के लिए जानी जाती है और अन्य शिक्षण संस्थान भी इसका उपयोग परीक्षा संबंधी पठन सामग्री की तरह करते रहे हैं। शुभ-आशा एवं विश्वास है कि यह सहायक सामग्री विद्यार्थियों की सहयोगी बनकर सतत मार्गदर्शन करते हुए उन्हें सफलता के लक्ष्य तक पहुंचाएगी।

शुभाकांक्षा सहित।

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CBSE SYLLABUS 2024-25

CHAPTER	NAME OF CHAPTER
Chapter I	CHANGING TRENDS AND CAREERS IN PHYSICAL EDUCATION • Concept, Aims & Objectives of Physical Education • Development of Physical Education in India – Post Independence • Changing Trends in Sports- playing surface, wearable gear and sports equipment, technological advancements • Career options in Physical Education • Khelo-India Program and Fit – India Program
Chapter II	OLYMPIC VALUE EDUCATION • Olympism – Concept and Olympics Values (Excellence, Friendship & Respect) • Olympic Value Education – Joy of Effort, Fair Play, Respect for Others, Pursuit of Excellence, Balance Among Body, Will & Mind • Ancient and Modern Olympics • Olympics - Symbols, Motto, Flag, Oath, and Anthem • Olympic Movement Structure - IOC, NOC, IFS, Other members
Chapter III	YOGA • Meaning and importance of Yoga • Introduction to Astanga Yoga • Yogic Kriyas (Shat Karma) • Pranayama and its types. • Active Lifestyle and stress management through
Chapter IV	PHYSICAL EDUCATION & SPORTS FOR CWSN • Concept of Disability and Disorder • Types of Disability, its causes & nature (Intellectual disability, Physical disability). • Disability Etiquette • Aim and objectives of Adaptive Physical Education. • Role of various professionals for children with special needs (Counsellor, Occupational Therapist, Physiotherapist, Physical Education Teacher, Speech Therapist, and Special Educator)
Chapter V	PHYSICAL FITNESS, WELLNESS, AND LIFESTYLE • Meaning & importance of Wellness, Health, and Physical Fitness. • Components/Dimensions of Wellness, Health, and Physical Fitness • Traditional Sports & Regional Games for promoting wellness • Leadership through Physical Activity and Sports • Introduction to First Aid – PRICE

CHAPTER	NAME OF CHAPTER
Chapter VI	TEST AND MEASUREMENT AND EVALUATION • Define Test, Measurements and Evaluation. • Importance of Test, Measurements and Evaluation in Sports. • Calculation of BMI, Waist – Hip Ratio, Skin fold measurement (3-site) • Somato Types (Endomorphy, Mesomorphy & Ectomorphy) • Measurements of health-related fitness
Chapter VII	FUNDAMENTALS OF ANATOMY, PHYSIOLOGY IN SPORTS • Definition and importance of Anatomy and Physiology in Exercise and Sports. • Functions of Skeletal System, Classification of Bones, and Types of Joints. • Properties and Functions of Muscles. • Structure and Functions of Circulatory System and Heart. • Structure and Functions of Respiratory System.
Chapter VIII	FUNDAMENTALS OF KINESIOLOGY AND BIOMECHANICS IN SPORTS • Definition and Importance of Kinesiology and Biomechanics in Sports. • Principles of Biomechanics • Kinetics and Kinematics in Sports • Types of Body Movements - Flexion, Extension, Abduction, Adduction, Rotation, Circumduction, Supination & Pronation • Axis and Planes – Concept and its application in body movements
Chapter IX	PSYCHOLOGY & SPORTS • Definition & Importance of Psychology in Physical Education & Sports. • Developmental Characteristics at Different Stages of Development. • Adolescent Problems & their Management. • Team Cohesion and Sports. • Introduction to Psychological Attributes: Attention, Resilience, Mental Toughness
Chapter X	TRAINING AND DOPING IN SPORTS • Concept and Principles of Sports Training • Training Load: Over Load, Adaptation, and Recovery • Warming-up & Limbering Down – Types, Method & Importance • Concept of Skill, Technique, Tactics & Strategies • Concept of Doping and its disadvantages

Chapter- 1

CHANGING TRENDS & CAREER IN PHYSICAL EDUCATION



- Concept, Aims & Objectives of Physical Education
- Development of Physical Education in India – Post Independence
- Changing Trends in Sports- playing surface, wearable gear and sports equipment, technological advancements
- Career options in Physical Education
- Khelo-India Program and Fit – India Program

CONCEPT, AIMS & OBJECTIVES OF PHYSICAL EDUCATION

PHYSICAL EDUCATION is the branch of education which encourages psychomotor, cognitive, and affective learning **through** physical activity and movement exploration. Simply, its education of the body through the body.

“Physical education is the sum of man’s physical activities selected as to kind and conducted as to outcomes”. - **J.F William**

“Physical Education is that phase of the whole field of education that deals with the big muscle activities and their related responses.” - **Jay B. Nash**

“Physical Education is the sum of those experiences which come to the individual through movement.” - **Delbert Oberteuffer**

AIMS:

1. Promoting Physical Fitness.
2. Skill Development.
3. Health Education.
4. Stress Reduction.
5. Promoting Lifelong Physical Activity.
6. Social Development.
7. Cultural Awareness.
8. Gender Equality.
9. Prevention of Lifestyle-Related Diseases.

OBJECTIVES

PRIMARY OBJECTIVES	
PHYSICAL DEVELOPMENT	To develop a good physique through the efficiency of organic systems like Respiratory, Circulatory, Digestive, Muscular and Neuro-muscular improvement.
MENTAL DEVELOPMENT	To facilitate the development of various Brain functions e.g. Decision Making, Alertness and response time, etc.
SOCIAL DEVELOPMENT	To develop qualities like confidence, obedience, temperament, sincerity, sacrifices, sportsmanship and self-control etc.
EMOTIONAL DEVELOPMENT	To develop the abilities to control emotions in various kinds of situations.

Besides this few other Objectives of Physical Education includes:

- To develop Neuro-Muscular system
- To achieve optimum Fitness and Health
- To Develop various Organ System of the body
- To develop Optimistic (positive) outlook
- To build and Effective Citizen

DEVELOPMENT OF PHYSICAL EDUCATION IN INDIA – POST INDEPENDENCE

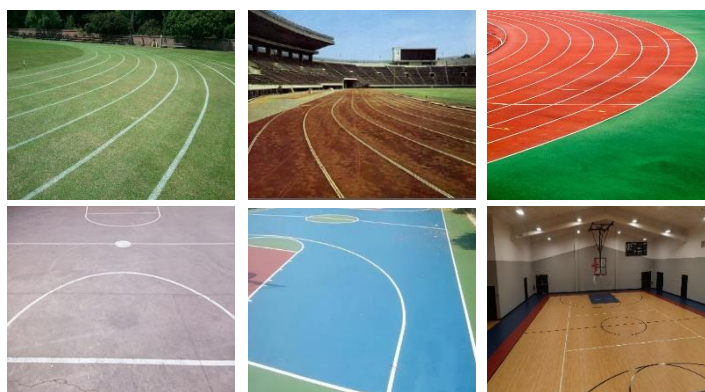
YEAR	DEVELOPMENT
1954	ALL INDIA COUNCIL OF SPORTS - Formation of National Sports Council under Chairmanship of <i>Maulana Abul Kalam Azad</i> to act as a liaison between the Government and the national federations for various sports.
1956	NATIONAL PLAN OF PHYSICAL EDUCATION AND RECREATION - Development of facilities for training of teachers in physical education along with R&D.
1957	LAXMI BAI NATIONAL COLLEGE OF PHYSICAL EDUCATION - Ministry of education established a college of physical education at Gwalior offering three year degree course.
1958	SPORTS AND YOUTH WELFARE DEPARTMENT - Ministry for education opened the department of Sports and Youth Welfare to promote physical education and sports in the country.
1958-59	ADHOC ENQUIRY COMMITTEE ON GAMES AND SPORTS - Establishment of Central Sports Institute for producing good coaches and for the training of various teams along with structuring the Organizational set up of Sports Federations
1959-60	NATIONAL PHYSICAL EFFICIENCY DRIVE - A norms based Non-competitive fitness Fest campaign to make people fitness conscious.
1959	KUNZURU COMMITTEE - Introduction of an integrated compulsory programme of basic curriculum at school stage for all along with promotion of NCC and Scout & Guide Programme.
1960	KAUL KAPOOR COMMITTEE - The physical education should be made an integral part of general education in schools and colleges along with development of infrastructure and award programme.
1961	NETAJI SUBASH NATIONAL INSTITUTE OF SPORTS - To produce good coaches, to provide training to various teams and to promote and carry research work in the field of sports.
1970-71	RURAL SPORTS TOURNAMENT SCHEME & SPORTS TALENT SEARCH SCHOLARSHIP SCHEME
1982	ASIAN GAMES - For hosting these games huge infrastructure was established, sports industries were built and these sports industries were encouraged to manufacture sport goods of top quality.

1984	SPORTS AUTHORITY OF INDIA -an autonomous organization under the overall control of the Ministry of Human Resource Development, Department of Youth Affairs and Sports to look after, to maintain and to generate funds for the sports infrastructure
1984, 2001 & 2007	NATIONAL SPORTS POLICY To develop long term Development Plans (LTDPs) for Effective participation in International events especially the Olympics, Asian and common wealth Games.

CHANGING TRENDS IN SPORTS- PLAYING SURFACE, WEARABLE GEAR AND SPORTS EQUIPMENT, TECHNOLOGICAL ADVANCEMENTS

PLAYING SURFACES:

Throughout ages sports had been played mostly in Natural surfaces. However from 1960 many advances has been made and in many of the sports artificial surfaces are being used in place of natural surfaces.



WEARABLE GEARS:

Smart watches: Use of smart watches or Fitness trackers provides instant measurement of many internal body functions which has revolutionised the Fitness Industry



Clothing: Advance clothing material has made participation in games and sports more comfortable and enhances the performance of many sports.

SPORTS EQUIPMENT:

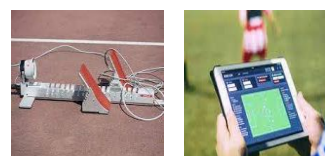
Shoes: Lighter shoes with more ability of absorb shock has enhanced the performance and health condition of the Players.



Equipment: New hockey sticks are made of fibre material before that i.e in past time wooden sticks were in use. From helmets to many wearable gears has been introduced as Protective Equipment which has save the life of sportsman.

TECHNOLOGICAL ADVANCEMENTS

Instant Replay, Sensor Tool, Timing System, RFID Chips



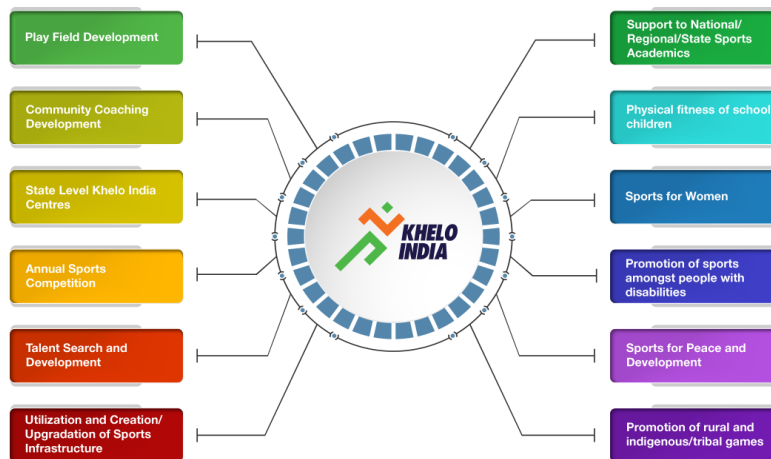
CAREER OPTIONS IN PHYSICAL EDUCATION

CAREER	OPTION	QUALIFICATION
TEACHING CAREER	Trained Graduate Teacher: They are appointed as TGT to teach games & sports for class 1st to 10th.	B. P. Ed
	Post Graduate Teacher: They are appointed as PGT to teach the theory / syllabus of physical education of class 11th & 12th in schools.	M. P. Ed
	Lecturers at college level: They are appointed as Lecturers to teach advanced physical education for college students.	M. P. Ed along with Ph.D OR M. P. Ed along with passing NET (National Eligibility Test)
COACHING CAREER	Specialized Coach in various games and Sports	Diploma in Sports Coaching
FITNESS RELATED CAREER	Aerobics Trainer Calisthenics Expert Rhythmic Expert Yoga Instructor Weight Training Expert	Certificate Course from various recognized bodies.
SPORTS MEDIA AND JOURNALISM	Sports journalist Sports Photographer Commentators Sports magazine writers	Post Graduate Diploma or Certificate Course from various recognized bodies.
SPORTS ADMINISTRATION	D.S.O (District Sports Officer) Director of Intra & Extra murals.	B. P. Ed along with Diploma in Sports Coaching or NET
SPORTS MANAGEMENT	Manager for competitions, Sports clubs, Swimming pools etc.	Post Graduate Diploma or Certificate Course from various recognized bodies.
SPORTS MARKETING	Involvement in promotional events As marketing head of various sports organizations	Post Graduate Diploma or Certificate Course from various recognized bodies.
SPORTS PHOTOGRAPHY	As freelancer or along with Media house as Sports photographer	Post Graduate Diploma or Certificate Course from various recognized bodies.

KHELO-INDIA PROGRAM AND FIT – INDIA PROGRAM

The programme was Launched in **2018** by the then Sports Minister **Col. Rajyavardhan Singh Rathore**. It was introduced to revive the sports culture in India at the grass-root level by building a strong framework for all sports played in our country and establish India as a great sporting nation. It is organized in two categories:

- Candidates below the age of 17 can participate in the under-17 category.
- Candidates below the age of 21 can participate in the under-21 category.



FIT-INDIA

FIT INDIA Movement was launched on **29th August, 2019** by **Honourable Prime Minister Shri. Narendra Modi**, with a view to make fitness an integral part of our daily lives. The mission of the Movement is to bring about behavioural changes and move towards a more physically active lifestyle.

Fit India proposes to undertake various initiatives and conduct events to achieve the following objectives:

- To promote fitness as easy, fun and free.
- To spread awareness on fitness and various physical activities that promote fitness through focused campaigns.
- To encourage indigenous sports.
- To make fitness reach every school, college/university, panchayat/village, etc.
- To create a platform for citizens of India to share information, drive awareness and encourage sharing of personal fitness stories.



SELF PRACTISE QUESTIONS

MULTIPLE CHOICE QUESTIONS:

01 Mark

Q1. In 1800, Physical Education was known as

- a) Physical Culture
- b) Physical Training
- c) Gymnastics**
- d) Hygiene Training

Q2. In Jesse Feiring William's definition of Physical Education, Physical education is the sum of man's physical activities selected as to kind, and conducted as to outcomes, the phrase 'activities selected as to kind' refers to activities that are

- a) Based on physical activities
- b) Based on planned outcomes
- c) Based on desired outcomes**
- d) Based on expected outcomes

Q3. Amongst the following which one is the key process in physical education?

- a) Making efforts
- b) Developing skills**
- c) Checking competency
- d) Evaluating performance

Q4. Where is the Laxmibai National Institute of Physical Education (LNPE) situated?

- a) Patiala
- b) Gwalior**
- c) New Delhi
- d) Lucknow

Q5. SAI stands for:

- a) Sports Academic Of India
- b) Sports Appointment of India
- c) Sports Authority of India**
- d) Sports Accreditation of India

Q6. Khelo India Programme was introduced in _____

- a) 2016-2017
- b) 2017-2018**
- c) 2018-2019
- d) 2019-2020

Q7. Where was the first edition of Khelo India Youth Games held?

- a) Pune
- b) New Delhi**
- c) Ranchi
- d) Guwahati

Q8. Which state won the highest medals in the Khelo India Youth Games 2022?

- a) Delhi
- b) Haryana**
- c) Kerala
- d) Maharashtra

Q9. Fit India Movement was launched in:

- a) 26 August ,2019
- b) 29 August , 2019**
- c) 26 February, 2018
- d) 29 February , 2019

Q10. What is/are the objective(s) of Fit India Movement?

- a) To promote fitness as easy ,fun and free
- b) To encourage indigenous sports
- c) To make fitness reach every school, college/university, panchayat/village etc.
- d) All of the above**

Q11. ASSERTION-REASON TYPE QUESTION

Each of the following question consist of two statements labelled Assertion (A) and Reason(R) and has following four choices (a) , (b) , (c) and (d).

Assertion (A): In 1973 Laxmibai College Of Physical Education (LCPE) was renamed to Laxmibai National College Of Physical Education (LNCPE).

Reason (R): LCPE got the status of “Deemed University”

- 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

Q12. ASSERTION-REASON TYPE QUESTION

Assertion (A): Khelo India Programme was launched by the Ministry of Youth Affairs and Sports, Government of India ,in 2019.

Reason (R): Its main objective was to revive the sports culture in India , especially at the grass roots level by building a strong framework for all sports played in our country and establishing India as a great sporting nation.

- 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**

Q13. MATCHING TYPE QUESTIONS

LIST-I	LIST-II
(Sports related Organisation)	(Year of Establishment)
i. All India Council of Sports (AICS)	1. 2000
ii. National Institute of sports	2. 1984
iii. Sports Authority of India	3. 1961
iv. Ministry of Youth Affairs and sports	4. 1954

Choose the correct option from the following:

	I	II	III	IV
a)	1	2	3	4
b)	2	1	4	3
c)	4	3	2	1
d)	3	4	1	2

VERY SHORT ANSWER QUESTION 2 Marks

Q1. What is the basic difference between 'Khelo India' and 'Fit India' scheme?

Answer:

Khelo India Scheme mainly focuses on Sportsman, Competition and optimization of performance whereas Fit India Mission emphasise on general fitness of the citizen and the country as a whole.

SHORT ANSWER QUESTION 3 Marks

Q1. Write a short note on:

- Career in sports journalism
- Career in sports Photography
- Teaching career in physical education

Answer:

Sports Journalism: Sports journalism is a form of writing that reports on matters pertaining to sporting topics and competitions. It covers both Text and TV Media.

Sports Photography: It includes both still and video mode to collect images of and footage of various sporting moments in a tournament.

Teaching Career in Physical Education: It includes teaching in School, Colleges and other educational institutions.

CASE STUDY BASED QUESTIONS

4 Marks

Q1. Participation in sports is an extremely important component of the development of any nation. When we see India's performance in international sports events, it is found that India is making a steady progress and this is happening when only 5% of our total population participates in games and sports. If this percentage of participation is enhanced, then results could be different. Thus, to inspire young talent and to provide them with world-class infrastructure and training facilities, the "Khelo India Programme" was launched by the Government of India.

Based on the above information, answer the following questions:

- When was the "Khelo India programme" launched?
- Khelo India programme was launched by the ministry of _____ Government?
- The scheme of 'Sports for peace & development' is exclusively for the state / UT _____.
- Who designed the three-stroke Khelo India logo?

Answer:

- 2017/2018
- Youth affairs & sports
- Jammu & Kashmir
- Ogilvy India

LONG ANSWER QUESTION

5 Marks

Q1. From the chronology events in Post Independent India mention any two committees and three institutions that have played an important role towards development of Sports in India.

Answers:

The committees that played a leading role in promotion of Sports in India are:

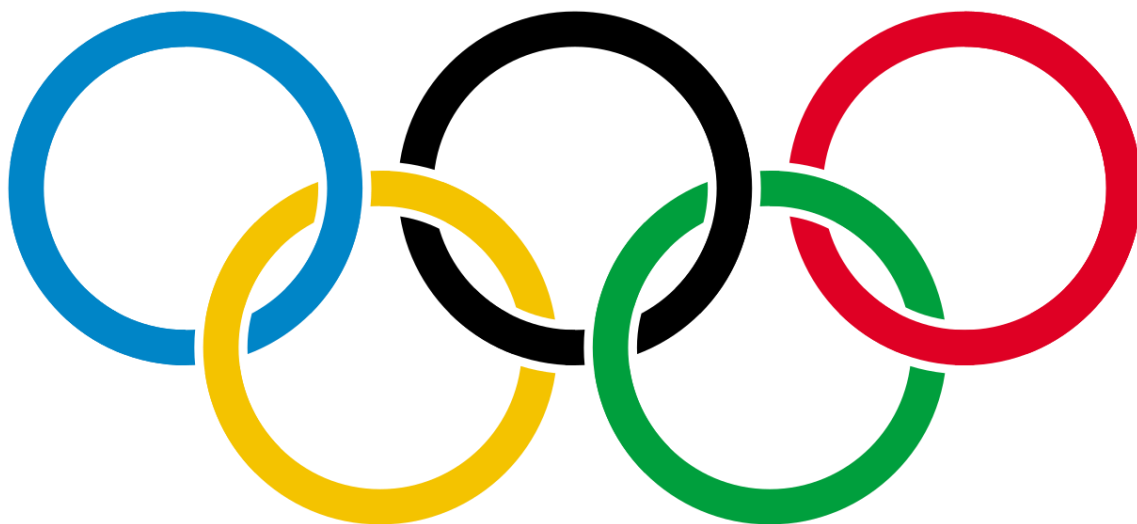
- KUNZURU COMMITTEE
- KAUL & KAPOOR COMMITTEE

The institutions that played a leading role in promotion of Sports in India are:

- LAKSHMIBAI NATIONAL COLLEGE OF PHYSICAL EDUCATION
- NETAJI SUBASH NATIONAL INSTITUTE OF SPORTS
- SPORTS AUTHORITY OF INDIA

(Elaborate Them)

OLYMPIC VALUE EDUCATION



- Olympism – Concept and Olympics Values (Excellence, Friendship & Respect)
- Olympic Value Education – Joy of Effort, Fair Play, Respect for Others, Pursuit of Excellence, Balance Among Body, Will & Mind
- Ancient and Modern Olympics
- Olympics - Symbols, Motto, Flag, Oath, and Anthem
- Olympic Movement Structure - IOC, NOC, IFS, Other members

OLYMPISM – CONCEPT AND OLYMPICS VALUES (EXCELLENCE, FRIENDSHIP & RESPECT)

OLYMPISM refers to the Philosophy of Olympic Games. It seeks to create a way for life by blending Sports with Culture, education and International Cooperation. The goal of Olympism is to place sports at the service of harmonious development.

OLYMPIC VALUES

The three values of Olympism are excellence, friendship and respect. They constitute the foundation on which the Olympic Movement builds its activities to promote sport, culture and education with a view to building a better world.

Excellence : Encouraging people to be the best they can be.

Friendship : It encourages to see sports as an instrument for mutual understanding between individuals and between people all over the world.

Respect : For Self, Rules & Regulation, Opponents, Sports, Environment and other people.

OLYMPIC VALUE EDUCATION – JOY OF EFFORT, FAIR PLAY, RESPECT FOR OTHERS, PURSUIT OF EXCELLENCE, BALANCE AMONG BODY, WILL & MIND

JOY OF EFFORT:

The joy of effort represents the satisfaction that comes from **giving your best, regardless of the outcome**. Athletes demonstrate true sportsmanship by embracing the challenges and pushing their limits.

FAIR PLAY:

It is the function of Olympic spirit, emphasizing **honesty, integrity** and **respect for rules** and opponents. Athletes are encouraged to compete ethically, with a strong sense of sportsmanship and putting the spirit of game above personal gains.

RESPECT FOR OTHERS:

The Olympic celebrate diversity and promote mutual respect among athletes regardless of their background and nationality. Respect to others extends to Coaches, officials and fans creating a harmonious and inclusive sports environment.

PURSUIT OF EXCELLENCE:

Striving for excellence is core Olympic value inspiring athletes to continuously improve and reach their highest potential.

BALANCE AMONG BODY WILL AND MIND:

The Olympic recognize the importance of a holistic approach to sport and life. Athletes are encouraged to maintain a healthy balance among Physical training, mental preparations and emotional wellbeing.

ANCIENT AND MODERN OLYMPICS

ANCIENT OLYMPICS

It began in **776 BC** in **Olympia Valley**. The Ancient Olympic Games were mainly a part of a religious festival in the honour of God Zeus. There was a series of athletic competitions held every four years at the sacred site of Olympia.

The events constituted of 05 Days

- Day 01- Opening Ceremony
- Day 02- Animal Games
- Day 03- Foot Race, Chariot Race, Equestrian, Throwing & Jumping
- Day 04- Boxing, Wrestling, Sword fighting and other contact games
- Day 05- Closing ceremony with Prize distribution

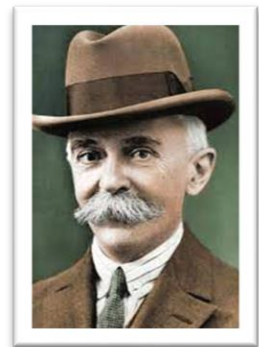
MODERN OLYMPICS

Baron Pierre de Coubertin founded the **International Olympic Committee (IOC)** in **1894**, leading to the **first modern Games in Athens in 1896**.

The IOC is the governing body of the Olympic Movement with the Olympic Charter defining its structure and authority.

The first modern Olympic Games were held on Sunday **24th March 1896** in the **Panathenaic Stadium in Athens (Greece)**.

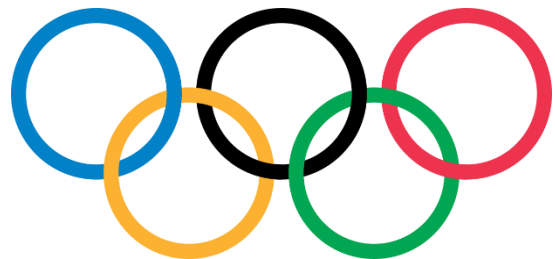
The Modern Olympic Games are leading International sporting events in which thousands of athletes from around the world participate in a variety of competitions.



OLYMPICS - SYMBOLS, MOTTO, FLAG, OATH, AND ANTHEM

OLYMPIC SYMBOL

The rings are five interlocking rings, coloured **BLUE, YELLOW, BLACK, GREEN** and **RED** on a white field, known as the "Olympic rings". The symbol was originally created in **1913** by **Coubertin**. He appears to have intended the rings to represent the five continents: **EUROPE, AFRICA, ASIA, THE AMERICAS**, and **OCEANIA**. There is no linkage between the colour of ring and the continents.



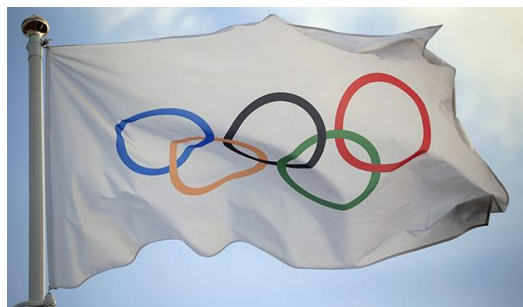
OLYMPIC MOTTO

The Olympic Motto is inscribed under the emblem which consists of three **Latin** words

CITIUS	FASTER
ALTIUS	HIGHER
FORTIUS	STRONGER

OLYMPIC FLAG

The flag was created for the Olympic Jubilee Congress in 1914 in Paris in celebration of the 20th anniversary of the Olympic Movement. First time it was hoisted in the **1920 Olympic Games in Antwerp**.



OLYMPIC OATH

Baron Pierre de Coubertin wrote the oath. First time it was introduced in 1920 Antwerp games. Every athlete promises to play fairly and obey all of the Olympic rules. One athlete from host country takes the oath at the opening ceremonies on behalf of all athletes by holds a corner of the Olympic Flag.



OLYMPIC ANTHEM

Created by Greek composer **Spýros Samáaras** to words written by his fellow countryman, poet Kostís Palamás, the Olympic Anthem is in fact the oldest property of the modern Games.

*"O Ancient immortal Spirit, pure father
Of beauty, of greatness and of truth,
Descend, reveal yourself and flash like lightning here,
within the glory of your own earth and sky.
At running and at wrestling and at throwing,
Shine in the momentum of noble contests,
And crown with the unfading branch
And make the body worthy and iron like.
Plains, mountains and seas glow with you
Like a white-and-purple great temple,
And hurries at the temple here, your pilgrim,
O Ancient immortal Spirit, every nation."*

OLYMPIC MOVEMENT STRUCTURE - IOC, NOC, IFS, OTHER MEMBERS

INTERNATIONAL OLYMPIC COMMITTEE (IOC)

- It was created by Coubertin in **23 June, 1894**.
- The IOC is the governing body of Modern Olympic Games.
- It supports and promotes participation in sports all over the world for building a peaceful world without discrimination.
- Headquarter in **Switzerland**.

NATIONAL OLYMPIC COMMITTEE (NOC)

The mission of the NOCs is to develop, promote and protect the Olympic Movement in their respective countries, in accordance with the Olympic Charter.

NOCs encourage the development of high performance sport as well as sport for all, while also providing training of sports administrators based on the Fundamental Principles of Olympism.

INDIAN OLYMPIC ASSOCIATION (IOA)

- It was created in 1927 and affiliated by IOC.
- It was created by Sir Dorabji Tata & Dr. A.G Noehren.
- The selection of National Teams is done by such Sports Federations and they recommend to IOA.
- It sends the Indian Contingent for Olympic Games, Commonwealth Games, Asian and South Asian Games.

Objectives of IOA

- Development & promotion of Olympic Movement.
- To obey and protects the rights of IOC.
- To encourage the youths for physical, moral & cultural education.
- To take strict actions against misbehaviour.
- To create national Olympic academies & museums related to Olympic.
- To oppose the discrimination on ground of races, religion, gender, caste & colour.



INTERNATIONAL SPORTS FEDERATIONS (ISF)

The International Sports Federations are responsible for establishing and enforcing the rules concerning the practice of their respective sports and to ensure their application.

The role of the IFs is to also oversee the development of their sports worldwide while acting in accordance with the Olympic Charter, including the adaption and implementation of the World Anti-Doping Code.

SELF PRACTISE QUESTIONS

MULTIPLE CHOICE QUESTIONS:

01 Marks

1. IOC was formed in

(a) 1886

(c) 1892

(b) 1894

(d) 1880

2. Ancient Olympic Games were organized in the honor of god.

(a) Hercules

(c) Posedon

(b) Theondosis

(d) Zues

3. How many rings Olympic symbol has?

(a) Three

(c) Five

(b) Two

(d) Four

4. Where is the headquarters of IOC?

(a) New York

(c) Paris

(b) Switzerland

(d) France

5. Who is the first President of Indian Olympic Association (IOA)?

(a) Sir Dorabji Tata

(c) Sardar Vallabh Bhai Patel

(b) Jawaharlal Nehru

(d) M.K. Gandhi

6. When was IOA established?

(a) 1937

(c) 1925

(b) 1935

(d) 1927

7. Who is known as the Father of modern Olympics?

(a) Prof Jigaro kano

(c) P.B.D. Coubertin.

(b) Sir Dorabji Tata

(d) Jocr Rogges

8. Where 2021 Olympics are held?

(a) Los angles

(c) Maxico

(b) India

(d) Tokyo

9. Choose the correct option. (a) The Olympic Games were revived in _____.

(a) 1800

(c) 1896

(b) 1856

(d) 1899

10. The Olympic Motto "Citius, Altius, Fortius" means _____.

(a) Faster, Higher, Stronger

(b) Faster, Stronger, Higher

(c) Stronger, Higher, Faster

(d) None of these

11. Match The Following

Match list-1 with list-2 and select the correct answer from the codes given below:

List-1

List-2

1.Father of Olympics

i) Citius , Altius ,Fortius

2.International Olympics Committee

ii) 394 A.D.

3.Olympic Ideal

iii) 23 June 1834

4.Last event of Ancient Olympics

iv) Pierre-de-Coubertin

Codes:

	(i)	(ii)	(iii)	(iv)
a)	2	4	3	1
b)	2	1	4	3
c)	4	3	1	2
d)	3	1	2	4

12. Assertion-Reason Type Questions

Assertion (A): Olympic flag is made up of a silk cloth in which five rings are embedded with each other.

Reason (R): Olympic flame is symbol of peace.

In the context of the above two statements, which one of the following is correct?

(a) Both (A) and (R) are true and (R) is the correct explanation of (A).

(b) Both (A) and (R) are true and (R) is not the correct explanation of (A).

(c) (A) is true but (R) is false.

(d) (A) is false but (R) is true.

VERY SHORT ANSWER QUESTION**2 Marks**

Q1. What are the colour of Rings in the Olympic flag?

Answer:

Blue, Yellow, Black, Green & Red

Q2. What does these rings symbolise?

Answer:

The interlinked rings represents the unity among continents.

SHORT ANSWER QUESTION**3 Marks**

Q1. What are Olympic Values:

Answers:

Excellence : Encouraging people to be the best they can be.

Friendship : It encourages to see sports as an instrument for mutual understanding between individuals and between people all over the world.

Respect : For Self, Rules & Regulation, Opponents, Sports, Environment and other people.

Q2. What are Olympic Mottos?

Answer:

The three Olympic Mottos are – CITIUS means FASTER, ALTIUS means HIGHER & FORTIUS means STRONGER

CASE STUDY BASED QUESTIONS**4 Marks**

While introducing the chapter Olympism in physical Education class Mr. Davis found that children were not familiar with the term and were clueless about the various committees working in this field. So he explained in detail about IOC and various information related to it were discussed. On the basis of your knowledge about IOC answer the following questions

- a) What is the full form of IOC?
- b) When was the IOC established?
- c) Where is the headquarter of IOC?
- d) Who is the 2nd president of IOC?

Answers:

- a) International Olympic Committee
- b) 1894
- c) Switzerland
- d) P.B.D. Coubertin

LONG ANSWER QUESTION**5 Marks**

Q1. Olympics is a mega sporting event which is deeply rooted to our history. The modern Olympics is an excellent platform for sportsmen to showcase their talent. Beyond the performance, what other things does the Olympics teach us?

Answer:

JOY OF EFFORT: The joy of effort represents the satisfaction that comes from giving your best, regardless of the outcome. Athletes demonstrate true sportsmanship by embracing the challenges and pushing their limits.

FAIR PLAY: It is the function of Olympic spirit, emphasizing honesty, integrity and respect for rules and opponents. Athletes are encouraged to compete ethically, with a strong sense of sportsmanship and putting the spirit of game above personal gains.

RESPECT FOR OTHERS: The Olympic celebrate diversity and promote mutual respect among athletes regardless of their background and nationality. Respect to others extends to Coaches, officials and fans creating a harmonious and inclusive sports environment.

PURSUIT OF EXCELLENCE: Striving for excellence is core Olympic value inspiring athletes to continuously improve and reach their highest potential.

BALANCE AMONG BODY WILL AND MIND: The Olympic recognize the importance of a holistic approach to sport and life. Athletes are encouraged to maintain a healthy balance among Physical training, mental preparations and emotional wellbeing.

YOGA



- Meaning and importance of Yoga
- Introduction to Astanga Yoga
- Yogic Kriyas (Shat Karma)
- Pranayama and its types.
- Active Lifestyle and stress management through Yoga

MEANING AND IMPORTANCE OF YOGA

The term 'Yoga' is derived from **Sanskrit word- 'Yuj'**. Yuj means 'Join or union'.

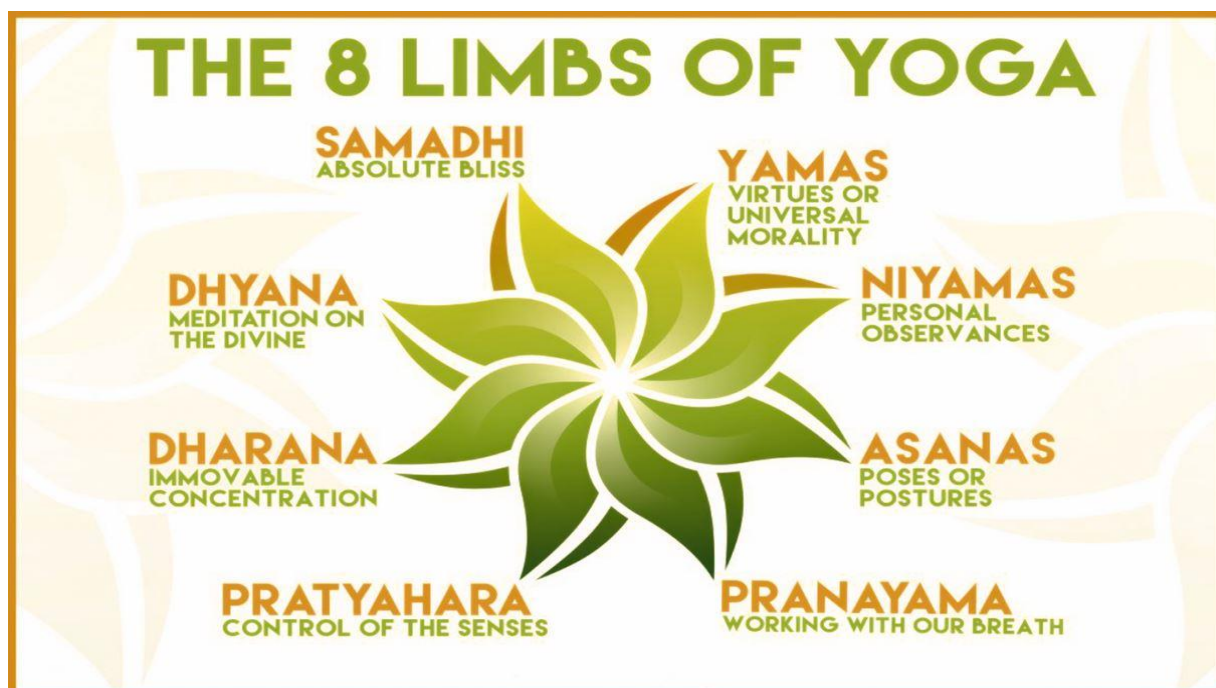
Thus, Yoga is considered as - '*Joining of individual self with Almighty*'.



IMPORTANCE OF YOGA	
PHYSICAL PURITY	In mean cleanliness of internal body and in yoga we are able to purify our internal organs with different yogic / <i>shuddhi kriyas</i> .
POSTURAL DEFORMITIES	Good Posture is imp for leading a good physical appearance and it can be maintained by yoga. If we do Yoga daily, we can prevent our body from various postural Deformities.
PREVENTION FROM DISEASES	Through due regularity of yoga we can prevent from various disease fighting Resistance.
ENHANCING FLEXIBILITY	If we do yoga asana daily so we can enhance our flexibility which are very imp for leading a healthy life. It prevent us from injuries and sports and body movement become quick.
MENTAL RELAXATION	Yoga is helpful for reducing mental stress everybody wants to free from anger, anxiety and emotional disturbances which is possible by the regular practice of yoga.
REDUCE OBESITY	Through the yogic exercises we can reduce obesity and make our body fit.
WILL POWER & CONFIDENCE	Through meditation mind can be trained to concentrate in one direction. All the distractions are eliminated and persons get mental power.

INTRODUCTION TO ASTANGA YOGA

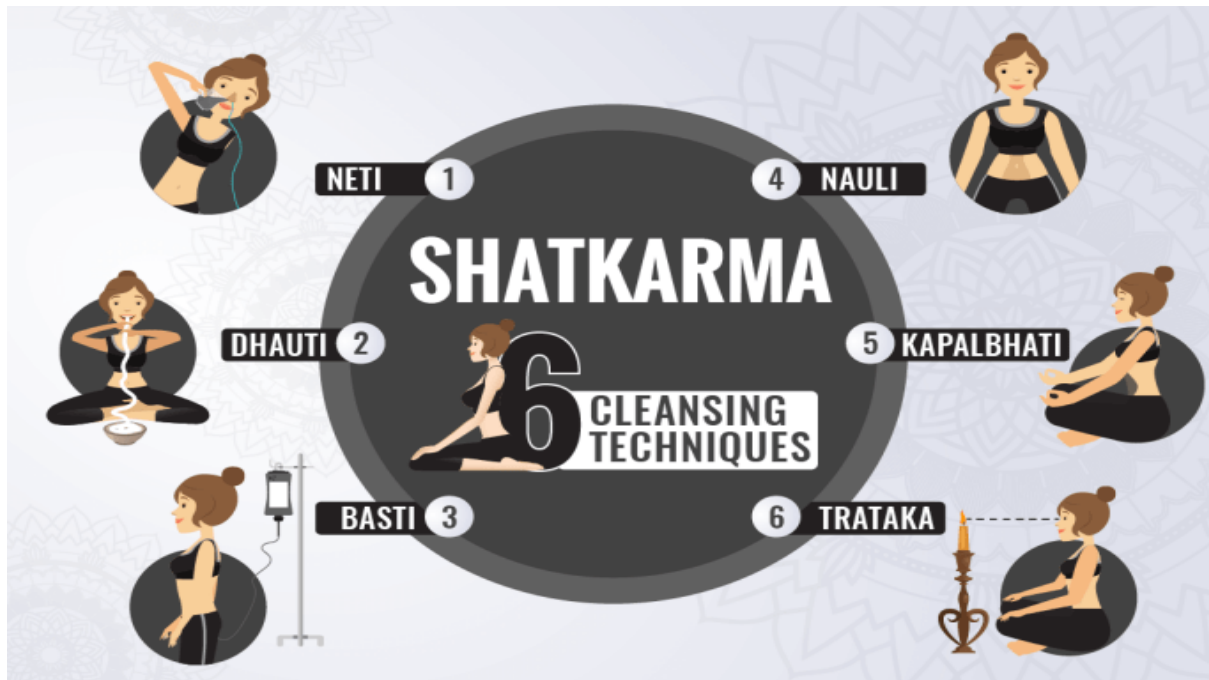
Around 147 BC, Patanjali developed a system of yoga that contains eight steps, popularly known as 'Astanga Yoga'.



ELEMENTS OF YOGA

YAMAS	Yamas are ethical rules and can be thought of as moral imperatives.
NIYAMA	It includes virtuous habits, behaviors and observances (the "dos").
ASANA	Asana is a posture that one can hold for a period of time, staying relaxed, steady, comfortable and motionless.
PRANAYAMA	It is the practice of consciously regulating breath (inhalation and exhalation).
PRATYAHARA	It is a process of withdrawing one's thoughts from external objects, things, person, and situation.
DHARANA	Dharana means concentration, introspective focus and one-pointedness of mind.
DHYANA	Dhyana literally means "contemplation, reflection" and "profound, abstract meditation".
SAMADHI	Samadhi literally means "putting together, joining, combining with, union, harmonious whole, trance".

YOGIC KRIYAS (SHAT KARMA)



NETI KRIYA

Purifies nasal cavities from accumulated impurities. It is very important to clear the nasal cavities as it is the pathway to 'Prana' or vital energy. This kriya is done using a clean neti pot.

JALA NETI

Using the neti pot, water is poured in through one nostril & then, under the effect of gravity, it is expelled out through the other nostril. Water that comes out from other nostrils removes impurities from nasal pathways.



SUTRA NETI

In this neti, a rubber thread (sutra) is used to massage the nasal pathways to open any blockages in the nostrils

DHAUTI KRIYA

Vamana Dhauti –Consuming a large quantity of lukewarm water and then vomiting it out to expel impurities from the food pipe.



Vastra Dhauti – A clean muslin cloth soaked in lukewarm water is swallowed and held in the stomach for a few minutes. Then it's pulled out from the mouth, which brings along impurities from the intestinal tract.

BASTI KRIYA

It is a technique that involves replenishing the body internally by cleansing the large intestines.

This technique helps treat disorders related to digestion & elimination. Jala Basti is one of the common practices among all the types of basti.

Traditionally, this is practiced by squatting in a river. In this cleansing technique, water is used to clean the bowels. The process involves taking a tub of water until the navel and sitting over it in Utkatasana.



NAULI KRIYA

It is an abdominal cleansing kriya that involves the movement of the lower abdominal muscles to stimulate the digestive process. Nauli practice provides a massaging effect & purifies the liver, spleen, urinary bladder, pancreas, gall bladder, and intestines.



KAPALBHATI

It is the one of the six kriyas that work on improving the brain's functioning.

Kapalabhati translates to "Skull Shining". It is a cleansing kriya to improve respiratory health, energize the body & keep the mind alert. In Kapalabhati, the abdominal wall rapidly draws in and out in conjunction with the breathing. The inhale is passive & the exhale is active.

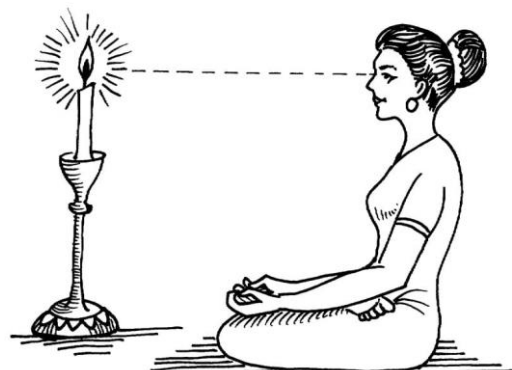


TRATAKA

Trataka Kriya is one of the easiest & effective eye cleansing techniques that involve steady & continuous gazing at any external or internal unmoving point. An illuminated candle at eye level works best.

Internal Trataka: It is when the focus is rested on the Third eye (located between eyebrows). This helps to awaken the third eye or the 6th chakra – Ajna chakra.

External Trataka: It is the practice of continuously gazing at an external object over time. E.g., the illuminated candle is at eye level.



PRANAYAMA AND ITS TYPES.

"Pranayama is control of Breath". "Prana" is Breath or vital energy in the body. On subtle levels prana represents the pranic energy responsible for life or life force, and "ayama" means control. So Pranayama is "Control of Breath".

SURYABHEDA PRANAYAMA: (Vitality Stimulating Breath)

Surya is 'the sun' and 'Bheda' means 'to pierce.' In this pranayama *Pingala Nadi* is activated by breathing in through the right nostril.

UJJAYI PRANAYAMA: (Victorious Breathe)

Ujjayi means 'victorious;' often known as the 'psychic breath'. This pranayama occurs spontaneously when concentration becomes deep and intense.

SEETKARI PRANAYAMA: (Hissing Breath)

In Seetkari pranayama the sound 'see' or 'seet' is made during inhalation.' The practice produces coolness in the body.

SHEETALI PRANAYAMA: (Cooling Breath)

Sheetali means 'the cooling breath' and it also means calm, passionless, unemotional. Like Seetkari, this pranayama was specifically designed to reduce the body temperature.

BHASTRIKA PRANAYAMA: (Bellows Breath)

Bhastrika is the name of the pranayama which imitates the action of the bhastra or 'bellows' and fans the internal fire, heating the physical and subtle bodies. The inhalation and exhalation are equal and are the result of systematic and equal lung movements. The breath is sucked in and pushed out with a little force.

BHRAMARI PRANAYAMA: (Humming Bee Breath)

This is Bhramari, 'the humming bee' pranayama, so called because the sound you make during respiration imitates that of a black bee.

MOORCHHA PRANAYAMA: (Swooning Breath)

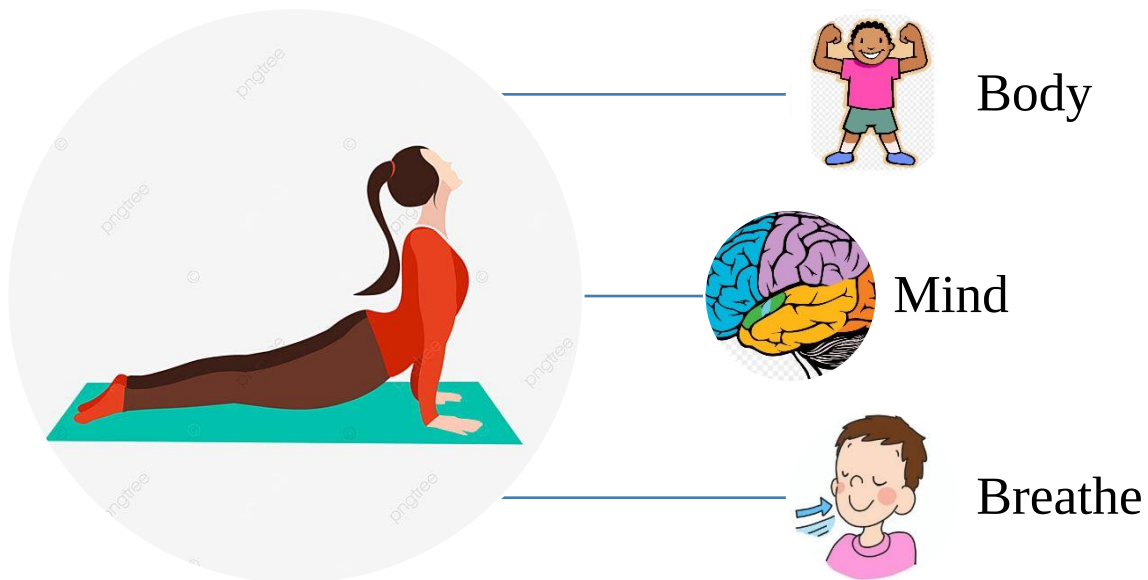
Moorchha is 'to faint' or 'swoon.' Through this pranayama the experience of conscious unconsciousness is meant to arise. Thus the purpose of this pranayama is to expand the consciousness and store prana.

PLAVINI PRANAYAMA: (Gulping Breath)

Plavana means 'to float.' According to the hatha yoga texts, Plavini pranayama enables one to float on water. The air is retained in the stomach and intestines and not expelled immediately.

ACTIVE LIFESTYLE AND STRESS MANAGEMENT THROUGH YOGA

Yoga can help reduce stress because it **promotes relaxation**, which is the natural opposite of stress. Yoga can benefit three aspects of ourselves that are often affected by stress: our body, mind, and breathing.



- Yoga encourages mental and physical relaxation, which helps reduce stress and anxiety.
- Yoga poses release physical blockages like muscle knots, helping release emotions and tension.
- Yoga promote the release of mood-boosting endorphins, which are the feel-good hormones that can positively affect how you handle stress.
- Focusing on the present moment during your yoga practice enhances awareness, boosts concentration.

SELF PRACTISE QUESTIONS

MULTIPLE CHOICE QUESTIONS:

01 Mark

Q1. Which of the following is considered the foundational text of classical yoga philosophy?

- a) Bhagavad Gita
- b) Yoga Sutras of Patanjali**
- c) Upanishads
- d) Vedas

Q2. In yoga, the term 'asana' refers to:

- a) Meditation techniques
- b) Breathing exercises
- c) Physical postures**
- d) Mantras and chanting

Q3. Which of the following is NOT a type of yoga practice?

- a) Hatha Yoga
- b) Vinyasa Yoga
- c) Zumba Yoga**
- d) Kundalini Yoga

Q4. Pranayama, a practice in yoga, primarily focuses on:

- Physical strength
- Flexibility
- Breath control**
- Mindfulness meditation

Q5. The term 'Namaste' commonly used at the end of a yoga session means:

- a) Good luck
- b) Hello
- c) The divine in me honors the divine in you**
- d) Peace and love

VERY SHORT ANSWER QUESTION

2 Marks

Q1. What is the primary goal of yoga?

Answer: The primary goal of yoga is to achieve physical, mental, and spiritual well-being through a balanced approach involving postures, breathing exercises, and meditation.

Q2. Define 'asana' in the context of yoga.

Answer: Asana refers to the physical postures or poses practiced in yoga to improve flexibility, strength, and balance.

Q3. What does 'pranayama' focus on in yoga practice?

Answer: Pranayama focuses on breath control to enhance the flow of life energy and promote mental clarity and relaxation.

Q4. What is the significance of 'Savasana' in a yoga session?

Answer: Savasana, or the Corpse Pose, is significant as it allows the body and mind to relax and integrate the benefits of the yoga practice.

Q5. What is the 'Yoga Sutras of Patanjali'?

Answer: The Yoga Sutras of Patanjali is a foundational text in yoga philosophy outlining the principles and practices of yoga.

Q6. Which type of yoga focuses on dynamic flowing sequences?

Answer: Vinyasa Yoga focuses on dynamic flowing sequences that synchronize breath with movement.

SHORT ANSWER QUESTION

3 Marks

Q1. Define yoga and its primary goal.

Answer: Yoga is a physical, mental, and spiritual practice originating in ancient India. Its primary goal is to achieve a state of physical well-being, mental peace, and spiritual enlightenment through various postures (asanas), breathing exercises (pranayama), and meditation.

Q2. Explain the significance of "Pranayama" in yoga practice.

Answer: Pranayama is the practice of breath control in yoga. It is significant because it helps in regulating the flow of prana (life energy) in the body, improves respiratory function, calms the mind, reduces stress, and enhances overall physical and mental health.

Q3. What are the benefits of practicing "Surya Namaskar" (Sun Salutation)?

Answer: Surya Namaskar, or Sun Salutation, offers numerous benefits, including improving flexibility, strengthening muscles, enhancing cardiovascular health, aiding digestion, and promoting mental clarity and relaxation.

Q4. Describe the role of meditation in yoga.

Answer: Meditation in yoga plays a crucial role in calming the mind, increasing concentration, reducing stress and anxiety, promoting emotional health, and achieving a state of inner peace and self-awareness.

Q5. What is "Hatha Yoga" and how does it differ from other forms of yoga?

Answer: Hatha Yoga is a branch of yoga that emphasizes physical postures (asanas) and breath control (pranayama) to prepare the body and mind for meditation. It differs from other forms of yoga by its focus on physical discipline and body alignment, serving as a foundation for other yoga practices.

CASE STUDY BASED QUESTIONS**4 Marks**

Q1. Varun was very keen to know the impacts of Yoga and thus he visit the central Library in his city. He came across many benefits of Yoga on our Health and Fitness. He was very surprised to know that Yoga has certain techniques to cleanse our inner body parts known as Shat Karma. This encouraged him to practise those Shat Karmas under specialised person so that he can reap the real benefits of those techniques.

- e) Based on the above situation, answer the following questions:
- f) Shat Karmas are also known as Yogic _____.
- g) The technique to cleanse the nostrils is known as _____.
- h) The technique to cleanse the Lungs is known as _____.
- i) The technique to cleanse the Stomach is known as _____.
- j)

Answer:

- (a) Kriyas
- (b) Neti
- (c) Kapalbhati
- (d) Dhauti

LONG ANSWER QUESTION**5 Marks**

Q1. Explain the historical origins and development of yoga. Discuss its evolution from ancient times to its modern-day practice.

Answer: Yoga originated in ancient India, with roots tracing back over 5,000 years. The earliest references to yoga are found in the Rig Veda, one of the oldest sacred texts. Initially, yoga was a meditative practice aimed at spiritual growth and self-realization, intertwined with religious and philosophical teachings.

During the pre-classical period, yoga evolved through the Brahmanas and Upanishads, with the latter texts introducing concepts like karma and the importance of meditation. Patanjali's Yoga Sutras, compiled around 200 CE, formalized yoga into an eight-limbed path (Ashtanga) encompassing ethical guidelines, physical postures (asanas), breath control (pranayama), and meditation.

The classical period witnessed the development of various yoga schools, each emphasizing different aspects of the practice. In the post-classical period, Hatha Yoga emerged, focusing on physical techniques to prepare the body for meditation.

In the 19th and 20th centuries, yoga was popularized in the West through the efforts of Indian teachers like Swami Vivekananda and Paramahansa Yogananda. Modern yoga now combines physical fitness, mental well-being, and spiritual enlightenment, practiced globally across diverse cultures and societies.

Q2. Discuss the physical, mental, and spiritual benefits of practicing yoga regularly.

Answer: Practicing yoga regularly offers numerous physical, mental, and spiritual benefits. Physically, yoga enhances flexibility, strength, and balance through various asanas

(postures). It improves cardiovascular health, respiratory function, and helps in weight management. Regular practice can also alleviate chronic pain, reduce inflammation, and enhance overall physical endurance.

Mentally, yoga promotes relaxation and stress relief. Techniques like pranayama (breath control) and meditation help calm the mind, reduce anxiety, and improve focus and concentration. Studies have shown that yoga can lower cortisol levels, the body's primary stress hormone, thus enhancing mental clarity and emotional stability.

Spiritually, yoga fosters a sense of inner peace and self-awareness. It encourages mindfulness and a deeper connection with one's inner self. The practice of dhyana (meditation) and dharana (concentration) can lead to heightened states of consciousness and a sense of unity with the universe. For many, yoga serves as a path to spiritual growth and self-realization, transcending physical practice to embrace a holistic way of living.

Q3. Describe the eight limbs of yoga as outlined in Patanjali's Yoga Sutras. How do these principles guide a practitioner's journey towards self-realization?

Answer: Patanjali's Yoga Sutras outline the eight limbs of yoga, known as Ashtanga, which provide a comprehensive guide for personal development and spiritual growth. The eight limbs are:

- **Yamas:** Ethical guidelines governing interactions with others, including non-violence (ahimsa), truthfulness (satya), non-stealing (asteya), continence (brahmacharya), and non-possessiveness (aparigraha).
- **Niyamas:** Personal observances for self-discipline, including cleanliness (saucha), contentment (santosha), austerity (tapas), self-study (svadhyaya), and surrender to a higher power (Ishvara pranidhana).
- **Asanas:** Physical postures designed to purify the body and prepare it for meditation, promoting strength, flexibility, and balance.
- **Pranayama:** Breath control techniques that enhance vital energy (prana) in the body, calming the mind and improving focus.
- **Pratyahara:** Withdrawal of the senses from external distractions, facilitating inner focus and mental clarity.
- **Dharana:** Concentration practices that train the mind to focus on a single point or object.
- **Dhyana:** Meditation, involving sustained, focused attention and contemplation, leading to a deep state of awareness and tranquillity.
- **Samadhi:** The ultimate state of self-realization and union with the divine, where the practitioner experiences profound inner peace and enlightenment.

Chapter- 4

PHYSICAL EDUCATION & SPORTS FOR CWSN



- Concept of Disability and Disorder
- Types of Disability, its causes & nature (Intellectual disability, Physical disability).
- Disability Etiquette
- Aim and objectives of Adaptive Physical Education.
- Role of various professionals for children with special needs (Counsellor, Occupational Therapist, Physiotherapist, Physical Education Teacher, Speech Therapist, and Special Educator)

CWSN (*Divyank*) CHILDREN WITH SPECIAL NEED

- Mental Retardation
- Deafness
- Speech or Language impairment
- Blindness
- Orthopaedic impairment
- Autism
- Traumatic Brain Injury
- Poor body mechanics
- Various Impairments

Usually they have limited opportunities. It's important to include them with other children so that they get all the benefits of participating in Physical Education & Sports programmes.



CONCEPT OF DISABILITY AND DISORDER

DISABILITY

- Disability is an impairment that may be cognitive, developmental, intellectual, mental, physical, etc.
- It's either inborn or occur during one's lifetime.
- It restricts one the function or movement of an individual.
- WHO- "A disability is a restriction or lack (resulting from impairment) of ability to perform an activity in the manner or within the range considered normal for a human being"

Types of Disability

- Cognitive Disability, Intellectual Disability & Physical Disability

DISORDER

- Disorders create hindrance in an individual's performance and reduce his efficiency.
- May enhance with passage of time.
- Mainly used for Mental Disabilities.
- Often defined as a blip in the usual functioning of a person.

Types of Disorder

- ADHD : Attention deficit Hyperactivity Disorder
- SPD : Sensory Processing Disorder
- ASD : Autism Spectrum Disorder
- ODD : Oppositional Defiant Disorder
- OCD : Obsessive Compulsive Disorder

TYPES OF DISABILITY, ITS CAUSES & NATURE (INTELLECTUAL DISABILITY, PHYSICAL DISABILITY)

INTELLECTUAL DISABILITY

- Limitation in intellectual functioning-Reasoning, Learning & Problem Solving
- Limitation in adaptive behaviour- Emotions and thinking

PHYSICAL DISABILITY

- Limitation in individual's Physical functioning, mobility, dexterity or stamina.
- Also includes respiratory disorders, blindness, Epilepsy and sleep disorders.
- Might be Motor deficiency or sensory impairment

DISABILITY ETIQUETTE

- Always put them first
- Shake hands while introduction
- For Visual impairment
 - Always identify yourself with others
 - Inform when leaving
- Listen carefully and attentively to them
- Use visual signals for individuals with Auditory impairments
- Avoid asking personal questions pertaining to disability
- Avoid speaking in high pitch

AIM AND OBJECTIVES OF ADAPTIVE PHYSICAL EDUCATION

AIM

To help or aid differentially abled students to achieve physical, mental, emotional and social growth proportionate to their potential through special, planned programme of regular physical education and recreational activities.

To provide equal opportunity to the differentially abled children to participate in physical education programmes, safely and successfully, in a least restrictive environment.

OBJECTIVE

- | | |
|---|---------------------------------------|
| ▪ Ensure service to meet Special Needs | ▪ Promote Sportsman Qualities |
| ▪ Develop Motor Skills | ▪ Develop knowledge of Good Mechanics |
| ▪ Enhance Self-Esteem & Self- Image | ▪ Improve Social Adjustments |
| ▪ Ensure participation in Physical Education Programmes | |
| ▪ Improve Physical Fitness | |
| ▪ Motivate Students to Protect Themselves | |

ROLE OF VARIOUS PROFESSIONALS FOR CHILDREN WITH SPECIAL NEEDS

Counsellor

- Specialist member of Education team providing valuable assistance to Students.
- Assist teaching staff with strategies for dealing with CWSN.
- Developmental programmes related to Stress Management, Anger Management, conflict Management & Positive Thinking.
- Helps CWSN to become productive member of the Society

Occupational Therapist

- Helps CWSN to perform Self-care skills like Eating, dressing, bathing and grooming i.e. activities related i.e. Fine motor Skills
- Help CWSN to participate & interact with others
- Also works on coordinative skills e.g. eye-hand coordination (hitting a ball)

Physiotherapist

- Concerned with Gross Motor Skills and mobility of CWSN
- Assess and manage CWSN with movement disorder.
- Focus on problems related to Muscles, bones, circulation etc.
- Evaluates Movement & Function of body

Physical Education Teacher

- Determine abilities of the CWSN
- Determine & implement methods for participation of CWSN in Games & Sports.
- Help in increasing fitness of CWSN
- Helps in developing feeling of Self-Esteem
- Organise various programmes for CWSN

Speech Therapist

- Provides treatment, support and care for CWSN who have difficulties in communication.
- Help CWSN to communicate through Speech & Language.
- Helps CWSN having difficulty in producing sounds and uttering a word.
- Helps in dealing with fluency disorder like stoppages, repetitions or prolonged sounds in words.

Special Educator

- Deals with CWSN having varying Learning, mental, Physical and Emotional abilities.
- Help in areas of Physical Skills, Learning through Play, communication, improving social & emotional skills.
- Assess cognitive abilities of CWSN
- Conduct curricular activities for CWSN

SELF PRACTISE QUESTIONS

MULTIPLE CHOICE QUESTIONS:

01 Marks

Q1. Disability present at the time of birth is also known as

- a) Invisible disability
- b) Cognitive disability
- c) Congenital disability**
- d) Temporary disability

Q2. Which one is congenital disability?

- a) Down syndrome**
- b) Cerebral palsy
- c) Polio
- d) Both a and b

Q3. Name the category of disability which can be difficult for others to recognize

- a) Physical disability
- b) Hidden disabilities
- c) Cognitive disabilities**
- d) Intellectual disabilities

Q4. Which is hidden disability

- a) Dyslexia
- b) Autism spectrum disorder**
- c) ADHD
- d) Down syndrome

Q5. In which category would you place a person with intellectual disability if he has a IQ level between 50-55?

- a) Mild**
- b) Moderate
- c) Severe
- d) Profound

Q6. Genetic disorder is found in an intellectual disability which is known as

- a) Autism
- b) Cerebral palsy**
- c) Down syndrome
- d) None

Q7. World Disability Day celebrated on

- a) 2nd April
- b) 21st June
- c) 29th August
- d) **3rd December**

Q8. What type of disorder is ADHD

- a) **Mental disorder**
- b) Emotional disorder
- c) Behavioural disorder
- d) Genetic disorder

Q9. What is the role of physiotherapist for children with a special need?

- a) **To manage movement disorders**
- b) To build communication ability
- c) To develop fine and Gross Motor skills
- d) To facilitate academic and intellectual growth

Q10. Which of the following professionals help in improving hand eye coordination flexibility and muscular strength?

- a) Physiotherapist
- b) Special educator
- c) **Physical education teacher**
- d) Occupational therapist

Q11. A/an _____ helps students in the development of fine and gross Motor skills

- a) Physiotherapist
- b) Speech Therapist
- c) **Occupational therapist**
- d) Physical education teacher

Q12. The aim of adaptive physical education is to help

- a) Adults
- b) Athletes
- c) Economically weaker section children
- d) **Differently disabled students**

Q13. Most suitable word used for disabled person is _____

- a) Disabled person
- b) Retarded
- c) **Divyang**
- d) Blind

Q14. A functional abnormality in day to day life activity is known as

- a) Disability

- b) Disorder**
- c) Dysfunction
- d) Disturbance

Q15. Which of the following has a role to help divyang?

- a) Counsellor
- b) Physical therapist
- c) Occupational therapist
- d) All of the above**

Q16. Match the following:

List - I

List-II

- | | |
|-----------------------------------|---|
| i. Counsellor speaking | 1. Take care of a special children who Face problem in |
| ii. Physiotherapist disability of | 2. Try to improve a disable child as per the needs of the the Divyang. |
| iii. Speech therapist | 3. Helps a Divyang to bring stability or movement |
| iv. Occupational therapist | 4. Enhances self-confidence of Divyang and helps him to make capable and strong |

Choose the correct option from the following:

	I	II	III	IV
(a)	2	4	3	1
(b)	2	1	4	3
(c)	4	3	1	2
(d)	3	1	2	4

Q17. Match the following:

List – I

List-II

- | | |
|------------------------|------------------------------|
| i. Leprosy | 1. Undeveloped organs |
| ii. Cerebral palsy | 2. Locomotors deformity |
| iii. Phocomelia | 3. Locomotors disabled |
| iv. Muscular dystrophy | 4. Paralysis of the brain |
| v. spina Bifida | 5. Deformity in the backbone |

Choose the correct option from the following:

	I	II	III	IV	V
(a)	3	4	1	2	5
(b)	4	2	3	1	5
(c)	1	3	2	4	5
(d)	2	1	4	3	5

Q18. Match the following:

List - I

(Category)

i. Moderate

ii. Mild

iii. Profound

iv. Severe

List-II

(IQ Level)

1. 50- 55 to 70-75

2. below 20 to 25

3. 20-25 to 35-40

4. 35-40 to 50-55

Choose the correct option from the following:

	I	II	III	IV
(a)	2	3	1	4
(b)	3	1	2	4
(c)	1	4	2	3
(d)	4	1	2	3

From Q.N 1 to 6 have two statements which one of the following is correct?

Q.N 1 Assertion (A): Children with disabilities have special needs

Reason (R): The children are not able to participate in regular daily activity and - physical exercises

- a) **Both (A) and (R) are true and (R) is the correct explanation of (A).**
- b) Both (A) and (R) are true and (R) is not the correct explanation of (A).
- c) (A) is true but (R) is false.
- d) (A) is false but (R) is true.

Q.N 2 Assertion (A): A person's disability affect his/ her life in many ways

Reason (R): Disability is a multi-dimensional concept

- a) **Both (A) and (R) are true and (R) is the correct explanation of (A).**
- b) Both (A) and (R) are true and (R) is not the correct explanation of (A).
- c) (A) is true but (R) is false.
- d) (A) is false but (R) is true.

Q.N 3. Assertion (A): Deaf means a person having 70DB hearing loss in a speech frequency in - both year

Reason (R): Hard of hearing means a person having 60 DB to 70DB hearing loss in a - speech frequencies in both years

- a) Both (A) and (R) are true and (R) is the correct explanation of (A).
- b) Both (A) and (R) are true and (R) is not the correct explanation of (A).**
- c) (A) is true but (R) is false.
- d) (A) is false but (R) is true.

Q.N 4. Assertion (A): Dwarfism is a type of physical disability

Reason (R): Cerebral palsy is a type of intellectual disability

- a) Both (A) and (R) are true and (R) is the correct explanation of (A).
- b) Both (A) and (R) are true and (R) is not the correct explanation of (A).
- c) (A) is true but (R) is false.**
- d) (A) is false but (R) is true.

Q.N 5. Assertion (A): Adaptive physical education develop the personality of children with disability. -

Reason (R): The goal of adaptive physical education is to involve the children with - disability in the learning process by providing opportunities based on their speciality.

- a) Both (A) and (R) are true and (R) is the correct explanation of (A).**
- b) Both (A) and (R) are true and (R) is not the correct explanation of (A).
- c) (A) is true but (R) is false.
- d) (A) is false but (R) is true.

Q.N 6. Assertion (A): Spina Bifida is an intellectual disability

Reason (R): Intellectual disabilities a condition of mental retardation.

- a) Both (A) and (R) are true and (R) is the correct explanation of (A).
- b) Both (A) and (R) are true and (R) is not the correct explanation of (A).
- c) (A) is true but (R) is false.
- d) (A) is false but (R) is true.**

VERY SHORT ANSWER QUESTION

2 Marks

Q1. How is disability different from a Disorder?

Answer: Disability reflect the consequences of impairment in terms of functional performance of activity by the individual. Disability may be physical mental intellectual cognitive or sensory. It may be present since birth or acquired during the person's life time. Generally disability cannot be cured.

While disorder is a disturbance in the normal functioning of an individual. The abnormal behaviour, ideas, feelings and lessons are called disorder is related to mental health.

Q2. Define disability etiquettes.

Answer: Disability etiquette is a set of guidelines to deal specifically with people having or facing different kinds of disabilities. It is preferred etiquette to communicate and interact respectfully and cautiously with people who have disability.

Q3. What is adaptive physical education?

Answer: adaptive physical education (APE) is physical education program which can be adapted or modified so that it becomes appropriate for a person with disability to participate in physical activities safely, successfully and with satisfaction.

Q4. What is the role of a physiotherapist for children with a special need?

Answer: The role of the physiotherapist is to assess and manage children and young people with movement disorders, disabilities or illness. Physiotherapist are trained to evaluate and improve the movement and function of the body with particular attention to Physical mobility, balance, posture, fatigue and pain. Physiotherapist use a range of techniques including massage and manipulation exercise and movement electrotherapy and hydrotherapy.

Q5. What is meant by intellectual disability?

Answer: Intellectual disability is a disability that is characterized by significant limitations in both intellectual functioning and adaptive behaviour. A person with an intellectual disability faces problem with intellectual functioning learning reasoning decision making and problem solving social skills social adjustment interpersonal communication skills making and retaining friendship empathy and practical skills management personal care job responsibility money management recreation and organising school and work task. On the basis of IQ children with intellectual disability can be classified as mild 50-55 to 70-75, moderate 35-40 to 50-55, severe 20-40 profound below 20-25. They face difficulty in conducting every day activities such as communicating socialising, etc.

SHORT ANSWER QUESTION

3 Marks

Q1. Explain the concept of disorder.

Answer: The term disorder refers to the disruption or disturbance in the normal functioning of an individual. Disorder characteristic classified in medical terms according to clinically significant disturbance in an individual's physical, cognitive and emotional regulation or behaviours. Disorder includes following features:

Associated: Disorder associated with physical or mental functioning disturbance. Disorders create hindrance in an individual's performance and reduce his efficiency.

Kinds: Different kinds of disorder include mental disorder, attention disorder, eating disorder, anxiety disorder, substance abuse, addiction disorder and so forth

Reversal: Individual experiencing disorder can be treated to being as they were before.

Q2. Enlist various types of disorder along with their full form.

Answer:

Types of Disorder

- ADHD : Attention deficit Hyperactivity Disorder
- SPD : Sensory Processing Disorder
- ASD : Autism Spectrum Disorder
- ODD : Oppositional Defiant Disorder
- OCD : Obsessive Compulsive Disorder

CASE STUDY BASED QUESTIONS**4 Marks**

Read the following case study and answer the questions given after each:

Q1. Abhimanyu is a physical education teacher. It makes him very sad to know that there are many children with disabilities in his school who are unable to participate in physical education activities and so he decides to include participation of such students also in physical education activities. He started contribute in the physical improvement of a disable child through a special organization suitable venue and appropriate and improved material. He also request to the principal for the availability of various professionals in the school for children with disabilities. He also keeps the CWSN students informed about the various competitions organised for them in order to create interest among them.

On the basis of the above, answer the following question.

- a) What are the objectives of adapted physical education?
- b) What is the role of a special educator for a CWSN?
- c) What is the role of counsellor for a Divyang person?

Answer:

- 1. To create interest in sports and insure participation of CWSN.
- 2. A special educator develops appropriate activities, programs as per the need.
- 3. Providing guidance for solving problems of Divyang.

Read the following case study and answer the questions given after each:

Q2. Parents of children with a special needs CWSN are often confronted with a number of terms for describing the child's challenge and the challenges are either termed as 'disorder' or 'disabilities'. Also children with a special needs face different challenges undertaking certain activities. So, in addition to the regular programs of physical education the school must provide APE programs for these children. While introducing this chapter to the students, the physical education teacher explain the different types of disabilities, the objectives of APE and the roles of various professionals for CWSN.

On the basis of the above information and your knowledge answer the following questions:

- a) What is the full form of APE?
- b) Intellectual disability is a disability that is characterised by significant limitations in both intellectual functioning and _____.
- c) The professional who works along with CWSN, parents, teachers, other school personal and members of the community in helping them become effective members of the community is _____.
- d) A genetic disorder is found in an intellectual disability which is known as _____

OR

Cerebral Palsy is a type of _____ disability.

Answer:

- a) Adapted Physical Education
- b) Adaptive Behaviour
- c) Counsellor or School Counsellor
- d) Down Syndrome OR Physical

LONG ANSWER QUESTION**5 Marks**

Q1. What is adaptive physical education state its aim and objectives in detail.

Answer: Adaptive physical education (APE) is physical education programme which has been modified or adapted or specially designed for differently abled students so that physical education activities are safe, achievable, enjoyable and therefore successful experiences.

Aim: To provide every individual an equal opportunity to the differentially abled children to participate in physical education and sports programmes, safely and successfully, in a least restrictive environment as per their needs.

Objectives:

- Ensure service to meet Special Needs
- Develop Motor Skills
- Enhance Self-Esteem & Self- Image
- Ensure participation in Physical Education Programmes
- Improve Physical Fitness
- Motivate Students to Protect Themselves
- Promote Sportsman Qualities
- Develop knowledge of Good Mechanics
- Improve Social Adjustments

Q2. Highlight the characteristic of physical disability.

Answer: The most common symptoms or sign of physical disability in children are

- Lack of full range of mobility of body or body parts like restriction in joint motion
- Problem in maintaining balance or stumbles and trips frequently
- Problems related to movement and muscle coordination
- Problems related to senses such as sight, hearing or speech impairment.
- Problems related to posture such as sitting and standing
- Lack of reflex movements
- Lack of control of the Limbs or the body parts
- Difficulty in releasing objects voluntarily
- Poorly developed hand or finger coordination and cannot pick up or Hold objects.

Chapter- 5

PHYSICAL FITNESS, WELLNESS, AND LIFESTYLE



- Meaning & importance of Wellness, Health, and Physical Fitness.
- Components/Dimensions of Wellness, Health, and Physical Fitness
- Traditional Sports & Regional Games for promoting wellness
- Leadership through Physical Activity and Sports
- Introduction to First Aid – PRICE

MEANING & IMPORTANCE OF WELLNESS, HEALTH, AND PHYSICAL FITNESS

WELLNESS

- It refers to man's capacity of spending a good balanced life.

"Wellness is a health related practice to optimize individual ability with the balance of Physical, Psychological, Intellectual, Social, Emotional and Spiritual aspects of Life"

- James R.

HEALTH

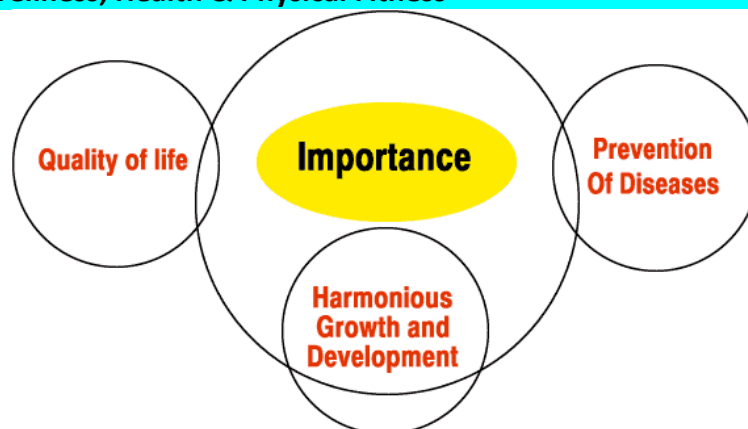
*"A state of complete physical, mental and social well-being and not **merely the absence of disease and infirmity**" - WHO (World Health Organization)*

PHYSICAL FITNESS

A person is said to physically fit

- If he/she is able to perform his/her daily routine task without any fatigue
- If he/she is able to enjoy his/her Leisure time
- If he/she is able to meet any emergency task

Importance of Wellness, Health & Physical Fitness



1. Quality Of Life
 - a. A healthy & physically fit person can manage the routine work efficiently without getting fatigued.
 - b. Easily tackle any difficult situation on his way.
 - c. It also possesses the qualities like good human relations, maturity & self-respect.
2. Prevention From Diseases:
 - a. Regular fitness exercises can prevent many diseases specially related to heart.
 - b. Helps in avoiding unhealthy habits- e.g. eating junk food, tobacco use and sedentary lifestyle.
3. Harmonious Growth And Development:
 - a. Regular training can improve the efficiency of various organs which can be beneficial for an individual.

COMPONENTS/DIMENSIONS OF WELLNESS, HEALTH, AND PHYSICAL FITNESS

COMPONENTS OF WELLNESS

1. Physical Wellness

- It involves the ability to do daily tasks.
- Do vigorous physical activities like swimming, sprint races etc.
- Adopt healthful habits like routine check-ups, a balanced diet, exercise etc.
- Avoid destructive habits like consumption of tobacco, drugs, alcohol etc.

2. Social Wellness:

- It creates the ability to interact with people around them that include family and friends.
- Involves the quality of good communication skills, sympathy, cooperation and helpfulness which makes a person well adjustable in the society.

3. Emotional Wellness:

- It is the ability to understand ourselves and cope with challenges of life.
- To control stress, anxiety and to express comfortably.

4. Intellectual Wellness:

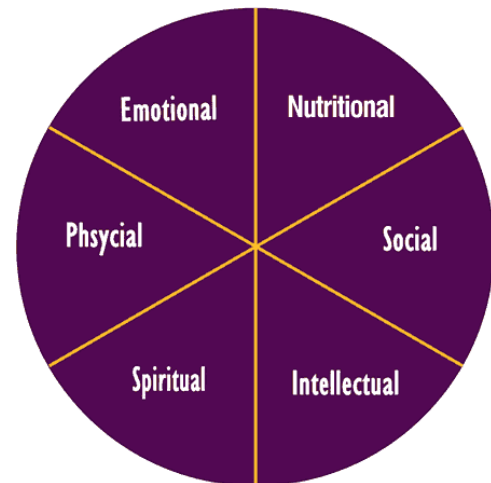
- It helps in acting quickly and correctly in any situation of life.
- It is the ability to think critically and make sound decisions.
- For maintaining it we should try to expand our knowledge & improve our skills.

5. Spiritual Wellness:

- It is the ability to establish peace and harmony in our lives.
- Do meditation or perform prayer and always given respect to religion that directs to have positive attitude towards life.
- It makes a person ethically, morally and spiritually sound.

6. Nutritional Wellness:

- Proper nutrition & a balanced diet are vital components for maintaining healthy lifestyle.
- Avoid fried, junk and fast food.
- Adopt fresh fruits, green vegetables, drink plenty of sugar-free liquids.



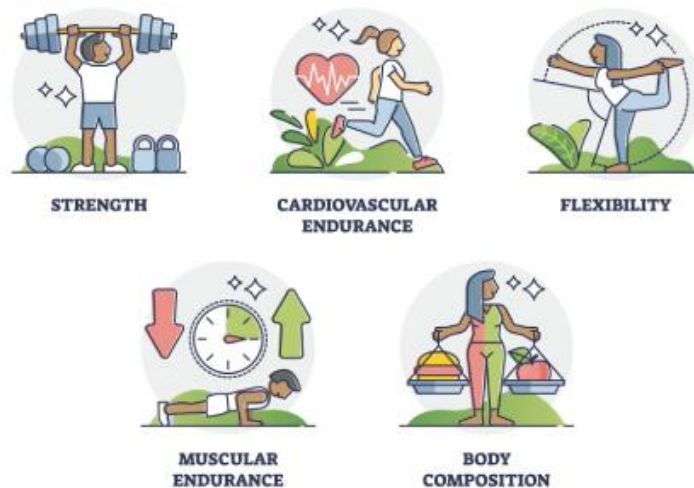
COMPONENTS OF HEALTH



COMPONENT	DESCRIPTION
PHYSICAL	It is the state of health in which all the system of the body function in its optimum level. It can be achieved by Eating right, Exercising daily, Avoiding bad habits like alcohol and having enough sleep.
MENTAL	Mental health refers to a healthy mind. It includes Sound mind, Decision making ability, Judgement ability and Reaction time.
SOCIAL	It is the state of health in which an individual is comfortable to make connection with another individual and doesn't feel difficult to adjust himself/ herself in a society.
EMOTIONAL	It is a state of self-awareness and acceptance of one's conditions and feelings. It can be achieved by Staying positive, Fighting stress, Expressing the feelings, etc.
SPIRITUAL	Spiritual health is a vast sea of many thoughts. It aims to find the meaning and purpose of human life without or without following any religion.

COMPONENTS OF PHYSICAL FITNESS

SKILL RELATED PHYSICAL FITNESS COMPONENT	
COMPONENT	DESCRIPTION
STRENGTH	The ability of the muscle/muscle group to overcome resistance. There are two types of strength: • Dynamic Strength • Static strength Can be improved through, Weight Training, Resistance Training
SPEED	It is the ability to move the body as fast as possible. Different sports skills require different fast movements like short distance running, shot-putter body across the throwing circle, running between wickets. Can be improved through, Repeated short Sprinting, Increasing explosive power of leg, etc.
ENDURANCE	It is the ability of the body to work for a longer time without getting fatigued or tired • Two types of endurance: Short Term Endurance Long Term Endurance Can be improved through, Long distance running
FLEXIBILITY	It is the range of movements of joints. Two types of flexibility • Passive Flexibility • Active Flexibility Can be improved through Yoga, Stretching Exercises, etc.
COORDINATIVE ABILITIES	It is the ability of the body to synchronize or coordinate the involvement of different organs during a movement. e.g. Eye-Hand coordination Can be improved through, Neuro Muscular Activities, Dance etc.



HEALTH RELATED PHYSICAL FITNESS COMPONENT	
COMPONENT	DESCRIPTION
STRENGTH	The ability of the muscle/muscle group to overcome resistance. There are two types of strength: • Dynamic Strength • Static strength Can be improved through, Weight Training, Resistance Training
CARDIO-VASCULAR ENDURANCE	It is the ability of the heart to pump blood efficiently to different part of body in condition of extra demand. Can be improved through, Jogging, Brisk Walking, Cycling etc.
MUSCULAR ENDURANCE	It is the ability of the muscles to work efficiently under the condition of fatigue. Can be improved through, Free Hand exercise, Exercise with natural body weight e.g. Push up, Sit Ups, Pull Ups, Weight training with low resistance and high repetition, etc.
FLEXIBILITY	It is the range of movements of joints. Two types of flexibility • Passive Flexibility • Active Flexibility Can be improved through Yoga, Stretching Exercises, etc.
BODY COMPOSITION	It refers to the percentage of fat, bone, and muscle in your body. It is used to see if you're at a healthy weight for your individual body Measured through, Hydrostatic weighing, Calliper, Bio Electric Impedance, Air displacement plethysmography, etc.

TRADITIONAL SPORTS & REGIONAL GAMES FOR PROMOTING WELLNESS

- Kabaddi : One of the most well liked sports in India which require both Strength and Talent to play. It is straight forward and affordable which does not require any special tool.
- Kho-Kho : Easy to learn “Run & Touch” game. It involves physical stamina with mental alertness and social interaction.
- Kushti : It is one of the oldest way to enhance strength. It also involves high reaction time and mental alertness.
- Malkhamb : This is one of the most beautiful Indian sports. It involves huge core strength, coordination and vigour.

These, indigenous sports are of very low cost and enhances all the aspects of Fitness and wellness.

LEADERSHIP THROUGH PHYSICAL ACTIVITY AND SPORTS



When an individual participates in Physical activity and Sports they experience the above train in a number of situation and thus develops these traits among themselves.

E.g. **Clear communication** is very important among teammates while participating in Team sports and the players learns this skill during practise and play. Hence, they become good communicator in their daily life also and this ability to communicate clearly is also an important trait of a Leader.

INTRODUCTION TO FIRST AID – PRICE

First aid is the first and immediate assistance given to any person with either a minor or serious illness or injury, with care provided to preserve life, prevent the condition from worsening, or to promote recovery until medical services arrive.



There are several principles of First Aid and among which PRICE theory is the most accepted one.



SELF PRACTISE QUESTIONS

MULTIPLE CHOICE QUESTIONS:

01 Marks

- 1) Which of the following is NOT a component of Wellness
 - a. Physical
 - b. Cosmetic**
 - c. Mental
 - d. Occupational
- 2) Occupational wellness is related to
 - a. fitness
 - b. meditation
 - c. environment
 - d. job**
- 3) Physical activity can help with
 - a. increased stress levels
 - b. getting sleep apnea
 - c. causing restless leg syndrome
 - d. helping your social life**
- 4) Which is NOT a health-related Physical Fitness component?
 - a. Muscular endurance
 - b. Cardiorespiratory endurance
 - c. Agility**
 - d. flexibility
- 5) Which is a component of Skill related Fitness?
 - a. Muscular Strength
 - b. Power
 - c. Body Composition
 - d. Flexibility**
- 6) Which of the following is NOT a technique to assess body fat?
 - a) Body mass index**
 - b) Skin fold thickness
 - c) Hydrostatic weighing
 - d) Air displacement
- 7) Which is NOT a balance test?
 - a) Standing Balance Test
 - b) One Leg Stand
 - c) Plate Tapping**
 - d) Flamingo Balance
- 8) Speed can be measured through?
 - a) Jogging
 - b) Short Sprint**
 - c) Long Sprint
 - d) Marathon

- 9) Pleasure word is related to?
- a) Mental Development
 - b) Development Of Health**
 - c) Emotion Development
 - d) Social Development

VERY SHORT ANSWER QUESTION

2 Marks

Q1. Is Cardio Vascular Endurance and Muscular Endurance similar in nature?

Answer:

No, it's not similar. Cardio Vascular endurance is the efficiency of heart to pump blood under the condition of extra prolonged demand, whereas Muscular endurance is efficiency of muscles to work under the condition of Fatigue.

Q2. Can indigenous game promote fitness? Explain with an example.

Answer:

Malkhamb is an Indigenous game and is demands performing of various asanas in a wooden pole which require huge amount strength, balance and flexibility.

SHORT ANSWER QUESTION

3 Marks

Q1. What does PRICE stands for?

Answer:

PRICE is a theory used for First Aid. It stands for

- Prevention
- Rest
- Ice
- Compression
- Elevation

Q2. What are the various types of Strength?

Answer:

Strength can be classified into two types:

Dynamic Strength: The ability to exert muscular force repeatedly or over a period of time. It is especially concerned with forces which produce or change the motion of a mechanical system

Static Strength: It is the ability of muscles to act against resistance. Here the muscle do not move but exert force.

CASE STUDY BASED QUESTIONS**4 Marks**

Q1. Identify the images below and mention fitness component that can be developed by these equipment.



(a)



(b)



(c)



(d)

Answer:

- a) Strength
- b) Body Composition
- c) Endurance
- d) Flexibility

LONG ANSWER QUESTION**5 Marks**

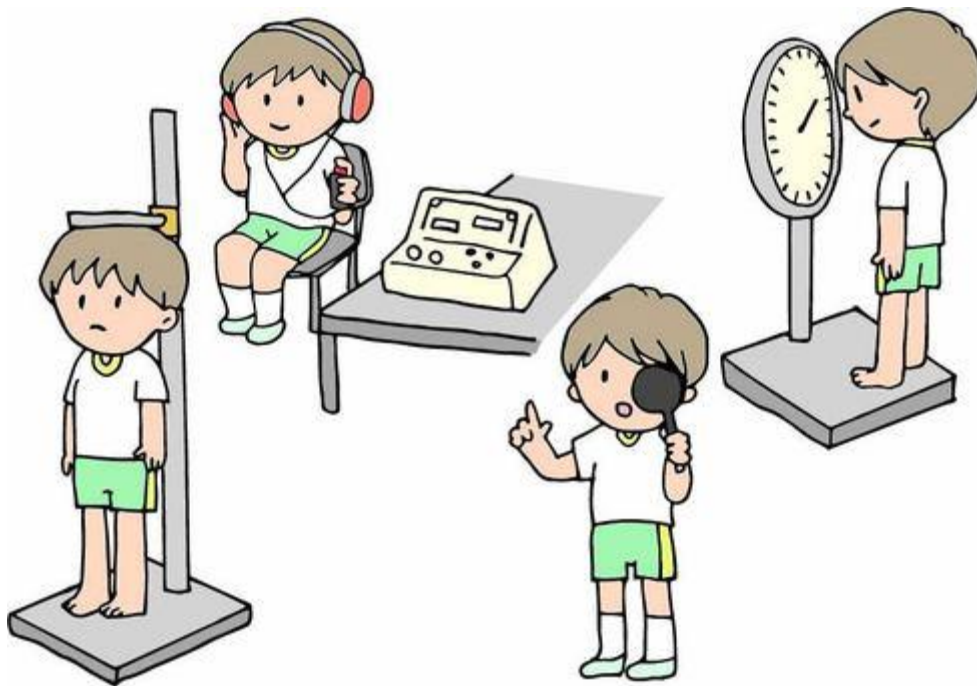
Q1. Vikram wants to become the monitor of the class. So, his teacher asked to note down the qualities in him. After reading the qualities the teacher decided to give him a chance. Explain the Qualities that vikram could have written.

Answer:

Qualities of a Good Leader:

- Respect
- Compassion
- Vision
- Communication
- Collaboration
- Influence
- Integrity
- Courage
- Gratitude
- Resilience

TEST AND MEASUREMENT AND EVALUATION



- Define Test, Measurements and Evaluation.
- Importance of Test, Measurements and Evaluation in Sports.
- Calculation of BMI, Waist – Hip Ratio, Skin fold measurement (3-site)
- Somato Types (Endomorphy, Mesomorphy & Ectomorphy)
- Measurements of health-related fitness

DEFINE TEST, MEASUREMENTS AND EVALUATION

A **test** is an instrument or tool used to make a particular measurement. This tool may be written, oral, a mechanical device (such as a treadmill), physiological, psychological, or another variation.

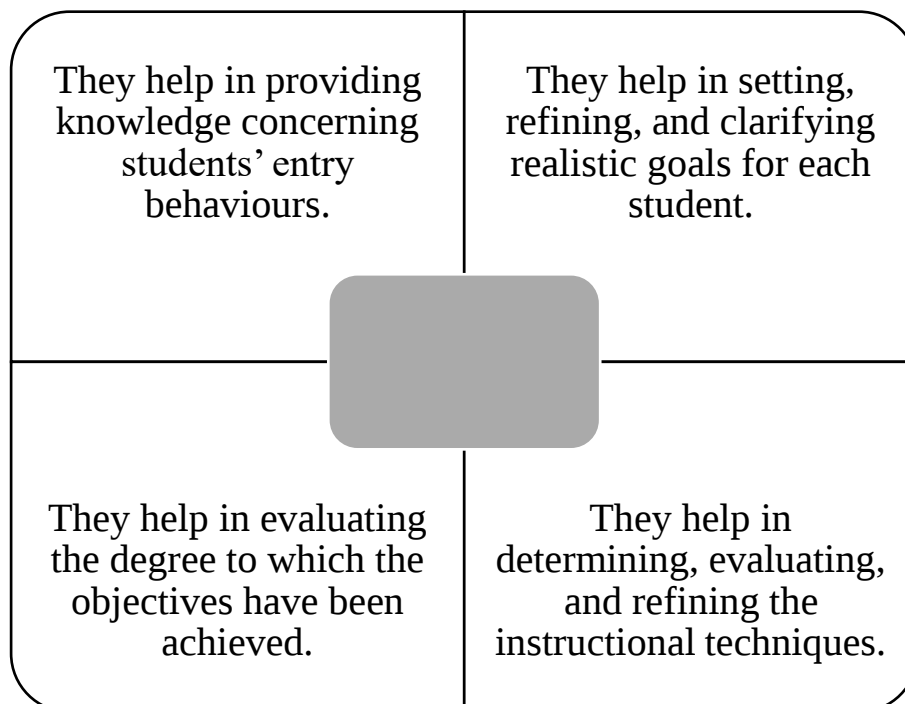
Measurement refers to the quantitative form of assessment and also refers to the scores obtained through test.

Evaluation is the process of delineating, obtaining, and providing useful information for judging decision alternatives. It is a statement of quality, goodness, merit, value, or worthiness about what has been assessed.

Example: A physical education teacher records the 30 sit-ups that a student completes in 1 min and reports the score as Good.

In this example, Test is Sit-ups, Measurement is 30 sit-ups and Evaluation is 'Good'.

IMPORTANCE OF TEST, MEASUREMENTS AND EVALUATION IN SPORTS



CALCULATION OF BMI, WAIST – HIP RATIO, SKIN FOLD MEASUREMENT (3-SITE)

BMI (Body Mass Index)

Body Mass Index is a simple calculation using a person's height and weight. The formula is **BMI = kg/m²** where kg is a person's weight in kilograms and m² is their height in meters squared

Example

Male stature: 175.3 cm, 1.753 m

Body mass: 97.1 Kg .

BMI = $97.1 / (1.753)^2 = 31.6 \text{ kg. m}^{-2}$, or simply 31.6

BMI	Classification
< 18.5	Under weight
18.5–24.9	normal weight
25.0–29.9	Overweight
30.0–34.9	class I obesity
35.0–39.9	class II obesity
≥ 40.0	class III obesity

WHR (Waist Hip ratio)

The Waist Hip Ratio is calculated by dividing your waist measurement by your hip measurement, since the hips are the widest part of your buttocks. The formula is:

WHR= waist circumference / hip circumference.

Target Population: This measure is often used to determine the coronary artery disease risk factor associated with obesity.

Advantages: the WHR is a simple measure that can be taken at home by anyone to monitor their own body composition levels.

Waist-to-Hip Ratio (WHR) Norms				
Gender	Excellent	Good	Average	At Risk
Males	<0.85	0.85–0.89	0.90–0.95	>0.95
Females	<0.75	0.75–0.79	0.80–0.86	>0.86

3 SITE SKINFOLD MEASUREMENT

Purpose : Estimate body fat % based on measurements of subcutaneous fat.

Equipment : Skinfold calliper

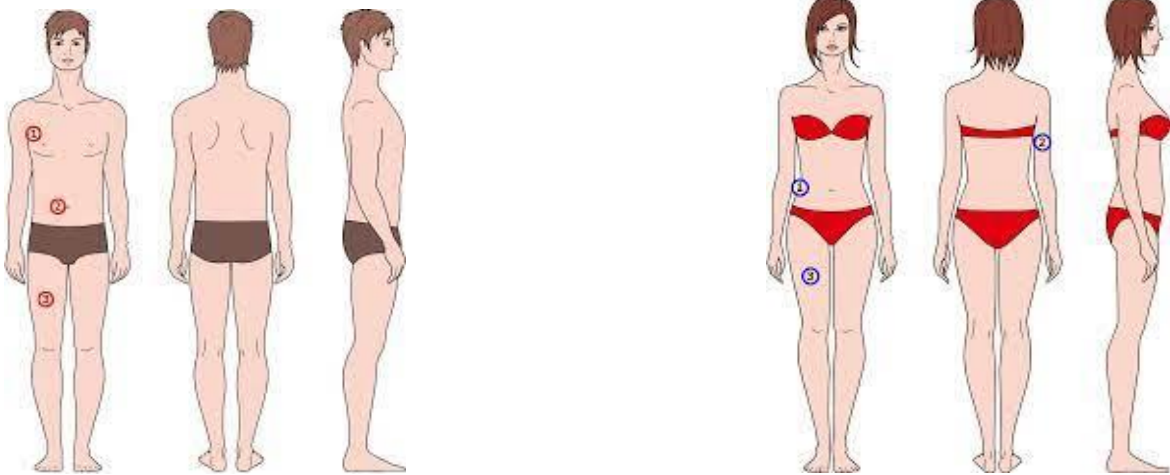
Male measurements:

- Chest : Diagonal fold half the distance between anterior axillary line and the nipple.
- Abdominal : Vertical fold 2cm to the right of the navel.
- Thigh : Midpoint of the anterior side of the upper leg between the patella and top of thigh.

Female measurements:

- Suprailiac : Diagonal fold parallel and superior to the iliac crest.

- Thigh : Midpoint of the anterior side of the upper leg between the patella and top of thigh.
- Tricep : Vertical fold at the midpoint of the posterior side of triceps between shoulder and elbow with arm relaxed at the side.



Formula to Calculate:

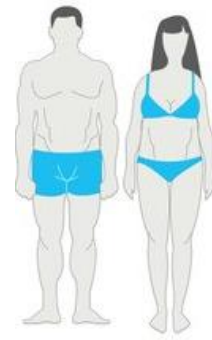
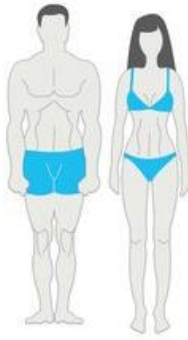
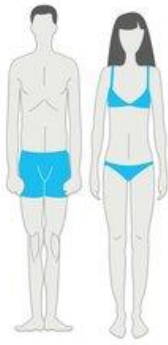
Body Density (Males) = $1.10938 - (0.0008267 \times \text{sum of chest, abdomen and thigh skinfolds in mm}) + (0.0000016 \times \text{square of the sum of chest, abdomen and thigh}) - (0.0002574 \times \text{age})$

Body Density (Females) = $1.0994921 - (0.0009929 \times \text{sum of triceps, thigh and suprailiac skinfolds}) + (0.0000023 \times \text{square of the sum of triceps, thigh and suprailiac skinfolds}) - (0.0001392 \times \text{age})$

From Body density the Fat % is calculated using Siri's Formula.

SOMATO TYPES (ENDOMORPHY, MESOMORPHY & ECTOMORPHY)

ECTOMORPH	MESOMORPH	ENDOMORPH
Lean, Delicate, Poor Muscles	Muscular	Plump, Buxom Developed visceral Structure
May not be found to be athletic in characteristics, especially due to being more prone to injuries and lack of muscularity required for competitive sports.	Less fat percentage, therefore found to be more physically active in sports, fitness and high intensity activities.	May not be found to be athletic or highly active in sports and less active toward exercise.



MEASUREMENTS OF HEALTH-RELATED FITNESS

AAHPERD FITNESS TEST

Health Related Fitness Components	Test Items
Body Composition	Triceps and subscapular skinfolds
Low Back Hamstring Flexibility	Sit and Reach
Abdominal Muscle Strength/Endurance	Bent knee sit-ups in one minute
Cardiorespiratory Endurance	Mile run or Nine-minute run

FIT INDIA FITNESS TEST

Health Related Fitness Components	Test Items
Body Composition	BMI
Flexibility	Sit and Reach
Muscular strength and Muscular endurance	Partial Curl-up and Push-Up
Cardiorespiratory Endurance	600 m Run/Walk

SELF PRACTISE QUESTIONS

MULTIPLE CHOICE QUESTIONS:

01 Marks

Q1.The range of normal weight in BMI is-

- a) **18.5 – 24.9**
- b) 15.5 – 20.5
- c) 16.8 – 18.0
- d) 12.1 – 15.5

Q2.Which of the following is not a health-related physical fitness component-

- a) Body composition
- b) Flexibility
- c) Muscular strength
- d) **Speed**

Q3.sit and reach is used to measure-

- a) Upper body strength
- b) **Flexibility**
- c) Endurance
- d) Back strength

Q4. According to the World Health Organization (WHO), a healthy WHR is

- a) **0.9 for male and 0.85 for female**
- b) 0.8 for both male and female
- c) 0.5 for male and 0.7 for female
- d) 0.65 for male and 0.72 for female.

VERY SHORT ANSWER QUESTION

2 Marks

Q1.Define test.

Answer: A test is a tool which is used to evaluate the skills, performance and reliability of the task completed by a sports person.

Q2. What is measurement?

Answer: Measurement is about the collection of data about performance or task completed by a sports person by using a test.

Q3.What is Evaluation?

Answer: It is a systematic determination of a subject's merit, worth and significance, using criteria governed by a set of standards.

Q4.How many types of evaluations are there? Name them.

Answer: Evaluation is of two types, namely- formative and summative evaluation.

SHORT ANSWER QUESTION**3 Marks**

Q1. Define BMI . What is the formula of calculating BMI.

Answer:

Body Mass Index is what BMI is fully known as. Using this method of measurement, people are divided into four categories: underweight, normal weight, obese, and overweight.

$BMI = \text{Weight(kg)} / \text{height(m)}^2$

Q2. Define formative and summative evaluation.

Answer:

Formative evaluation-Formative evaluation is conducted during the learning process to provide ongoing feedback to improve learning and teaching.

Summative evaluation-Summative evaluation is conducted at the end of a learning period to assess the overall learning achievement or competency attainment.

Q3. What are the 3 sites for skinfold measurement?

Answer:

The 3 sites for skinfold measurement are-

1. Triceps 2. Subscapular 3. Suprailiac

Q4. What do you mean by somatotype? What are the types?

Answer:

The somatotype gives an overall summary of the physique as a unified whole. There are majorly 3 somatotypes- Ectomorph, Endomorph and Mesomorph.

CASE STUDY BASED QUESTIONS**4 Marks**

Kavita started going to gym to improve her health. She started taking proper diet according to the instructions given to her. She used to do strength training and cardio training in the gym. After a few week she started to see result in her health but she didn't have any idea how to measure her improvement in fitness.

- a) What are the health related physical fitness?
- b) How can Kavita find out her body composition?
- c) If she wants to measure her flexibility then what test she should opt for?
- d) How will she measure her cardiovascular endurance?

Answer:

a) Components of Health Related Physical Fitness

- (1) Body composition
- (2) Flexibility
- (3) Muscular strength

- (4) Muscular endurance
- (5) Cardiorespiratory endurance
- b) BMI/Waist hip ratio
- c) Sit and reach test
- d) 600m run/walk test.

LONG ANSWER QUESTION

5 Marks

Q1.Explain skinfold measurement.

Answer:

Skinfold measurement, used in anthropometry to estimate body fat percentage, typically involves taking skinfold thickness measurements at specific anatomical sites on the body. The three most commonly used sites for skinfold measurement are:

Triceps Skinfold:

Located on the back of the arm, midway between the shoulder and the elbow (approximately at the level of the midpoint of the upper arm).

This site is commonly used because it tends to accumulate subcutaneous fat and is relatively easy to locate and measure consistently.

Subscapular Skinfold:

Located just below the inferior angle of the scapula (shoulder blade), at a diagonal fold taken about 1-2 cm below the lower tip of the scapula.

This site is chosen because it reflects fat deposition in the subscapular region and correlates well with total body fat.

Suprailiac Skinfold:

Located just above the iliac crest (hip bone), at a point in the mid-axillary line when the arm is raised to 90 degrees.

This site is used because it reflects fat accumulation in the region above the hip bone and is relatively easy to locate.

These three sites are selected because they provide a representative sample of fat distribution across different areas of the body, allowing for a reasonably accurate estimation of total body fat percentage when used in conjunction with an appropriate formula

Chapter- 7

FUNDAMENTALS OF ANATOMY, PHYSIOLOGY IN SPORTS

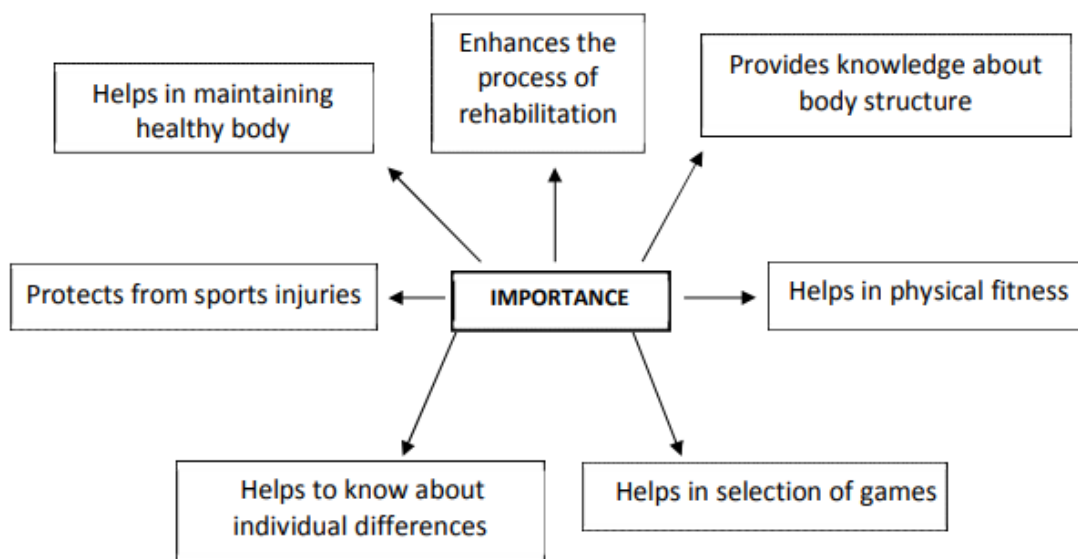


- Definition and importance of Anatomy and Physiology in Exercise and Sports.
- Functions of Skeletal System, Classification of Bones, and Types of Joints.
- Properties and Functions of Muscles.
- Structure and Functions of Circulatory System and Heart.
- Structure and Functions of Respiratory System.

DEFINITION AND IMPORTANCE OF ANATOMY AND PHYSIOLOGY IN EXERCISE AND SPORTS.

The word **Anatomy** is derived from the Greek words 'Ana' which means 'apart' and 'tomy' meaning 'to cut'. Hence, the word anatomy refers to dissection and it can be defined as the science of the structure of a body learned by dissection. In other words, anatomy is the study of the shape and structure of human body and body parts along with their relationship to one another.

The word physiology is derived from the Greek words *physos* means nature and *logio* which means 'the study'. Hence, the word physiology refers to the study of the human body and its functions and of the different parts and organs of the body .e.g., the detailed working and function of the skeletal system, respiratory system and the circulatory.



FUNCTIONS OF SKELETAL SYSTEM, CLASSIFICATION OF BONES, AND TYPES OF JOINTS.

FUNCTION OF SKELETAL SYSTEM

- This skeletal system provides shape and support to the body.
- It allows the body to create movement by forming the frame work of the body, to which the muscles are attached. Movement occurs when muscles contract and pull on bones making them create movement in the joint.
- Internal organs of the body like heart, lungs, liver, brain etc. are soft and delicate. The skeleton protects these organs.
- The hard substance of the bones also serves as a store house of minerals.
- Blood cells are also formed within the cavitation of the skeleton which is known as Haematopoiesis.

CLASSIFICATION OF BONES

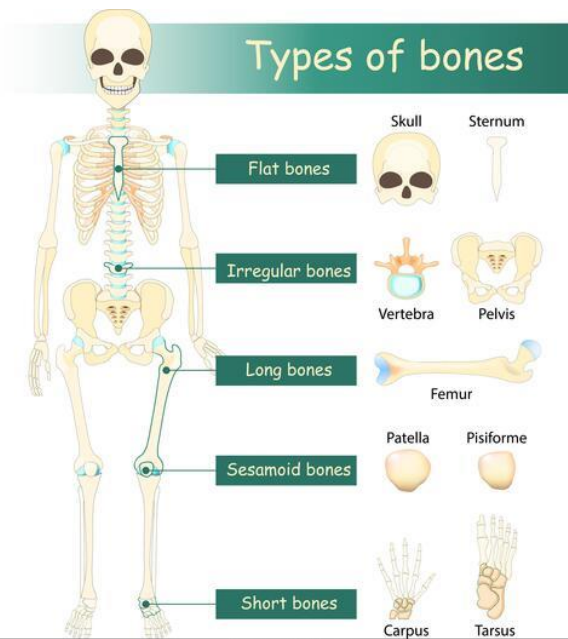
LONG BONES: Long bones are hard, dense bones that provide strength, structure, and mobility to the body.

SHORT BONES: A short bone is composed of central spongy bone and covered with a thin layer of compact bone. The motion of short bones is limited, and they glide on one another.

FLAT BONES: Flat bones are thin and flat. They are composed of a central layer of spongy bone between two outer layers of compact bone.

IRREGULAR BONES: They are composed of a central layer of spongy bone between two outer layers of compact bone.

SESAMOID BONES: Sesamoid bones are small flat bones embedded within muscles or tendons. They are formed from the connective tissue found in tendons and ligaments



TYPE OF JOINTS

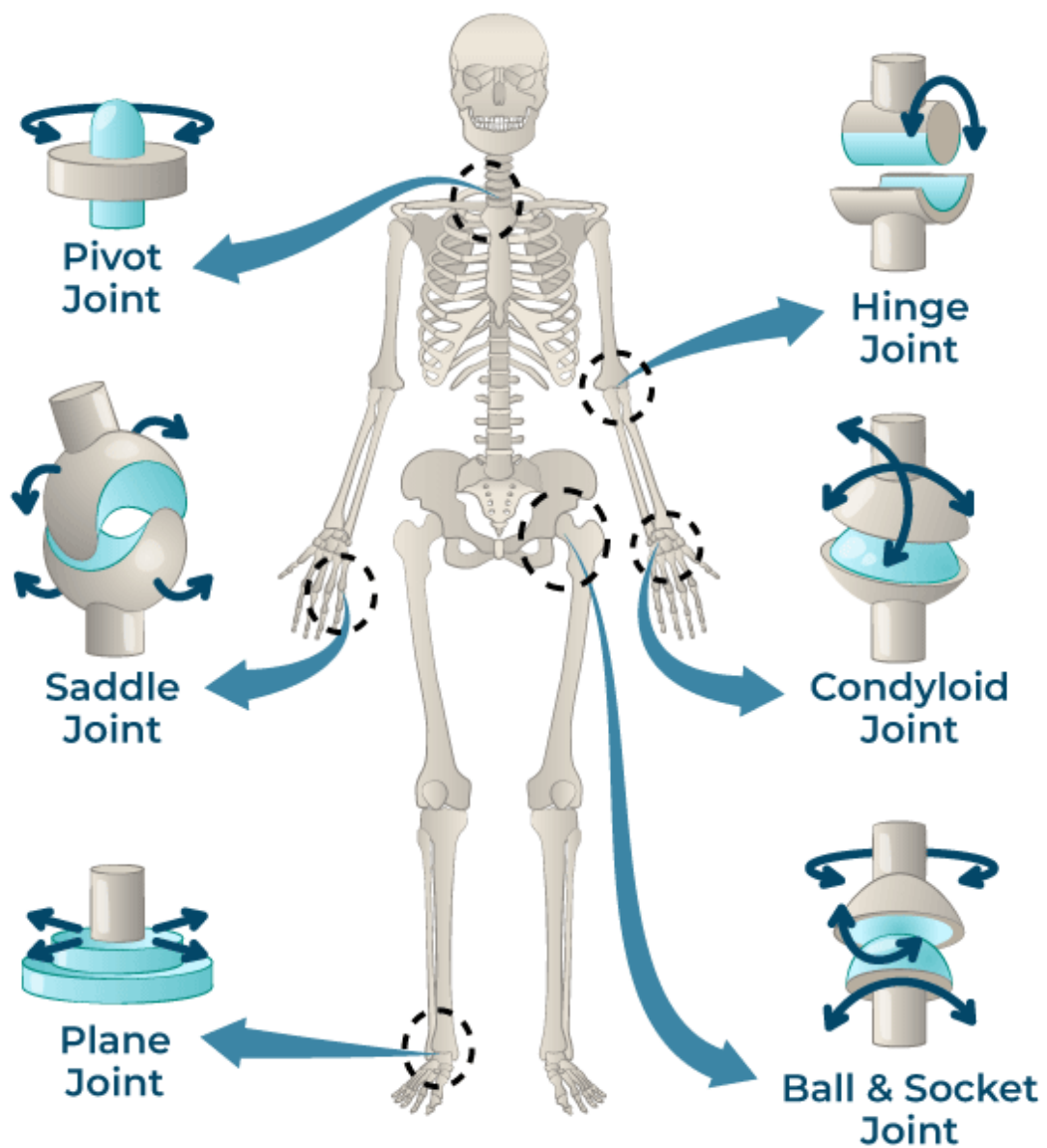
JOINT TYPE	SCIENTIFIC NAME	EXAMPLE
Immovable Joints	Synarthrosis	Skull
Slightly Movable Joints	Amphiarthrosis	Vertebral Column
Freely Movable Joints	Diarthrosis	They are further classified into 6 types
TYPES OF FREELY MOVABLE JOINT		EXAMPLE
Ball and socket joint: The rounded head of one bone sits within the cup of another, such as the hip joint or shoulder joint. Movement in all directions is allowed.		Shoulder
Saddle joint : This permits movement back and forth and from side to side, but does not allow rotation, such as the joint at the base of the thumb		Thumb
Hinge joint: The two bones open and close in one direction only (along one plane) like a door, such as the knee and elbow joints.		Elbow
Condylloid joint: This permits movement without rotation, such as in the jaw or finger joints.		Wrist

Pivot joint: One bone swivels around the ring formed by another bone, such as the joint between the first and second vertebrae in the neck.

Hip Joint

Gliding joint: Smooth surfaces slip over one another, allowing limited movement, such as the wrist joints.

Phalanges of Hand



PROPERTIES AND FUNCTIONS OF MUSCLES

Contractility is the ability of muscle cells to forcefully shorten. For instance, in order to flex (decrease the angle of a joint) your elbow you need to contract (shorten) the biceps brachii and other elbow flexor muscles in the anterior arm. Notice that in order to extend your elbow, the posterior arm extensor muscles need to contract. Thus, muscles can only pull, never push.

Excitability is the ability to respond to a stimulus, which may be delivered from a motor neuron or a hormone.

Extensibility is the ability of a muscle to be stretched. For instance, let's reconsider our elbow flexing motion we discussed earlier. In order to be able to flex the elbow, the elbow extensor muscles must extend in order to allow flexion to occur. Lack of extensibility is known as spasticity.

Elasticity is the ability to recoil or bounce back to the muscle's original length after being stretched.

Function:

Movement: Our body's skeleton gives enough rigidity to our body that skeletal muscles can yank and pull on it, resulting in body movements such as walking, chewing, running, lifting, manipulating objects with our hands, and picking our noses.

Maintenance of posture: Without much conscious control, our muscles generate a constant contractile force that allows us to maintain an erect or seated position, or posture.

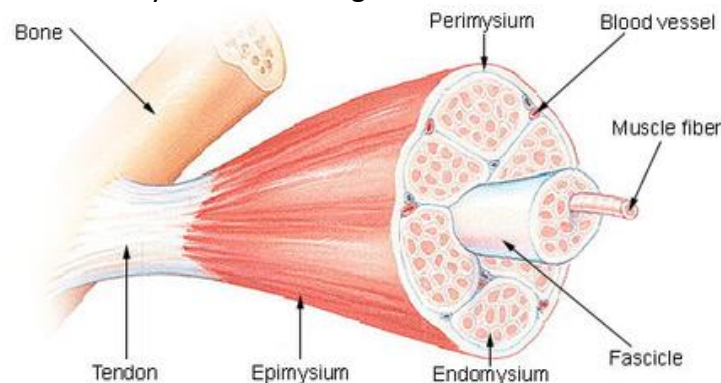
Respiration: Our muscular system automatically drives movement of air into and out of our body.

Heat generation: Contraction of muscle tissue generates heat, which is essential for maintenance of temperature homeostasis. For instance, if our core body temperature falls, we shiver to generate more heat.

Communication: Muscle tissue allows us to talk, gesture, write, and convey our emotional state by doing such things as smiling or frowning.

Constriction of organs and blood vessels: Nutrients move through our digestive tract, urine is passed out of the body, and secretions are propelled out of glands by contraction of smooth muscle. Constriction or relaxation of blood vessels regulates blood pressure and blood distribution throughout the body.

Pumping blood: Blood moves through the blood vessels because our heart tirelessly receives blood and delivers it to all body tissues and organs.



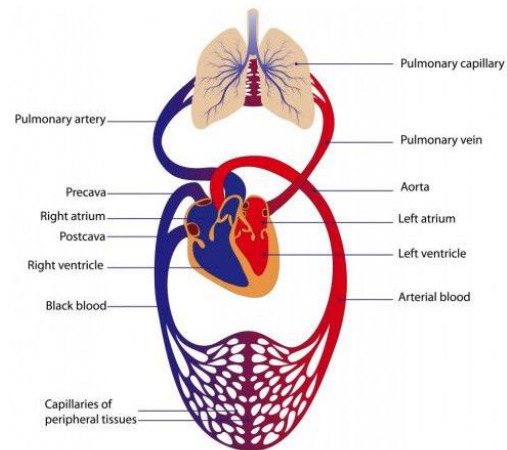
STRUCTURE AND FUNCTIONS OF CIRCULATORY SYSTEM AND HEART

The circulatory system is made up of blood vessels that carry blood away from and towards the heart.

Arteries carry blood away from the heart and veins carry blood back to the heart. The circulatory system carries oxygen, nutrients, and hormones to cells, and removes waste products, like carbon dioxide.

The parts of your circulatory system are:

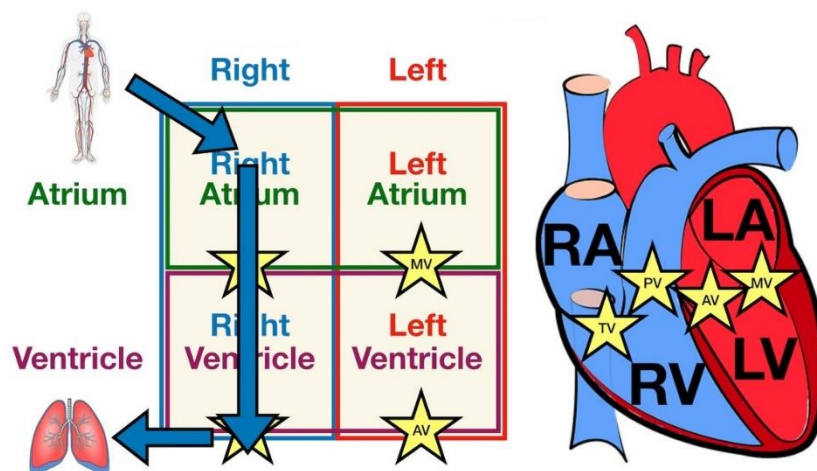
- Heart, a muscular organ that pumps blood throughout your body.
- Blood vessels, which include your arteries, veins and capillaries.
- Blood, made up of red and white blood cells, plasma and platelets



Function:

- Circulates OXYGEN and removes Carbon Dioxide.
- Provides cells with NUTRIENTS.
- Removes the waste products of metabolism to the excretory organs for disposal.
- Protects the body against disease and infection.
- Clotting stops bleeding after injury

Heart:



STRUCTURE AND FUNCTIONS OF RESPIRATORY SYSTEM.

The respiratory system is the network of organs and tissues that help you breathe.

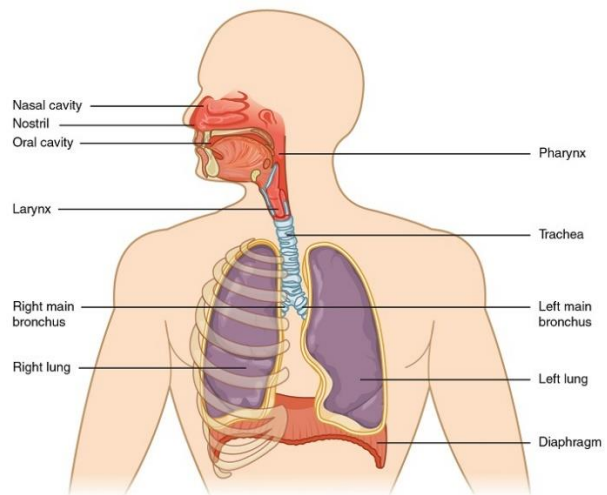
It includes your airways, lungs and blood vessels. The muscles that power your lungs are also part of the respiratory system. These parts work together to move oxygen throughout the body and clean out waste gases like carbon dioxide

Respiration is made up of two phases:

- Inspiration - Inhale (breathe in) oxygen
- Expiration – Exhale (breathe out) carbon dioxide

The respiratory system consists of

- The nose
- The nasal cavity
- The pharynx
- The larynx
- The trachea
- Bronchi
- The lungs
- Bronchioles
- Alveoli
- Diaphragm



Function:

- Delivers oxygen to the cells in your body.
- Removes waste gases, including carbon dioxide, from the body when you exhale.
- Protects your airways from harmful substances and irritants
- Allows you to talk and to smell.
- Warms air to match your body temperature and moisturizes it to the humidity level your body needs.

SELF PRACTISE QUESTIONS

MULTIPLE CHOICE QUESTIONS:

01 Marks

Q1. What is the primary function of the circulatory system?

- a) Regulation of body temperature
- b) Digestion of food
- c) Transportation of oxygen, nutrients, and hormones
- d) All

Q2. Which blood vessels carry blood away from the heart?

- a) Arteries
- b) Veins
- c) Capillaries
- d) Lymphatics

Q3. What component of blood is responsible for carrying oxygen throughout the body?

- a) Red blood cells
- b) White blood cells
- c) Plasma
- d) Platelets

Q4. Which of the following is not a part of the circulatory system?

- a) Heart
- b) Kidneys
- c) Blood vessels
- d) Blood

Q5. Where does gas exchange between blood and tissues occur in the circulatory system?

- a) Arteries
- b) Capillaries
- c) Veins
- d) Lymphatics

Q6. What is the primary function of the respiratory system?

- a) Pumping blood throughout the body
- b) Digesting food
- c) Exchanging gases (oxygen and carbon dioxide)
- d) Regulating body temperature

Q7. Which structure is responsible for filtering, warming, and moistening incoming air?

- a) Pharynx
- b) Larynx
- c) Nasal cavity
- d) Trachea

Q8. During inspiration, what happens to the diaphragm?

- a) It contracts and moves upward
- b) It relaxes and moves downward
- c) It contracts and moves downward
- d) It relaxes and moves upward

Q9.

Assertion (A): The alveoli are essential for gas exchange in the lungs.

Reason (R): Alveoli provide a large surface area and have thin walls that facilitate efficient gas exchange.

- 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

Q10. What is the role of plasma in the blood?

- a) Carries oxygen to tissues
- b) Provides immunity against pathogens
- c) Transports nutrients and wastes
- d) Clots blood to prevent bleeding

VERY SHORT ANSWER QUESTION

2 Marks

Q1. What is the primary function of the circulatory system?

Answer: The primary function of the circulatory system is to transport oxygen, nutrients, and hormones to cells and remove waste products like carbon dioxide.

Q2. What is the role of the diaphragm in respiration?

Answer: The diaphragm contracts and moves downward during inspiration to allow air into the lungs, and relaxes and moves upward during expiration to expel air from the lungs.

SHORT ANSWER QUESTION

3 Marks

Q1. Write the difference between slow twitch fibre and fast twitch fibre?

Answer: Slow twitch fibre is known as red fibre which contract slowly. These play a significant role in aerobic activities. For example, long distance and cross-country races.

Fast twitch fibre is also known as white fibre. These fibre contract quickly and provide strength and speed but they fatigue more quickly. For example, boxing, 100mt and 200mt race.

CASE STUDY BASED QUESTIONS**4 Marks**

Q1. Sana is studying in class 8th she has started playing football recently. While chasing the ball she feels breathlessness and hardness in muscles so, she takes some rest. After a short while, she comfortably and again started playing.

- a) While running we feel breathlessness and after resting, we feel better. Write the process behind this _____.
- b) What should be done to avoid this process?
- c) The process of gas exchange in the lungs occurs in the _____.
- d) Blood is pumped from the heart to the lungs via the _____.

Answer:

- a) Second wind
- b) One should do continues training
- c) Alveoli
- d) Pulmonary

LONG ANSWER QUESTION**5 Marks**

Q1. What are the functions of human circulatory system?

Answer:

Functions of the Circulatory system:

- Circulates oxygen and removes Carbon Dioxide.
- Provides cells with nutrients.
- Maintenance of body temperature.
- Removes the waste products of metabolism to the excretory organs for disposal.
- Protects the body against disease and infection.
- Clotting stops bleeding after injury.

FUNDAMENTALS OF KINESIOLOGY AND BIOMECHANICS IN SPORTS



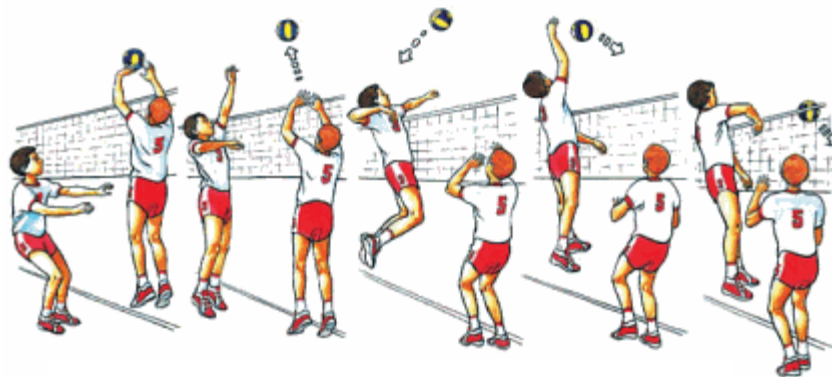
- Definition and Importance of Kinesiology and Biomechanics in Sports.
- Principles of Biomechanics
- Kinetics and Kinematics in Sports
- Types of Body Movements - Flexion, Extension, Abduction, Adduction, Rotation, Circumduction, Supination & Pronation
- Axis and Planes – Concept and its application in body movements

DEFINITION AND IMPORTANCE OF KINESIOLOGY AND BIOMECHANICS IN SPORTS

Biomechanics is derived from two words, BIO + MECHANICS. Bio means living thing and mechanics is a field of Physics. Thus, it is the branch of science which deals with the forces related to body movements.

Kinesiology is derived from Ancient Greek word 'kinesis' which means '**movement**', and 'logia' which means '**study of**'. Thus it is the scientific study of *human body movement*.

"**Kinesiology** refers to the whole scholarly area of human movement study, while **biomechanics** is the study of motion and its causes in living things."



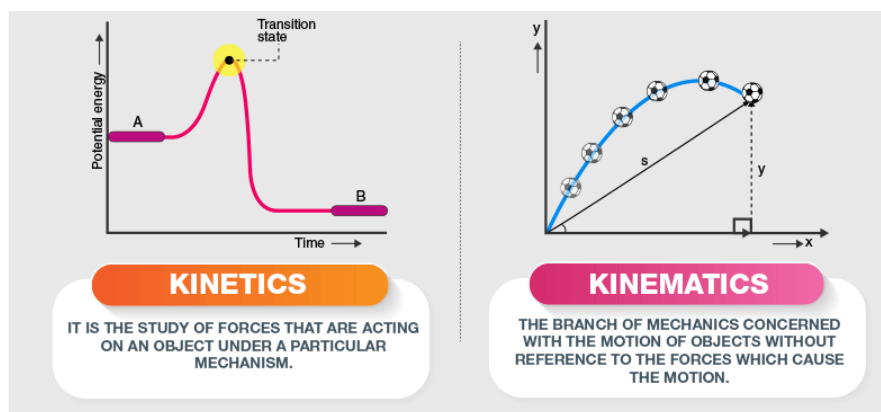
IMPORTANCE

- The main focus of Kinesiology is the study of the mechanical concepts related to human movement which is beneficial for every individual even in their daily activities.
- Kinesiology applies sciences like biomechanics, anatomy, physiology and psychology to better understand how the human body responds to physical activity and various stimuli.
- Kinesiology and physical education study the role of exercise, physical movement and sports in the development of human health and happiness.
- It helps to understand the interconnection between human structure and functions.
- It provides adequate knowledge of movement to athletic trainers who can, then, try to prevent athletes from suffering injuries.
- It provides knowledge regarding efficient movements as a part of daily living in order to achieve optimum quality of body efficiency.
- The study of Kinesiology and Physical Education may be used as the basis for a variety of careers which include Gym instructors, Coaches in different sports etc.

PRINCIPLES OF BIOMECHANICS

PRINCIPLE	DESCRIPTION
FORCE–MOTION	The Force-Motion Principle states that it takes unbalanced forces (and the subsequent torques they induce) to create or modify our motion.
FORCE–TIME	The Force-Time Principle states that modification of movement depends on the timing of force application as much as the size of the forces used to create it.
INERTIA	Inertia can be defined as the property of all objects to resist changes in their state of motion.
RANGE OF MOTION	Range of Motion is the overall motion used in a movement; it could be linear or angular motion of the body segments.
BALANCE	Balance is a person's ability to control their body position relative to some support base.
THE COORDINATION CONTINUUM	The Coordination Continuum principle says that determining the optimal timing of muscle actions or segmental motions depends on the movement's goal.
SEGMENTAL INTERACTION	The principle of Segmental Interaction says that the forces acting in a system of linked rigid bodies can be transferred through the links and joints.
OPTIMAL PROJECTION	The biomechanical principle of optimal projection says an optimal range of projection angles for a specific goal for most human movements involving projectiles
SPIN	The principle of Spin or rotations applies largely to projectiles, and particularly sports balls.

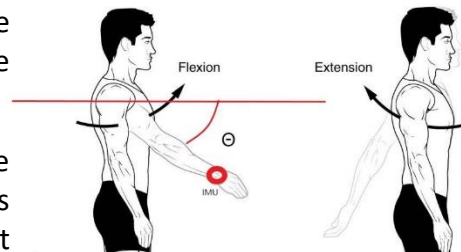
KINETICS AND KINEMATICS IN SPORTS



TYPES OF BODY MOVEMENTS - FLEXION, EXTENSION, ABDUCTION, ADDUCTION, ROTATION, CIRCUMDUCTION

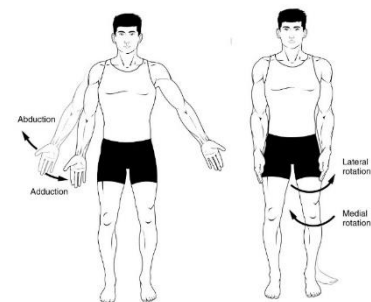
Flexion: Bending parts at a joint so that the angle between them decreases and parts come closer together (bending the lower limb at the knee).

Extensions: Straightening parts so that the angle between them increases and parts moves farther apart (straightening the lower limb at the knee).



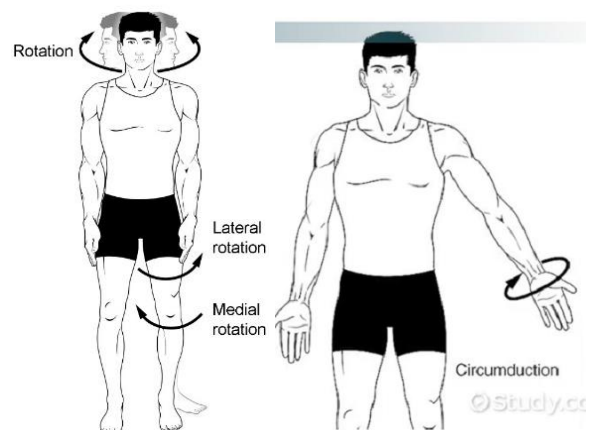
Abduction means moving a part away from the midline (lifting the upper limb horizontally to form a right angle with the side of the body))

Adduction means moving a part towards the midline (returning the upper limb from the horizontal position to the side of the body).



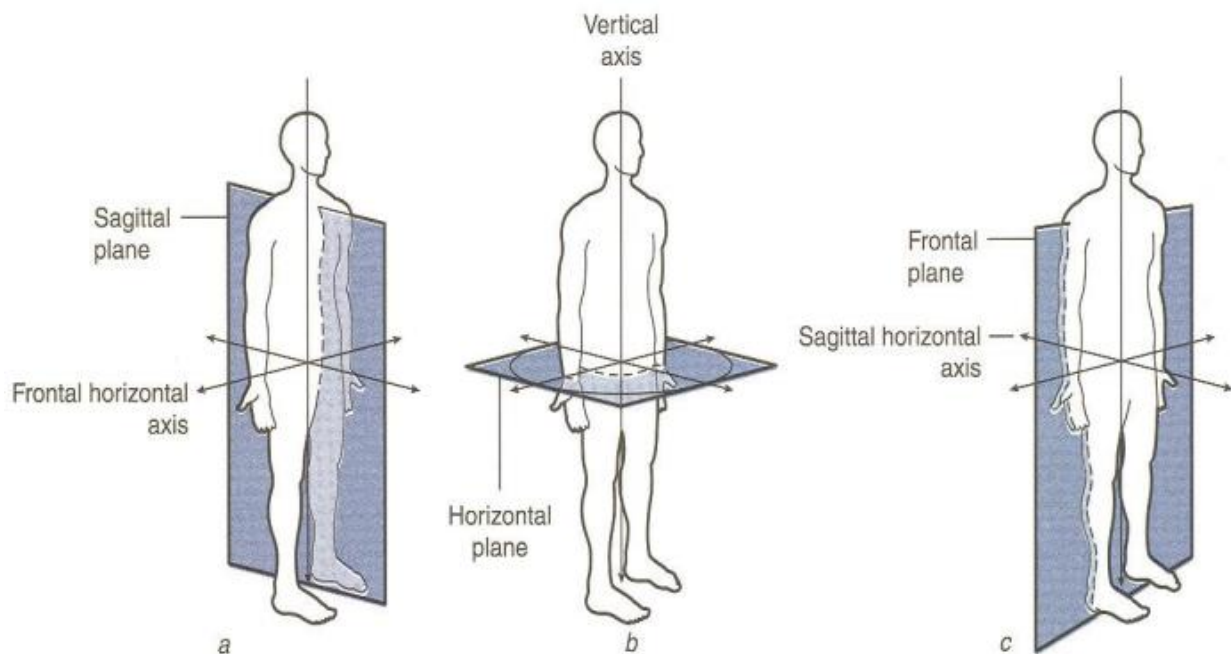
Circumduction: Circumduction is that movement which takes place between the head of a bone and its articular cavity. This kind of motion is best seen in the shoulder and hip joints.

Rotation: Rotation is a form of movement in which a bone moves around a central axis without undergoing any displacement from the axis. Moving a part around an axis is called rotation. eg. Twisting the head from side to side.



AXIS AND PLANES – CONCEPT AND ITS APPLICATION IN BODY MOVEMENTS

AXIS	PLANE
An axis is a straight line around which an object rotates.	It is area in which the movement takes place.
The frontal axis passes horizontally from left to right and is formed by the intersection of the frontal and transverse planes.	The sagittal plane lies vertically and divides the body into right and left parts.
The sagittal axis passes horizontally from posterior to anterior and is formed by the intersection of the sagittal and transverse planes.	The frontal plane also lies vertically and divides the body into anterior and posterior parts.
The vertical axis passes vertically from inferior to superior and is formed by the intersection of the sagittal and frontal planes.	The transverse/Horizontal plane lies horizontally and divides the body into superior and inferior parts.



SELF PRACTISE QUESTIONS

MULTIPLE CHOICE QUESTIONS:

01 Marks

Q1. Biomechanics helps in _____

- a) Treating injuries to sports person
- b) Improving performance of athletes
- c) Increasing friction between the athlete and the ground surface
- d) All of the above**

Q2. Abduction and adduction take place at which Axis

- a) Oblique
- b) Longitudinal or vertical
- c) Frontal or medio lateral
- d) Sagittal or anteroposterior**

Q3. Flexion and extension are

- a) Movements in the frontal plane about the said sagittal axis
- b) Movement in the sagittal plane about the frontal axis**
- c) Movement in the horizontal plane about the vertical axis
- d) None of the above

Q4. Biomechanics is a branch of

- a) Biology
- b) Kinesiology**
- c) Science
- d) Physics

Q5. _____ refers to the study of human movement including the interaction between the athlete Sports Equipment and the exercise environment

- a) Kinesiology
- b) Physical education
- c) Biomechanics**
- d) Sports education

Q6. Biomechanics can play a crucial role in

- a) Injury prevention
- b) Performance enhancement
- c) Physical movement
- d) Both a and b**

Q7. The science that deals with the structural aspect of the human body is known as

- a) Physiology
- b) Anatomy**
- c) Botany
- d) Kinesiology

Q8. The scientific study about the human or non-human body movements it is known as

- a) Physiology
- b) Anatomy
- c) Biology
- d) Kinesiology**

Q9. Increases take place when the angle between the two bones attached to the joint

- a) Flexion
- b) Extension**
- c) Adduction
- d) None of these

Q10. Newton's second law of motion can be applied in sports like

- a) Baseball
- b) Swimming
- c) Football
- d) All of the above**

VERY SHORT ANSWER QUESTION

2 Marks

Q1. Enlist the parts of lever.

Answer:

- a) Fulcrum
- b) Resistance
- c) Force

Q2. What is centre of gravity?

Answer:

The centre of gravity is an imaginary point where the whole weight of the body is concentrated.

Q3. What is friction?

Answer:

Friction is defined as the resistance offered by the surfaces that are in contact when they move past each other.

SHORT ANSWER QUESTION**3 Marks**

Q1. What are second class levers? Give examples.

Answer:

Second-class levers have the load between the effort and the fulcrum. A wheelbarrow is a second class lever. The wheel is the fulcrum, the handles take the effort, and the load is placed between the wheel and the effort (person doing the lifting). The effort always travels a greater distance and is less than the load.

Q3. What is the first and second condition of equilibrium?

Answer:

First Condition: The first condition of equilibrium states that for an object to remain in equilibrium, the net force acting upon it in all directions must be zero.

Second Condition: The second condition of equilibrium states that the net torque acting on the object must be zero.

CASE STUDY BASED QUESTIONS**4 Marks**

Q1. Vijay is very active in Sports and regularly visits Gym for various weight training Exercise. On Monday and Thursday he perform exercise related to Back and Biceps while on Tuesday & Friday he performs exercises related to Chest & Triceps and on Wednesday and Saturday he performs exercises related to lower body. While doing exercise he relates many of the biomechanics topics taught in Physical Education Class.

- a) Biceps curl involves which kind of movement?
- b) Biceps curl involves movement in which plane and axis?
- c) Trunk twisting involves which kind of movement?
- d) Trunk twisting involves movement in which plane and axis?

Answer:

- a) Flexion-Extension
- b) Sagittal Plane & Frontal Axis
- c) Rotation
- d) Transverse plane and Vertical axis.

LONG ANSWER QUESTION**5 Marks**

Q1. Give example of each type of lever which our body uses during various activities.

Answer.

Followings are the example of class I lever which is used by our body. Our skull is the lever arm and the neck muscles at the back of the skull provide the force (effort) to hit football while we lift our head up against the football (load).

When the neck muscles relax, our head nods/hits forward.

Following is the example of class II lever which is used by our body. Our calf muscles and Achilles tendon provide the effort when the calf muscle contracts. The load is our body weight and is lifted by the effort (muscle contraction).

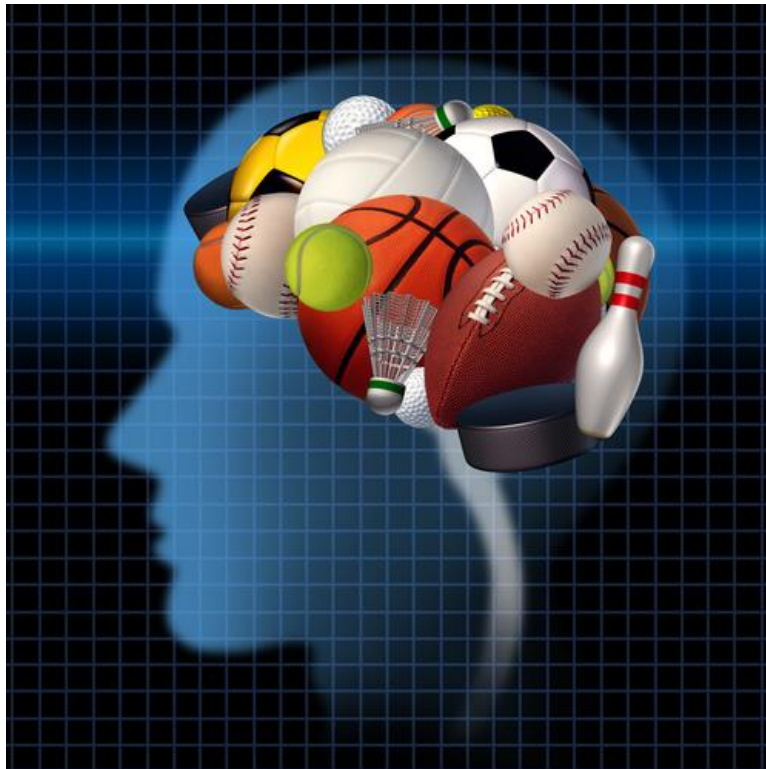
Following is the example of class III lever which is used by our body. The biceps muscle provides the effort (force) and bends the forearm against the weight of the forearm and any weight that the hand might be holding.

Q2. What do you know about lever? What are different types of levers? Explain the application of lever in sports.

Answer.

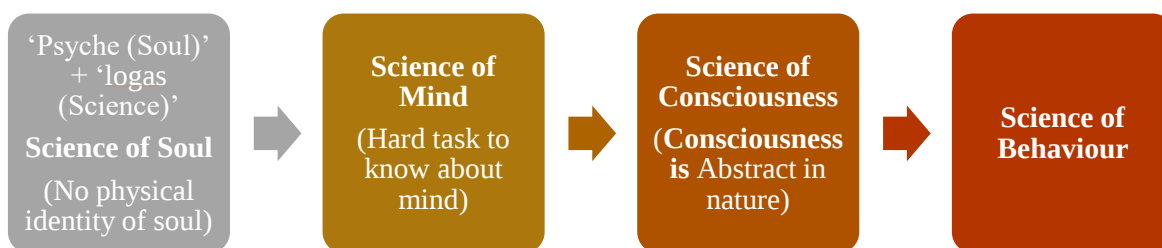
Lever is a rigid bar which is capable of rotating about a fixed point called the fulcrum. Example: - see-saw, scissors, pulley etc. Skeletal system also acts like lever. CLASS I LEVER - A first class lever has the fulcrum located between the force and the resistance. Example- See-saw, a pair of scissors, bicycle brake. Rowing: in rowing, application of the force on the oars at the axis. CLASS II LEVER - A second class lever has the load or resistance located between the fulcrum and the force. Example- wheel barrow, punching machine, Straight push ups, calisthenics, lifting of legs from the ground, etc. CLASS III LEVER - A third class lever has the force located between the fulcrum and the resistance. Example- baseball bat, Tennis racket, boat-paddles, curling of biceps

PSYCHOLOGY & SPORTS



- Definition & Importance of Psychology in Physical Education & Sports.
- Developmental Characteristics at Different Stages of Development.
- Adolescent Problems & their Management.
- Team Cohesion and Sports.
- Introduction to Psychological Attributes: Attention, Resilience, Mental Toughness

DEFINITION & IMPORTANCE OF PSYCHOLOGY IN PHYSICAL EDUCATION & SPORTS



Psychology

- *"It is the interpretation & explanation of behaviour in mental or Physical terms"* -- Ross
- *"Psychology is the study of the human behaviour & Human relationship"* – Crow & Crow

Sports Psychology

- *"Sports Psychology is an Applied Psychology. It is more concerned with the personalities, emotional or motivational aspects of sports & physical activities. It employs many of the techniques used in Psychology"* – Clark & Clark

IMPORTANCE

- Enhances Physiological Capacities
- Assist to learn Motor Skills
- Aids in understanding Behaviour
- Helps in controlling Emotions
- Prepares an Athlete for competition
- Supports emotional needs of Sports Persons

DEVELOPMENTAL CHARACTERISTICS AT DIFFERENT STAGES OF DEVELOPMENT

STAGES	DEVELOPMENTAL MILESTONES
Infancy : 0-2 years	Physical: The child's body weight increases to almost triple the birth weight, and increase in height is about one-third during the first year alone. Growth of brain size is also rapid during first 18 months. Linguistics: Children start developing language ability and learn through their sense organs. They explore the world in their own ways and express their intellect by making various sounds like gurgling, cooing, etc. Social & Emotional: Expressing joy, anger, sadness is achieved by 6 months. Motor skills: The infant first controls his head and trunk, then lifts his chest, sits upright, crawls, creeps, stands with help, stands holding some objects and starts walking.
STAGES	DEVELOPMENTAL MILESTONES

Early Childhood: 2-6 years	Physical: The child develops athletic appearance and loses baby chubbiness. Brain and head grows rapidly during this period. Cognitive: The child develops ability to classify objects, people or events. They are imaginative, animated and create their own hypothetical world. Psycho Social: He/ She is able to express his/her feelings and emotions and communicate needs and feelings with others. Linguistic: The child develops the ability to speak in complete sentences. Motor skills: The child has better control of his/her physical movement and can have better coordination of body parts.
Late Childhood (Pre-Adolescence) 6-11 years	Physical: There is an increase in strength as body parts become stronger. Cognitive: By this age children develop concrete thinking abilities, in which they develop ability to think logically and use mental operations to solve problems. However, they still lack abstract thinking ability. Psycho Social: The child develops gender identification and social comparison to identify themselves from others. Motor skills: They have developed the ability to use body parts with appropriate speed.
Adolescence (11-20 years)	Physical: Boys and girls develop height, weight, muscles and achieve maturity. The onset of this stage is marked by the onset of puberty. Secondary sex organs start developing. E.g. Moustache in boys and breasts in girls. Psycho Social: At this stage boys and girls are argumentative and they have a tendency to find fault with the authority figures. They are self-conscious and influenced by their peer group. Cognitive: Boys and girls become innovative and take great interest in learning various skills. They also develop the ability of abstract thinking. Motor skills: They develop strength, speed, endurance, flexibility, coordination at a rapid rate.
Early Adulthood (20 -40 years)	By the time they reach adulthood, individuals are responsible, mature, self-supporting and well-integrated into society.
Middle Adulthood (40-65 years)	This period is characterised by strong social networking, relatively stable personality, and life is dominated by work and family.
Old Age (65 and above)	This period is marked by decline of health and faculties, and individuals often plan to retire. It is marked by inactiveness and people are prone to various physical limitations.

ADOLESCENT PROBLEMS & THEIR MANAGEMENT

PROBLEM	MANAGEMENT
Physical Problems	Education of Motor Development
Mental Problems	Education of Psychology
Aggressive Behaviour	Moral Education
Lack of Stability	Vocational Guidance
Emotional Problems	Suitable Environment
Problem related to Gender	Sex Education
Problems of Self-Support	Suitable Environment
Feeling of Importance	Adequate Independence
Social Problems	Social Education

TEAM COHESION AND SPORTS

From '**ME**' to '**WE**'

A dynamic process that is reflected in the tendency of a team to stick together and remain united in pursuit of its goals and objectives despite difficulties and set-backs.



Benefits of Team cohesion

- 1) Group outcomes
 - Team stability
 - Team Efficacy
- 2) Individual outcomes
 - Improved Athletic Performance
 - Perceived Psychological Momentum
 - Enhanced mood, emotion, and satisfaction

INTRODUCTION TO PSYCHOLOGICAL ATTRIBUTES: ATTENTION, RESILIENCE, MENTAL TOUGHNESS

Attention is a state of consciousness in which a person can respond to a stimulus or stimuli. In psychology, a stimulus can be a required task, an object, or an event that requires a response. Attention is a combination of how long a person can focus and how many things they can focus on.

There are two dimensions of attention: **width (broad and narrow)** and **direction (internal and external)**, resulting in four types of attentional control:

- a) External broad
- b) Internal broad
- c) External narrow
- d) Internal narrow

Resilience is the ability to bounce back from adversity, trauma, tragedy, danger or other sources of stress in life.

Types of Resilience:

- **Natural Resilience:** It is a natural ability that is bestowed upon a person at conception. It is characterized by openness to new experiences, an eagerness to learn, and a want to have fun.
- **Adaptive Resilience:** Adaptive resilience is when, as a result of adverse circumstances, one has to learn, adjust and adapt.
- **Restored Resilience:** Restorative or “learned” resilience is the type of resilience, restored by learning skills that aid in coping with life’s challenges. This can also aid in dealing with the past, present, and future traumas in a more effective manner.

Mental toughness is a multifaceted construct made up of multiple key components including values, attitudes, cognitions, emotions, and behaviours that refer to an individual’s ability to thrive through both positively and negatively construed challenges, pressures, and adversities.

Attributes of Mental Toughness

- Self-confident and self-assured
- Able to focus and concentrate
- Intrinsically motivated
- Strong work ethic
- Committed to excellence
- Persistent and determined
- Positive attitude, no negativism
- Resilient in the face of failure or injury
- Thrive on pressure and challenge
- Consistent personal values
- Emotional intelligence
- Physically tough
- Gracious in face of success

SELF PRACTISE QUESTIONS

MULTIPLE CHOICE QUESTIONS:

01 Marks

Q1. Psyche refers to

- a) **Mind or Soul**
- b) Heart
- c) Brain
- d) None of these

Q2. _____ are I highly emotional and Sensitive.

- a) Infants
- b) **Adolescents**
- c) Adults
- d) Old people

Q3. "Adolescence is the period of great stress and strain, storm and strife" whose statement is it?

- a) Watson
- b) Crow and Crow
- c) Clarke and Clarke
- d) **None of the above**

Q4. "Psychology is the science of human behaviour." whose statement is it?

- a) **Pillsbury**
- b) Watson
- c) Woodworth
- d) Singer

Q5. Which of the following in the age group for Adolescence?

- a) 8-16 years
- b) 9-18 years
- c) **10-19 years**
- d) 12-19 years

Q6. Children in adolescent age demand.

- a) Money
- b) Self-worth
- c) **Freedom**
- d) Reward

Q7. Infancy stage & for the age group

- a) **0-2 year**
- b) 1-2 year
- c) 1-3 year
- d) 0-1 year

Q8. Changes in memory and perception are indicators of

- a) Physical development
- b) Social development
- c) Mental development**
- d) Emotional development.

Q9. Which one of the following is not a problem related to adolescence?

- a) Eating Disorder
- b) Substance abuse
- c) Anti-Social behaviour
- d) Lack of language development.**

Q10. Which factor increases group Cohesiveness?

- a) Trust**
- b) Diversity
- c) Arrogance
- d) Negative past group experiences.

Q11. An individual's ability to bounce back emotionally in the face of adversity is referred to as:

- a) Anxiety
- b) Motivation
- c) Resilience**
- d) Mental toughness

Q12. Which of the following factors help in improving team cohesion?

- a) Set individual goals
- b) Set team goals
- c) Provide feedback to individuals
- d) All of these**

VERY SHORT ANSWER QUESTION

2 Marks

Q1. Difference between psychology and Sports Psychology?

Answer:

According to Crow and Crow, "Psychology is the study of the human behaviour and human relationship."

According to Clark and Clark, "Sports psychology is an applied psychology. It is more concerned with the personalities, emotional or motivational aspects of sports and physical activities. It employs many of the techniques used in psychology."

Q2. Define the term Growth and development?

Answer:

Growth means the growth of physical organs whether it is in shape, size, height or weight,

Development is not limited to growing larger, instead it consists of a progressive series of changes of an orderly, coherent type towards the goal of maturity.

Q3. What do you mean by adolescence?

Answer:

The word 'adolescence is derived from the Latin word 'adolescere' which means "to grow to maturity.

According to Jersield "Adolescence is the period through which growing person makes transition from childhood to maturity".

SHORT ANSWER QUESTION

3 Marks

Q1. Define Resilience? What are various types of Resilience? What are the way to develop Resilience in Sports?

Answer:

Resilience in the process of adapting well in the face of adversity, trauma, tragedy , threats or even significant sources of stress.

Type of Resilience

- Natural Resilience
- Adaptive Resilience
- Restored Resilience

Way be develop Resilience in Sports

- Boost or nurture self-esteem
- Cultivate a positive and optimistic mind set.
- Be self-motivated to succeed.
- Set goals with realistic expectations
- Make strong social support System.

CASE STUDY BASED QUESTIONS

4 Marks

Joseph, a student in 11th grade, is a very active and athletic boy. He wakes up early in "the morning and also goes for archery training. In the training, he starts focusing on various psychological attributes such as attention, mental toughness and resilience.

Based on the above information, answer the following questions

(a) _____ is the concentration of mental effort on sensory or mental events

(b) Attention focus allowing athletes to perceive several occurrences simultaneously is referred as _____

(c) _____ resilience is a type of resilience that occurs when one has to learn, and adapt, as a result of adverse circumstances.

(d) _____ is defined as a collection of values, attitudes, emotions, cognitions, and behaviours that influence the way in which an athlete approaches, responds to, and appraises demanding events to consistently achieve his or her goals.

OR

_____ resilience is a type of resilience that is characterised by an openness to experiences, an eagerness to learn, and a want to have fun

Answer

- a) Attention
- b) Broad Attention focus
- c) Adaptive
- d) Mental toughness OR Natural

LONG ANSWER QUESTION

5 Marks

Q1. Explain the problems of adolescence? How the problems can be managed?

Answer:

- Physical problem
- Mental problem
- Problem of Aggressive Behaviour
- Lack of Stability and Adjustment
- Emotional problem
- Problem Related to Sex
- Problem of Self-Support
- Feeling of importance
- Social problem

Management of Adolescence problem

- Education for Motor Development
- Education of Psychology
- Sex Education
- Vocational Education
- Moral and Religious Education
- To provide suitable Environment
- Adequate Independence
- Social Education

TRAINING AND DOPING IN SPORTS



- Concept and Principles of Sports Training
- Training Load: Over Load, Adaptation, and Recovery
- Warming-up & Limbering Down – Types, Method & Importance
- Concept of Skill, Technique, Tactics & Strategies
- Concept of Doping and its disadvantages

CONCEPT AND PRINCIPLES OF SPORTS TRAINING

Training : The process of preparing for some task

Sports Training : The Process of Preparing an athlete for an sporting event

It is the basis of his/her preparedness for achievements in the field of sports

Matwejew- *"Sports training is the basic form of preparation of sportsmen"*

Harre- *" Sports training is based on scientific knowledge, and a pedagogical process of sports perfection which, through systematic effect on psycho-physical performance ability and performance readiness, aims at leading a sportsman to top level of performance"*

Principles of Sports Training:

- Principle of Continuity
- Principle of Overload
- Principle of Individual Difference
- Principle of General and Specific Preparation
- The principle of Progression
- The Principle of Specificity
- The principle of Active involvement
- The principle of Variety
- The principle of Warm-Up and Cool-Down
- The principle of Rest & recovery
- The principle of Cyclicity

TRAINING LOAD: OVER LOAD, ADAPTATION, AND RECOVERY

TRAINING LOAD:

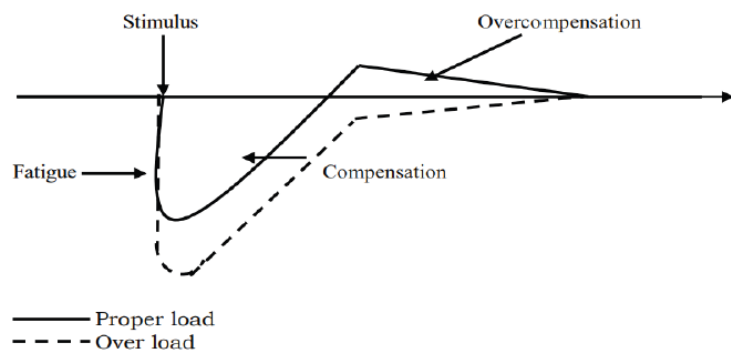
Physiological and Psychological demand that are placed on the individual through motor stimulus (movement), resulting in improvement and maintenance of performance capacity is known as Training load.

Two main components of Training Load is:

- Intensity of Load
- Volume of Load

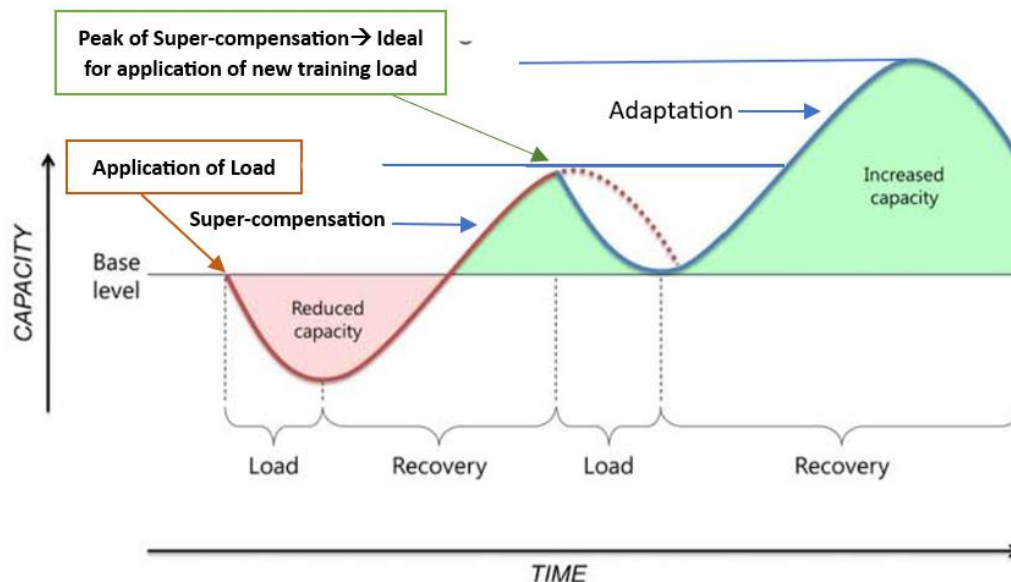
OVERLOAD

It is a state when the Training Load exceeds the loading capacity of an individual for a prolonged duration. Overload reduces the performances of an individual.



ADAPTATION

In literal sense, the word adaptation means to get adjusted. However in terms of Sports training, it is the process by which the loading capacity of the individual gets increased over time due to regular training.



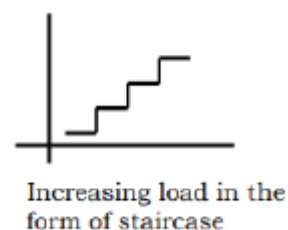
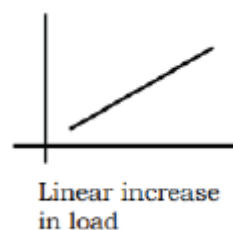
Method of adaptation:

Linear Method: In this method the Training Load is increased gradually and continuously over a period of time.

e.g. Increment of one Push Up daily starting from the base load of 5. i.e. 5 Push up in first day then 6 Push Up the next day and gradually increasing one push up each day.

Step Method: In this method the Training Load is kept constant over a period of time and then is increased further for the next period of time.

e.g. Increment of 3 Push Up after performing 5 push up for One Week.



RECOVERY:

It is the physiological process the body replenish the energy reserves and returns to its previous condition. Adequate recovery requires time and leads to positive adaptation.

WARMING-UP & LIMBERING DOWN – TYPES, METHOD & IMPORTANCE

WARMING UP

It Is a Short Duration Activity, Performed Prior To Training Session or Competition. It helps Sportsperson to Prepare Physically, Mentally & Physiologically for Training Session or Competition. The Muscles Become Ready and Perform Efficiently.

TYPES	METHODS
Passive Warming Up To increase the body temperature without performing any physical activity	External means such as by wearing warm clothes, massage, hot water, steam, sunlight or hot drinks etc.
Active Warming Up Sportsperson performs many physical activities to raise body temperature up to required level	General Warming Up Performing all types of Activities Including Jogging, Jumping, Stretching etc.
	Specific Warming Up Exercises Are Done With Equipment and special exercises are performed which have direct relationship with the activity to be performed

Importance of Warming Up

- Increases the Body Temperature
- Increases Metabolic Rate
- Decreases the Viscosity of Muscles
- Reduces the Anxiety and Tension
- Increases the Speed of Nerve Impulses
- Enhances Cooling Efficiency
- Decreases the Resistance in Muscles Capillaries
- Reduces the Blood Lactic Acid
- Increases the Speed of Transfer of Oxygen and Fuel to Tissues
- Warming-up Avoids Injury
- Increases the Speed of Muscles

LIMBERING DOWN

Cooling down or warming down after a competition which allows the body to transit gradually from an exertional state to a resting state.

Methods:

- Stretching
- Cold Baths
- Light Jogging with gradual decrease of speed
- Massaging

Importance of Limbering Down

- Body Temperature Becomes Normal
- Decrease in the Level of Adrenaline in the Blood
- Proper Removal of Waste Products
- Muscles Do Not Remain Stiff
- Decrease in Tension
- Heart Rate Returns to Initial Stage
- Reduces the Chances of Dizziness or Fainting
- Supply of Oxygen

CONCEPT OF SKILL, TECHNIQUE, TACTICS & STRATEGIES

TECHNIQUE

Technique is the mechanical model of doing any task through which an athlete minimizes his energy expenditure and produces remarkable output.

SKILL

Skill is defined as the automation of motor action i.e. the capacity of the sportsman to realize the technique in actual motor action.

So, Skill is conceptualizing & performing a technique that tells how well the athlete is performing a technique. Example- Sachin Tendulkar's skill of playing straight drive is excellent, because of his ability to execute technique of executing a straight drive to perfection.

TACTICS

Tactics are the skills required in any game that allows a player or team to effectively use their skills and talent to the best possible advantage.

STRATEGIES

It can be defined as *"a plan of action designed to achieve a long-term or overall aim."* In general, strategy is an overall plan or approach for solving a problem, which involves many decisions, such as identifying the goal and the groups that are trying to influence it. In sports, strategy is the overall plan or approach for successful participation in the competition.

TECHNIQUE	SKILL	TACTICS	STRATEGIES
Leg Spin	Ability to execute Leg Spin.	A captain may change bowling and alter field placement to get a batsman out	A team with strong batting line up may decides to chase down target by batting second after winning the toss

CONCEPT OF DOPING AND ITS DISADVANTAGES

Doping- It is referred as a situation when athletes use prohibited substances or methods to improve their sporting performance.

International Olympic Committee- "Doping is the use of any method or substances that might harm the athlete in a quest to gain an unfair advantage, over his/her fellow competitors."

WADA (World Anti-Doping Agency)- "Doping is defined as the occurrence of one or more of the anti-doping rule violations set forth in Article 2.1 through Article 2.8 of the code"

Doping Includes:

- Presence of a prohibited substance or method
- Use or attempt to use a prohibited substance or method
- Refusing to submit sample collection after being notified
- Failure to file athlete's whereabouts after being notified
- Tampering with any part of the doping control process.
- Possession of a prohibited substance or method.
- Trafficking a prohibited substance or method
- Administering or attempting to administer a prohibited substance or method to an athlete.

TYPES	SUSTANCE/ METHOD	FUNCTION
PERFORMANCE ENHANCING SUBSTANCES	Stimulants	Enhances alertness and physical activity– by enhancing Heart & breathing rate and functioning of Brain E.g. Amphetamines, cocaine, ephedrine & Adrafinil
	Anabolic Steroids	Stimulates Growth of Muscle and helps to train harder Increase muscle strength E.g. Drostanolone, Metenolone, Oxandrolone etc.
	Peptide Hormones	Increase the production of RBCs Stimulate blood Circulation E.g. Erthropoietin, Human Growth Hormone & insulin etc.
	Beta-2-Agonists	Generally used to treat Asthama Relax air passage and helps in flow of more air/oxygen to lungs Enhance respiratory function
	Narcotics	Reduce or eliminate pain E.g. Morphine, Heroin & Pethidine etc.
	Diuretics	Used to remove body fluids. Helps in sudden body weight reduction by eliminating body water E.g. Dextran
	Glucocorticoids	Relieve fatigue & pain
	Cannabinoids	Induce feeling of relaxation E.g. Hashish, Marijuna etc.

PHYSICAL METHODS	Blood Doping	The process of artificially increasing the RBC and in turn increased Oxygen carrying capacity of the blood - Autologous Blood doping Athlete's blood is taken out few weeks before competition Injected back into the body before the competition - Homologous Blood doping Someone else blood is injected into the body before the competition
	Gene Doping	Manipulating the genetic structure of an individual

EFFECTS OF DOPING

Name of Drug	Anabolic Steroids	Corticosteroids	Diuretics	Stimulants	Narcotic Analgesic	Beta Blockers
Effects	Increases muscle mass and strength	Increase aggression, reduces fatigue and pain	Reduce weight quickly and mask other drug	Increase alertness and delay fatigue	Kill Pain and induce feeling of Calm	Slow heartbeat and steady body movements
Minor Complications	Women- Menstrual irregularities, breast shrinkage. Men- Testicular atrophy, irritability	Retarded healing or foster infections	Dehydration, stomach or leg cramps, loss of Sodium and Potassium.	Restlessness and anxiety, accelerate heart rate and breathing	Danger of Worsening injury.	Causes asthma symptoms and decreased mental alertness
Severe Complications	Heart and Liver Disease	Causes Pituitary gland, adrenal gland and Kidney problem	Causes irregular heartbeats that can lead to Heart attacks and Kidney Damage	Erratic heartbeats and severe high temperature addictive	Slow breathing	Severe slow heart rate

SELF PRACTISE QUESTIONS

MULTIPLE CHOICE QUESTIONS:

01 Marks

Q1. In order to develop the best performance of an athlete in competition, sports training has become

- a) **Scientific and systematic**
- b) Disorganised and irrational
- c) Complex and painstaking
- d) Easy and approximate

Q2. Exercise is a short-term activity which results in

- a) Normalising the heart rate
- b) Decreasing blood pressure
- c) **Increase in blood flow**
- d) Decrease in heart rate

Q3. Due to systematic training the resting heart rate of a Marathon player will

- a) Remain normal
- b) **Decrease**
- c) Increase
- d) Become critical

Q4. The main benefit of systematic and scientific sports training is an increase in

- a) **Performance**
- b) Injuries
- c) Physical labour
- d) Supervision

Q6. Transitional Phase is a

- a) **Rest and recovery period**
- b) Training period
- c) Competition period
- d) Fitness period

Q7. General preparation focuses on

- a) Personality
- b) Functional capacity
- c) Cardio vascular efficiency
- d) **Over all fitness component**

Q8. Warming up is performed to

- a) **Generate heat in body**
- b) Decrease metabolic rate
- c) Lower the body temperature
- d) Increase oxygen supply to the muscles

Q9. In basketball, shooting is required to score goals. Shooting is a

- a) **Technique**
- b) Style
- c) Skill
- d) Tactic

Q10. The first case of doping in Modern Olympics came to light in

- a) **1904**
- b) 1908
- c) 1912
- d) 1916

Q11. The Canadian sprinter named Ben Johnson who won a gold medal at the 1988 Seoul Olympics, which was later rescinded, tested positive for

- a) **Anabolic steroid**
- b) Diuretic
- c) Cannabinoids
- d) Blood doping

Q12. In which Olympic Games, was the doping test first done by IOC under the Anti-Doping Agency Campaign?

- a) 1960 Summer Olympic Game
- b) 1960 Winter Olympic Games
- c) **1968 Summer Olympic Game**
- d) 1968 Winter Olympic Game

Q13. The performance enhancement drug generally used by boxers and judo players to reduce their weight is

- a) **Diuretic**
- b) Peptide hormone
- c) Anabolic steroid
- d) Beta-2 agonist

Q14. Stimulants benefit performance by

- a) **Increasing heart and respiratory rates and suppressing the symptoms of fatigue**
- b) Having a painkilling and sedating effect
- c) Releasing hormones promoting growth, healing and body repair
- d) Preventing the release of adrenaline

Q15. Some of the side effects of using narcotics include

- a) Suppressed appetite, increased blood pressure and body temperature
- b) **Addiction, suppressed appetite, toxicity**
- c) Impotency, infertility, arteriosclerosis, heart disease, liver and kidney cancer
- d) A damaging effect on endurance, heart disease

Q16. Sports which is well known for the use of anabolic steroids

- a) **Sprinting**
- b) Soccer
- c) Archery
- d) Shooting

Q17. Match the following

- | | |
|----------------------|---------------------------------|
| a. Anabolic steroids | (i) Bumetanide & Furosemide |
| b. Narcotics | (ii) Formoterol & Salbutamol |
| c. Diuretics | (iii) Testosterone & Nandrolone |
| d. Beta-2 Agonists | (iv) Morphine & Methadone |

- a) a – i, b – ii, c – iii, d – iv
- b) a – iv, b – iii, c – ii, d – i
- c) a – ii, b – i, c – iv, d – iii
- d) a – iii, b – iv, c – i, d – ii**

Q18. Assertion-Reason Based Questions

Each of the following questions consists of two statements labelled Assertion (A) and Reason (R) and has the following four choices (a), (b), (c) and (d)

Assertion (A): The principle of Specificity in training plays a key role in improving the performance of athletes.

Reason (R): It improves a particular functional ability of the body's organs and systems which encourages the performance of athletes

- 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

Q19. Assertion-Reason Based Questions

Assertion (A): Cannabinoids are banned from sports competitions, although they give relief from fatigue & pain.

Reason (R): This practice boosts red blood cells raising the capacity of blood to carry O₂.

- 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

VERY SHORT ANSWER QUESTION**2 Marks**

- Q1. What is the difference between Super compensation and Overload?
- Q2. Mention two benefits of Warming up & two benefits of Limbering down.
- Q3. What is the difference between Strategies & Tactics?
- Q4. Mention any four side effects of using Anabolic steroid.
- Q5. Mention the use of Diuretics & Beta-blockers in sports.

SHORT ANSWER QUESTION**3 Marks**

- Q1. Explain the relationship between Load, recovery & adaptation.
- Q2. Explain the importance of Warming up and cooling down in sports.
- Q3. Explain various methods of doping by physical manipulation.

CASE STUDY BASED QUESTIONS**4 Marks**

Q1. Coaches rely on well-established sports training principles to create fitness training programmes and develop sports skills to achieve optimum performance in sports activities. Addison is doing cardiovascular training, and his coach instructed him to take rest in between the training session.

- a) Which principle of sports training is followed by Addison?
- b) In principle of _____, there should not be any break.
- c) The Meso cycle is a training of _____ days.
- d) The Micro cycle is a training of _____ days.

Answer:

- a) Principle of Rest & Recovery
- b) Continuity
- c) 3-4 weeks
- d) 3-10 days

Q2. According to the WADA code, doping is not only about using a prohibited substances or methods to improve performance but also about breaking any of the rules listed by WADA. This Code is the core document that harmonises anti-doping policies, rules & regulations within sports organizations and among public authorities around the world.

- (a) What is the full form of WADA?
- (b) WADA was established on _____.
- (c) WADA publishes an updated code _____ year(s).

(d) _____ as a prohibited substance or method increase muscle mass, strength & resilience.

Answer:

- a) World Anti-doping Agency
- b) 10th November, 1999
- c) Every
- d) Anabolic steroids

LONG ANSWER QUESTION

5 Marks

Q1. Explain Overload. What are the causes of training overload? Mention the symptoms of overload.

Q2. Explain any five principles of sports training.

Q3. Explain any five Prohibited substances of doing with their use & side effects.

SAMPLE PAPER 1
BLUE PRINT

Sl.	Name of Chapter/Unit	Multiple Choice (01 Marks)	VSA (02 Marks)	SA (03 Marks)	Case Study Assertion/ reason (4 Marks)	LA (5 Marks)	Total Questions (Marks)
1	Changing Trends & Career in Physical Education	2(1)		1(3)			3(5)
2	Olympics	2(1)	1(2)	1(3)			4(7)
3	Yoga	2(1)	1(2)		1(4)		4(8)
4	Physical Education & Sports for CWSN	1(1)	1(2)	1(3)			3(6)
5	Physical Fitness, Health and Wellness	2(1)	1(2)		1(4)		4(8)
6	Test, Measurement & Evaluation	1(1)	1(2)		1(4)		3(7)
7	Fundamentals of Anatomy, Physiology in Sports	2(1)		1(3)		1 (5)	4(10)
8	Fundamentals of Kinesiology and Biomechanics in Sports	2(1)	1(2)			1 (5)	4(9)
9	Psychology & Sports	2(1)		1(3)		1 (5)	4(10)
10	Training and Doping in Sports	2(1)		1(3)		1 (5)	4(10)
	Total Questions Note: Along with options	18 Questions	6 Questions	6 Question	3 Questions	4 Questions	37 Questions
	To be attempted	18 Questions (18 marks)	5 Questions (10 marks)	5 Question (15 marks)	3 Questions (12 marks)	3 Questions (15 marks)	34 Questions (70 marks)

SAMPLE QUESTION PAPER

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.
- 6) Section 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)

(18x1 Marks)

Q1. The sports which is not included in the Olympics is ?

- a) Cricket
- b) Hockey
- c) Foot Ball
- d) Hand ball

Q2. Physical education Career Option is ?

- a) Sports Photography
- b) Sports Administration
- c) Sports broadcasting
- d) All of the Above

Q3. Who is the father of Morden Olympic Games?

- a) Pierre-de-coubertin
- b) Aristotle
- c) John Pele
- d) None of these

Q4. The Olympic ideal is ?

- a) Faster
- b) Higher
- c) Stronger
- d) All of the above

Q5. Kapalbhati improve the functioning of

- a) Liver
- b) Lungs
- c) Knee
- d) Joints

Q6. According to Patanjali the elements of Yoga are

- a) 6
- b) 7
- c) 8
- d) 1

- Q7. Which of the following has role to help a Divyang
- a) Counselor
 - b) Physical therapist
 - c) Occupational therapist
 - d) All of the above
- Q8. Components of wellness are
- a) Social wellness
 - b) Physical wellness
 - c) Emotional wellness
 - d) All of the above
- Q9. Which strength development method does not show Muscle Movement?
- a) Isotonic
 - b) Isometric
 - c) Isokinetic
 - d) None of the above
- Q10. What states one's ability, Capacity and Achievement Level?
- a) Test
 - b) evaluation
 - c) measurement
 - d) none of these
- Q11. The femur is the ----- bone in the body ?
- a) small
 - b) longest
 - c) flat
 - d) round
- Q12. An Example of hinge joint is ?
- a) Ankle
 - b) Wrist
 - c) Elbow
 - d) Shoulder
- Q13. The type of movements are ?
- a) Flexion
 - b) Extension
 - c) Abduction
 - d) All of these
- Q14. A motion that pulls a body part away from the midline of the body is ?
- a) Abduction
 - b) Distance
 - c) Adduction
 - d) None of these
- Q15. The study of Human behaviour is called?
- a) Home Science
 - b) Social Science
 - c) Psychology
 - d) Political Science

Q16. Rapid physical changes happen in ?

- a) Infancy
- b) Childhood
- c) Adolescence
- d) Adulthood

Q17. Name of anti-doping agency is ?

- a) AWADA
- b) MADA
- c) WADA
- d) All of the above

Q18. Anabolic steroids Affects?

- a) Heart
- b) Gland
- c) Liver
- d) All of the above

(SECTION B)

(5x2 Marks)

Q19. Describe the Olympic Flag?

Q20. Give the benefits of Kapalbhathi?

Q21. Differentiate between active and passive flexibility?

Q22. Briefly explain measurement and Evaluation?

Q23. Mention two objectives of Adoptive Physical Education?

Q24. Mention any two types of Joints along with its scientific names?

(SECTION C)

(5x3 Marks)

Q25. Briefly explain any three career options in Physical Education?

Q26. Explain the Olympic Values?

Q27. Briefly explain the concept of disability and disorder?

Q28. Explain three adolescence problems?

Q29. Name three organs associated with respiratory system along with its function?

Q30. What are the causes of Overload?

(SECTION D)

(3x4 Marks)

31. Ramesh had been suffering from stress, tension, anxiety from the last three years. Now along with these problems, he is also facing severe depression. He has already consulted many doctors but has not found an appropriate solution. Ultimately he met our yoga instructor. The yoga instructor taught him to perform Yogic asanas, pranayamas and yoganidra. After about three months of regular practice, he was feeling well.

Based on the above passage, answer the following questions:-

1. What is Yoga?
2. What was the problem of Ramesh?
3. What did the Yoga instructor teach Ramesh to overcome his problem?
4. What is pranayama?

32. Joseph, Pravesh and Ankit are good friends. Joseph is conscious of his physical fitness, while Ankit wants to make his mark as a physically fit child. Pravesh is indifferent to his lifestyle and his focus is only on study, as a result of which he is physically weak. His weakness has affected his efficiency and neither is he able to do well in the academy field.

On the basis of the above situation, answer the following questions:-

1. What is the importance of physical fitness and lifestyle?
2. What are the components of physical fitness?
3. What are various components of health-related physical fitness?
4. Discuss about indifferent lifestyle and its disadvantage?

Q33. Last year, our school organized a program 'Run for unity'. All the students and teachers of our school were involved in this race. Such runs promote unity, peace and harmony among the people. After covering a distance of two Kilometers, one student suddenly felt chest pain. He complained to a teacher regarding pain. Immediately some of the teachers, who were running beside him, took him to the doctor for necessary checkup. His blood pressure was measured and ECG was also performed. Doctor said that it was not the case of heart problem. It was surely the problem of second wind which is a usual phenomenon for individual who does not practice to run a race.

Based on the above passage, answer the following question:

- a) What is Physical fitness?
- b) What values did the teachers show by taking the student to the doctor immediately?
- c) Was the student physically fit enough?
- d) What is the full form of ECG?

(SECTION E)

(3x5Marks)

Q34. What are Different components of physical fitness? Explain any three of the components.

Q35. Explain the importance of Anatomy & Physiology.

Q36. Explain any five principals of sports training?

Q37. Explain in details the types of body movement?

ANSWER KEYS

(SECTION A)

Q. NO.	ANSWER	MARKS
1	a) Cricket	1
2	d) All of the above	1
3	a) Pierre De Coubertin	1
4	d) All of the above	1
5	a) Lungs	1
6	c) 8	1
7	d) All of the above	1
8	d) All of the above	1
9	b) Isometric	1
10	b) Evaluation	1
11	b) Longest	1
12	c) Elbow	1
13	d) All of these	1
14	a) Abduction	1
15	c) Psychology	1
16	c) Adolescence	1
17	c) WADA	1
18	d) All of the Above	1

(SECTION B)

Q. NO.	ANSWER	MARKS
19	White Silk Cloth, Five Rings, Represent Five Continents, Joint ring represents friendship & unity blue, yellow, black, green and red	1 1
20	▪ It is the sixth yogic kriya ▪ Exercise of the lungs ▪ Improve the functioning of the lungs ▪ Wind pipe is freed from the defects & blood is purified. (Any Two)	1+1
21	Active flexibility – Maximum extension of the joint of the body without external support Passive flexibility – Having maximum range of motion in the joint through external support	1+1

22	Test – Are devices by which we can evaluate one's skills, knowledge & capabilities. Measurement – Collecting of quantitative data using different tests & technologies.	1+1
23	Development of physical fitness Development of skill through participation Development of individual ability Conducting interesting school sports programmes	1+1
24	Immovable joints – Synarthrosis Slightly movable joints – Amphiarthrosis Freely movable joints – Diarthrosis (Any two)	1+1

(SECTION C)

Q. NO.	ANSWER	MARKS
25	i) Teaching career in Physical Education. ii) Coaching as career. iii) Administration related career. iv) Health related career. v) Career in communication/media. (Explain any three)	1+1+1
26	Olympic values are : i) Excellence ii) Friendship iii) Respect (Explanation required)	1+1+1
27	Disability – Any disadvantage due to which an individual is not able to perform the activities of normal human life is known as disability. Disorder – Any disruption due to which an individual is not able to perform his daily human activities is known as disorder. Disorder is related to mental health.	1+1+1
28	i) Independency ii) Problems of physical development iii) Emotional problems iv) Problem of adjustment v) Problems of behaviour vi) Problems of addiction vii) Sex problems (Three explanations required)	1+1+1

29	i) Lungs ii) Intercostal muscles iii) Diaphragm iv) Bronchi v) Trachea vi) Larynx vii) Pharynx (Three explanations required)	1+1+1
30	i) Rapid increase in the training load thus adaptation does not take place. ii) High volume of load. iii) Excess of competition with high demands. iv) Inadequate rest. v) Insufficient daily routine. vi) Indulgence in alcohol & nicotine vii) Health factor viii) An unfriendly family towards sports (Any Six)	0.5 X 6

(SECTION D)

Q. NO.	ANSWER	MARKS
31	a) Yoga is derived from the Sanskrit word (YUJ) which mean union of individual soul with the universal spirit of God . b) Ramesh was suffering from stress, tension & anxiety. c) To perform yogic Asana ,Pranayama's & yognidra d) Control of breath is called pranayama's	1 1 1 1
32	a) Enhances efficiency ,protects us from various diseases, perform daily work without fatigue. b) Strength, Speed ,Endurance, Flexibility & Coordinative abilities c) Body composition ,Flexibility, Muscular strength, Muscular Endurance, Cardiorespiratory Endurance. d) Decrease longevity, Decrease energy level , Increase desperation Decrease in physical fitness	1 1 1 1
33	a) Capacity to do routine work without fatigue. b) Sympathy to Empathy towards the students. c) No students is physically fit enough . d) ECG Echocardiogram.	1 1 1 1

(SECTION E)

Q. NO.	ANSWER	MARKS
34	i) Strength ii) Speed iii) Endurance iv) Flexibility v) Coordinative abilities (Explain any three in brief)	2 1+1+1
35	i) Knowledge of body structure & functions of body parts. ii) Helpful in prevention from injuries & rehabilitation. iii) Helpful in selection of games & training. iv) Knowledge of physical change & fitness through exercise. v) Knowledge of atmospheric effect on players. vi) Helpful in knowing the anatomical & physiological differences among males & females. (Briefly explain any five)	1+1+1+1+1
36	▪ Principle of Continuity ▪ Principle of Overload ▪ Principle of Individual Difference ▪ Principle of General and Specific Preparation ▪ The principle of Progression ▪ The Principle of Specificity ▪ The principle of Active involvement ▪ The principle of Variety (Any Five)	1+1+1+1+1
37	Types of body movements : i) Flexion ii) Extension iii) Abduction iv) Adduction v) Rotation vi) Circumduction vii) Supination viii) Pronation (Explain any four)	1 1+1+1+1

SAMPLE PAPER 2

BLUE PRINT

Sl.	Name of Chapter/Unit	Multiple Choice (01 Marks)	VSA (02 Marks)	SA (03 Marks)	Case Study Assertion/ reason (4 Marks)	LA (5 Marks)	Total Questions (Marks)
1	Changing Trends & Career in Physical Education	4(1)		1(3)	1(4)		6(11)
2	Olympism	1(1)	1(2)	1(3)			3(6)
3	Yoga	2(1)				1 (5)	3(7)
4	Physical Education & Sports for CWSN	1(1)	1(2)	1(3)	1(4)		4(10)
5	Physical Fitness, Health and Wellness	1(1)				1 (5)	2(6)
6	Test, Measurement & Evaluation	1(1)	1(2)				2(3)
7	Fundamentals of Anatomy, Physiology in Sports	2(1)	1(2)	1(3)	1(4)	1 (5)	6(16)
8	Fundamentals of Kinesiology and Biomechanics in Sports	3(1)		1(3)			4(6)
9	Psychology & Sports		1(2)	1(3)			2(5)
10	Training and Doping in Sports	3(1)	1(2)			1 (5)	5(10)
	To be attempted	18 Questions (18 marks)	5 Questions (10 marks)	5 Question (15 marks)	3 Questions (12 marks)	3 Questions (15marks)	34 Questions (70 marks)
			Internal Choice in One Question	Internal Choice in One Question	Internal Choice in One Question	Internal Choice in One Question	

SAMPLE QUESTON PAPER

GENERAL INSTRUCTIONS:

- 1) The question paper consists of 5 sections and 34 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 19-23 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. There is internal choice available in one Question.
- 4) Sections C consist of Question 24-28 carrying 3 marks each and are short answer types and should not exceed 100-150 words. There is internal choice available in one Question.
- 5) Sections D consist of Question 29-31 carrying 4 marks each and are case studies. There is internal choice available.
- 6) Section E consists of Question 32-34 carrying 5 marks each and are short answer types and should not exceed 200-300 words. There is internal choice available.

(SECTION A)

(18x1 Marks)

- Q1. In which year the 'All India Council of Sports' was formed?
- a) 1952
 - b) 1953
 - c) 1954
 - d) 1955
- Q2. In which year the 'Sports Authority of India' was established?
- a) 1981
 - b) 1982
 - c) 1983
 - d) 1984
- Q3. FIT India movement was launched in which year?
- a) 2008
 - b) 2009
 - c) 2018
 - d) 2019
- Q4. Which of the below is not an objective of physical education?
- a) Physical development
 - b) Neuro muscular development
 - c) Disease development
 - d) Emotional development

- Q5. 'CITIUS, ALTIUS, FORTIUS' is known as:
- a) Olympic Symbol
 - b) Olympic Motto
 - c) Olympic Oath
 - d) Olympic Anthem
- Q6. In Yoga the element 'Pranayama' is related with:
- a) Meditative exercises
 - b) Breathing exercises
 - c) Concentration exercises
 - d) Slow stretching
- Q7. Yama is the _____ limb of Yoga
- a) First
 - b) Second
 - c) Third
 - d) Fourth
- Q8. 'ADHD' refers to:
- a) Attention Deficit Hyperactivity Disorder
 - b) Attention Deficit Hypo activity Disorder
 - c) Attention Deficit Hypo activity Disease
 - d) Attention Deficit Hypo activity Disease
- Q9. Performing daily routine activities without any fatigue is:
- a) Mental wellness
 - b) Dynamic ability
 - c) Physical Fitness
 - d) None of these
- Q10. 0.80 Waist Hip ration in males is categorised as:
- a) Excellent
 - b) Good
 - c) Average
 - d) At Risk
- Q11. 'Pivot Joint' falls under which category of Joint?
- a) Immovable Joints
 - b) Slightly Movable Joints
 - c) Freely Movable Joints
 - d) All of the Above
- Q12. 'Patella' is an example of which kind of Bone?
- a) Flat Bone
 - b) Irregular Bone
 - c) Long Bone
 - d) Sesamoid Bone

Q13. While doing Bicep curl, when the dumbbell is moved away the biceps, the movement is known as:

- a) Flexion
- b) Extension
- c) Abduction
- d) Adduction

Q14. _____ can be defined as the property of all objects to resist changes in their state of motion.

- a) Force
- b) Inertia
- c) Gravitation
- d) Projectile

Q15. The plane that divides the body into upper and lower half is known as:

- a) Frontal plane
- b) Sagittal Plane
- c) Transverse plane
- d) None of the above

Q16. Which of the following is method of 'Limbering down'?

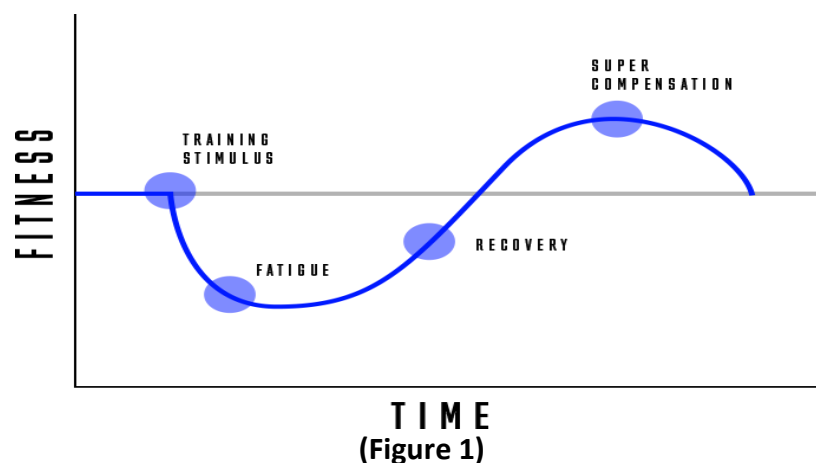
- a) Stretching
- b) Hot Bath
- c) Running
- d) None of the Above

Q17. Which of the following prohibited substance is used to Increase alertness and delay fatigue?

- a) Anabolic Steroids
- b) Diuretics
- c) Stimulants
- d) Beta Blockers

Q18. The image below (**Figure 1**) represents which component of Sports Training?

- a) Circuit Training
- b) Recovery
- c) Adaptation
- d) None of the above



(SECTION B)

(5x2 Marks)

- Q19. Briefly Explain regarding IOC (International Olympic Committee).
Q20. Describe the role of Physical Education teacher (any two) for CWSN.
Q21. What is BMI? The BMI of an individual with 97.1 Kg and height 175 cm is 31.6. In which category does he fall?
Q22. Mention any four conditions which come under the preview of 'Doping'.

OR

Mention one Individual and one team benefit of Team Cohesion.

- Q23. Identify the type of freely movable joint of the following Joints:

- a) Shoulder
- b) Thumb
- c) Elbow
- d) Wrist

(SECTION C)

(5x3 Marks)

- Q24. Briefly explain any three careers in Physical Education
Q25. Describe the Olympic Values.
Q26. Mention three disability etiquettes.
Q27. Briefly explain the type of Joints on the basis of their movement capability.
Q28. Differentiate Kinetics and Kinematics

OR

Describe the changes in Physical, Cognitive and Motor Skills during the Adolescence period.

(SECTION D)

(3x4 Marks)

- Q29. Praveen is a good player. He wished to win in sports and make his country proud nationally and internationally, but he did not get proper coaching and guidance. He takes it as a challenge and wants to pursue a career in sports to provide coaching and proper guidance to such children. He wants to make them aware of the various schemes run by the Government of India and encourages them to participate in these schemes so that they can make their country proud in the field of sports.

Based on the above situation, answer the following questions:

- a) Mention one National and one International competition in sports.
- b) Mention one career prospect in physical education.
- c) Mention one scheme run by Govt of India for the promotion of Sports.
- d) Mention the educational qualification requires to become a coach.

- Q30. Below are the illustration of freely movable joints.

- a) Identify the joint in Fig .1
- b) Identify the joint in Fig .2
- c) Identify the joint in Fig .3
- d) Identify the joint in Fig .4

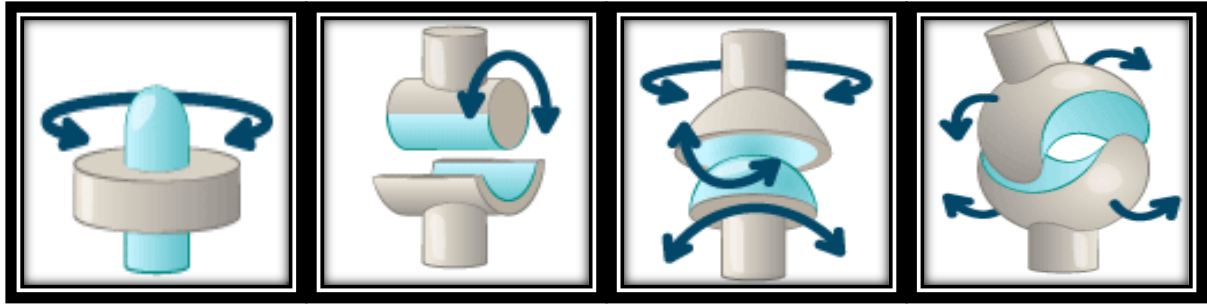


Fig 1

Fig 2

Fig 3

Fig 4

Q31. Children with special needs face different challenges in undertaking certain activities. So, in addition to the regular programmes of physical education the school must provide APE programmes for children. While introducing this chapter to the students, the Physical Education teacher explains the different types of disabilities and the objectives of APE.



- a) List down any two types of physical disabilities.
- b) What is ADHD?
OR
What is SPD?
- c) What is APE?
- d) List any one aims of APE.

(SECTION E)

(3x5Marks)

Q32. Explain the elements of Yoga as per 'Astanga yoga'.

Q33. Explain the PRICE Theory in First Aid.

Q34. Explain the importance of Physiology and anatomy in the field of sports

OR

Explain any five principles of Sports Training.

**ANSWER KEY
(SECTION A)**

Q. NO.	ANSWER	MARKS
1	c) 1954	1
2	d) 1984	1
3	d) 2019	1
4	c) Disease development	1
5	b) Olympic Motto	1
6	b) Breathing exercises	1
7	a) First	1
8	a) Attention Deficit Hyperactivity Disorder	1
9	c) Physical Fitness	1
10	a) Excellent	1
11	c) Freely Movable Joints	1
12	d) Sesamoid Bone	1
13	b) Extension	1
14	b) Inertia	1
15	c) Transverse plane	1
16	a) Stretching	1
17	c) Stimulant	1
18	c) Adaptation	1

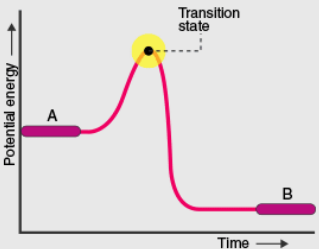
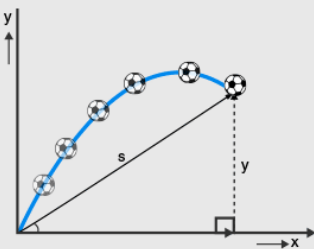
(SECTION B)

Q. NO.	ANSWER	MARKS
19	- It was created by Coubertin in 23 June, 1894. - The IOC is the governing body of Modern Olympic Games. - It supports and promotes participation in sports all over the world for building a peaceful world without discrimination. - Headquarter in Switzerland. (any two)	1 1
20	- Determine abilities of the CWSN - Determine & implement methods for participation of CWSN in Games & Sports. - Help in increasing fitness of CWSN - Helps in developing feeling of Self-Esteem - Organise various programmes for CWSN (Any Two)	1+1

21	BMI = Body Mass Index The individual falls in Class I Obesity.	1+1
22	▪ Presence of a prohibited substance or method ▪ Use or attempt to use a prohibited substance or method ▪ Refusing to submit sample collection after being notified ▪ Failure to file athlete's whereabouts after being notified ▪ Tampering with any part of the doping control process. ▪ Possession of a prohibited substance or method. ▪ Trafficking a prohibited substance or method ▪ Administering or attempting to administer a prohibited substance or method to an athlete. (Any two) OR Benefits of Team cohesion 3) Group outcomes Team stability Team Efficacy 4) Individual outcomes Improved Athletic Performance Perceived Psychological Momentum Enhanced mood, emotion, and satisfaction	1+1
23	• Shoulder- Ball & Socket Joint • Thumb-Saddle Joint • Elbow-Hinge Joint • Wrist- Condylod Joint	½ X 4

(SECTION C)

Q. NO.	ANSWER	MARKS
24	• Teaching Career • Coaching Career • Fitness Related Career • Sports Media And Journalism • Sports Administration • Sports Management • Sports Marketing • Sports Photography (Any three)	1+1+1

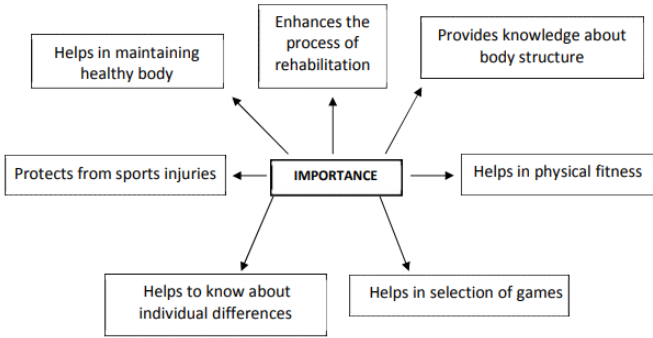
25	Excellence : Encouraging people to be the best they can be. Friendship : It encourages to see sports as an instrument for mutual understanding between individuals and between people all over the world. Respect : For Self, Rules & Regulation, Opponents, Sports, Environment and other people.	1+1+1
26	▪ Always put them first ▪ Shake hands while introduction ▪ For Visual impairment ▪ Always identify yourself with others ▪ Inform when leaving ▪ Listen carefully and attentively to them ▪ Use visual signals for individuals with Auditory impairments ▪ Avoid asking personal questions pertaining to disability ▪ Avoid speaking in high pitch (Any three)	1+1+1
27	Immovable Joints Slightly Movable Joints Freely Movable Joints	1+1+1
28	 KINETICS IT IS THE STUDY OF FORCES THAT ARE ACTING ON AN OBJECT UNDER A PARTICULAR MECHANISM.  KINEMATICS THE BRANCH OF MECHANICS CONCERNED WITH THE MOTION OF OBJECTS WITHOUT REFERENCE TO THE FORCES WHICH CAUSE THE MOTION.	1 ½ + 1 ½
	OR Physical: Boys and girls develop height, weight, muscles and achieve maturity. The onset of this stage is marked by the onset of puberty. Secondary sex organs start developing. E.g. Moustache in boys and breasts in girls. Cognitive: Boys and girls become innovative and take great interest in learning various skills. They also develop the ability of abstract thinking. Motor skills: They develop strength, speed, endurance, flexibility, coordination at a rapid rate.	1+1+1

(SECTION D)

Q. NO.	ANSWER	MARKS
31	a) Any National & International Competition b) Teacher, Coach, Player, Sports Photographer, Sports Journalists etc c) Khelo India d) Coaching Diploma	05+0.5 1 1 1
32	a) Pivot joint b) Hinge Joint c) Ball & Socket Joint d) Saddle Joint	1 1 1 1
33	a) Physical & Intellectual b) Attention deficit Hyperactivity disorder OR Processing Disorder c) equal opportunity to the differentially abled children to participate in physical education programmes, safely and successfully, in a least restrictive environment d) To help or aid differentially abled students to achieve physical, mental, emotional and social growth proportionate to their potential through special, planned programme of regular physical education and recreational activities.	1 1 1 1

(SECTION E)

Q. NO.	ANSWER	MARKS
32	YAMAS Yamas are ethical rules and can be thought of as moral imperatives. NIYAMA It includes virtuous habits, behaviors and observances (the "dos"). ASANA Asana is a posture that one can hold for a period of time, staying relaxed, steady, comfortable and motionless. PRANAYAMA It is the practice of consciously regulating breath (inhalation and exhalation). PRATYAHARA It is a process of withdrawing one's thoughts from external objects, things, person, and situation. DHARANA	5

	Dharana means concentration, introspective focus and one-pointedness of mind. DHYANA Dhyana literally means "contemplation, reflection" and "profound, abstract meditation". SAMADHI Samadhi literally means "putting together, joining, combining with, union, harmonious whole, trance".	
33		2.5 2.5
34	 (Any five)	5
	OR - Principle of Continuity - Principle of Overload - Principle of Individual Difference - Principle of General and Specific Preparation - The principle of Progression - The Principle of Specificity - The principle of Active involvement - The principle of Variety (Any Five)	1+1+1+1+1

SAMPLE PAPER 3

BLUE PRINT

Sl.	Name of Chapter/Unit	Multiple Choice (01 Marks)	VSA (02 Marks)	SA (03 Marks)	Case Study Assertion/ reason (4 Marks)	LA (5 Marks)	Total Questions (Marks)
1	Changing Trends & Career in Physical Education	1(1)		1(3)		1 (5)	3(9)
2	Olympism	4(1)	1(2)				5(6)
3	Yoga	2(1)		1(3)	1(4)		4(9)
4	Physical Education & Sports for CWSN				1(4)	1 (5)	2(9)
5	Physical Fitness, Health and Wellness	2(1)	1(2)	1(3)			4(7)
6	Test, Measurement & Evaluation	2(1)	1(2)			1 (5)	4(9)
7	Fundamentals of Anatomy, Physiology in Sports	2(1)	1(2)	1(3)			4(7)
8	Fundamentals of Kinesiology and Biomechanics in Sports	2(1)		1(3)	1(4)		4(9)
9	Psychology & Sports	1(1)	1(2)			1 (5)	3(8)
10	Training and Doping in Sports	2(1)	1(2)	1(3)			4(7)
	To be attempted	18 Questions (18 marks)	5 Questions (10 marks)	5 Question (15 marks)	3 Questions (12 marks)	3 Questions (15marks)	34 Questions (70 marks)
			Internal Choice in One Question	Internal Choice in One Question	Internal Choice in One Question	Internal Choice in One Question	

SAMPLE QUESTON PAPER

GENERAL INSTRUCTIONS:

- 1) The question paper consists of 5 sections and 34 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 19-23 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. There is internal choice available in one Question.
- 4) Sections C consist of Question 24-28 carrying 3 marks each and are short answer types and should not exceed 100-150 words. There is internal choice available in one Question.
- 5) Sections D consist of Question 29-31 carrying 4 marks each and are case studies. There is internal choice available.
- 6) Section E consists of Question 32-34 carrying 5 marks each and are short answer types and should not exceed 200-300 words. There is internal choice available.

(SECTION A)

(18x1 Marks)

Q1. In the year 2018 the then Sports Minister Col. Rajyavardhan Singh Rathore, launched a sports programme, which is known as:

- a) Sports Authority of India
- b) FIT India
- c) Khelo India
- d) None of the above

Q2. Which among these are considered as Olympic Values?

- a) Excellence
- b) Friendship
- c) Respect
- d) All of the above

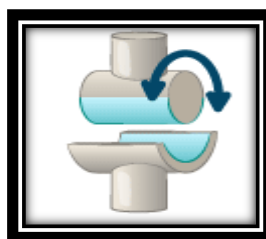
Q3. How many rings are there in the Olympic Ring?

- a) 3
- b) 4
- c) 5
- d) 6

Q4. In the Olympic Motto the word 'Citius' refers to

- a) Stronger
- b) Faster
- c) Higher
- d) None of the above

- Q5. International Olympic Committee was formed in which year?
- a) 1892
 - b) 1894
 - c) 1992
 - d) 1994
- Q6. Which of the following is NOT an element of 'Astang Yoga':?
- a) Yam
 - b) Pranayam
 - c) Samadhi
 - d) Tratak
- Q7. Name the 'Kriya' which is performed to cleanse the Nostrils?
- a) Kapalbhati
 - b) Tratak
 - c) Neti
 - d) Dhauti
- Q8. What does 'P' stands for in the 'PRICE' theory?
- a) Paisa
 - b) Pure
 - c) Prevention
 - d) Precaution
- Q9. Which of the following is **NOT** a Traditional game?
- a) Malkhamb
 - b) Kabaddi
 - c) Kho-Kho
 - d) Golf
- Q10. Which of the following is a site of Skinfold Measurement in both Male and Female?
- a) Thigh
 - b) Abdominal
 - c) Chest
 - d) Suprailiac
- Q11. Which of the following Somatotype Category is having Lean, Delicate, Poor Muscles?
- a) Ectomorph
 - b) Mesomorph
 - c) Endomorph
 - d) None of the Above
- Q12. Identify the type of joint in the picture below?



- a) Saddle Joint

- b) Hinge Joint
- c) Ball and Socket Joint
- d) Pivot Joint

Q13. Which of the following organ is part of Circulatory System?

- a) Bronchi
- b) Nostrils
- c) Lungs
- d) Heart

Q14. _____ can be defined as the property of all objects to resist changes in their state of motion.

- a) Force
- b) Inertia
- c) Gravitation
- d) Projectile

Q15. The plane that divides the body into Right and Left half is known as:

- a) Frontal plane
- b) Sagittal Plane
- c) Transverse plane
- d) None of the above

Q16. The age between 0-2 years is known as:

- a) Infancy
- b) Early Childhood
- c) Late Childhood
- d) Adolescence

Q17. Which of the following does NOT falls under the criterion of Doping?

- a) Presence of a prohibited substance or method
- b) Use or attempt to use a prohibited substance or method
- c) Trafficking a prohibited substance or method
- d) Filing and notifying the whereabouts

Q18. Consumption of which of the following prohibited substance reduce the feeling of Fatigue and pain?

- a) Glucocorticoids
- b) Narcotics
- c) Blood Doping
- d) Anabolic Steroids

(SECTION B)

(5x2 Marks)

Q19. Briefly Explain regarding IOC (International Olympic Committee).

Q20. Briefly describe Physical & Mental Component of Health.

Q21. What is BMI? The BMI of an individual with 97.1 Kg and height 175 cm is 31.6. In which category does he fall?

Q22. Identify the type of Bones: a) Skull b) Femur c) Patella d) Carpus

OR

What is Mental Toughness?

Q23. Describe the types of Warm-up.

(SECTION C)

(5x3 Marks)

Q24. Briefly explain any three primary objectives of Physical Education

Q25. Describe Seetali, Bhastrika & Bhramari Pranayama

Q26. Mention Six Qualities of a Good Leader

Q27. Describe the Type of Joints.

Q28. Describe Flexion, Abduction & Circumduction.

OR

Describe the methods of Load adaptation.

(SECTION D)

(3x4 Marks)

Q29. Varun was very keen to know the impacts of Yoga and thus he visit the central Library in his city. He came across many benefits of Yoga on our Health and Fitness. He was very surprised to know that Yoga has certain techniques to cleanse our inner body parts known as Shat Karma. This encouraged him to practise those Shat Karmas under specialised person so that he can reap the real benefits of those techniques.

Based on the above situation, answer the following questions:

- a) Shat Karmas are also known as Yogic _____.
- b) The technique to cleanse the nostrils is known as _____.
- c) The technique to cleanse the Lungs is known as _____.
- d) The technique to cleanse the Stomach is known as _____.

Q30. The concept of Inclusive education intends to bring the children with special needs to main stream Physical education. Though there are certain challenges but it can be dealt with the help of few professionals and by adding certain infrastructural changes. The major problem that children with special needs face is regarding their Gross and fine motor skills. However professional working this domain can help in improving these abilities. Mr. Shivam, a teacher in ABC Pubic Schools who had the knowledge of APE requested his principal to develop a low heighted basketball with a ring double the size of normal ring.

Based on the above situation, answer the following questions:

- a) What does CWSN stands for?
- b) Which professional can help the CWSN to improve their Gross Motor Skill?
- c) Which professional can help the CWSN to improve their Fine Motor Skill?
- d) Mr. Shivam is specialised in which profession?

OR

What is APE?

Q31. John a student of Class XI regularly visits Gym and while performing exercise he finds certain connection between what he read in his Physical education book and the exercise he is doing. John noticed that while starting a Bicep curl he has to exert more force but the effort gets reduced after initiating the movement.

Based on the above situation, answer the following questions:

- a) Which principle of mechanics cause the extra effort while starting the exercise.
- b) The movement while bringing the barbell close to the chest is known as _____.
- c) The movement when the barbell goes away from the chest is known as _____.
- d) The bicep curl is performed in which Plane?

(SECTION E)

(3x5Marks)

- Q32. Elaborate any five Career option in Physical Education
- Q33. Describe the role of Counsellor, Occupational therapist, Physiotherapist, Physical Education Teacher & Speech Therapist in development of Children with Special Need.
- Q34. What does 'AAHPERD' stands for? Describe the components of AAHPERD Fitness Test.

OR

Describe Five Adolescence Problems and its Management.

**ANSWER KEY
(SECTION A)**

Q. NO.	ANSWER	MARKS
1	c) Khelo India	1
2	d) All of the above	1
3	c) 5	1
4	b) Faster	1
5	b) Olympic Motto	1
6	d) Tratak	1
7	c) Neti	1
8	c) Prevention	1
9	d) Golf	1
10	a) Thigh	1
11	a) Ectomorph	1
12	b) Hinge Joint	1
13	d) Heart	1
14	b) Inertia	1
15	b) Sagittal Plane	1
16	a) Infancy	1
17	d) Filing and notifying the whereabouts	1
18	a) Glucocorticoids	1

(SECTION B)

Q. NO.	ANSWER	MARKS
19	- It was created by Coubertin in 23 June, 1894. - The IOC is the governing body of Modern Olympic Games. - It supports and promotes participation in sports all over the world for building a peaceful world without discrimination. - Headquarter in Switzerland. (any two)	1 1
20	PHYSICAL COMPONENT It is the state of health in which all the system of the body function in its optimum level. It can be achieved by Eating right, Exercising daily, Avoiding bad habits like alcohol and having enough sleep. MENTAL COMPONENT Mental health refers to a healthy mind. It includes Sound mind, Decision making ability, Judgement ability and Reaction time.)	1+1
21	BMI = Body Mass Index The individual falls in Class I Obesity.	1+1

22	a) Skull – Flat Bone b) Femur – Long Bone c) Patella – Sesamoid Bone d) Carpus – Short Bone OR Mental toughness is a multifaceted construct made up of multiple key components including values, attitudes, cognitions, emotions, and behaviours that refer to an individual's ability to thrive through both positively and negatively construed challenges, pressures, and adversities.	1+1								
23	<table><tr><th>TYPES</th><th>METHODS</th></tr><tr><td>Passive Warming Up To increase the body temperature without performing any physical activity</td><td>External means such as by wearing warm clothes, massage, hot water, steam, sunlight or hot drinks etc.</td></tr><tr><td>Active Warming Up Sportsperson performs many physical activities to raise body temperature up to required level</td><td>General Warming Up Performing all types of Activities Including Jogging, Jumping, Stretching etc.</td></tr><tr><td></td><td>Specific Warming Up Exercises Are Done With Equipment and special exercises are performed which have direct relationship with the activity to be performed</td></tr></table>	TYPES	METHODS	Passive Warming Up To increase the body temperature without performing any physical activity	External means such as by wearing warm clothes, massage, hot water, steam, sunlight or hot drinks etc.	Active Warming Up Sportsperson performs many physical activities to raise body temperature up to required level	General Warming Up Performing all types of Activities Including Jogging, Jumping, Stretching etc.		Specific Warming Up Exercises Are Done With Equipment and special exercises are performed which have direct relationship with the activity to be performed	½ X 4
TYPES	METHODS									
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	Specific Warming Up Exercises Are Done With Equipment and special exercises are performed which have direct relationship with the activity to be performed									

(SECTION C)

Q.	ANSWER	MARKS
24	PHYSICAL DEVELOPMENT To develop a good physique through the efficiency of organic systems like Respiratory, Circulatory, Digestive, Muscular and Neuro-muscular improvement. MENTAL DEVELOPMENT To facilitate the development of various Brain functions e.g. Decision Making, Alertness and response time, etc. SOCIAL DEVELOPMENT To develop qualities like confidence, obedience, temperament, sincerity, sacrifices, sportsmanship and self-control etc. EMOTIONAL DEVELOPMENT To develop the abilities to control emotions in various kinds of situations.	1+1+1
25	SHEETALI PRANAYAMA: (Cooling Breath) Sheetali means 'the cooling breath' and it also means calm, passionless, unemotional. Like Seetkari, this pranayama was specifically designed to reduce the body temperature. BHASTRICA PRANAYAMA: (Bellows Breath) Bhastrika is the name of the pranayama which imitates the action of the bhastra or 'bellows' and fans the internal fire, heating the physical and subtle bodies. The inhalation and exhalation are equal and are the	1+1+1

	result of systematic and equal lung movements. The breath is sucked in and pushed out with a little force. BHRAMARI PRANAYAMA: (Humming Bee Breath) This is Bhramari, 'the humming bee' pranayama, so called because the sound you make during respiration imitates that of a black bee.	
26	(Any Six)	1+1+1
27	Immovable Joints Slightly Movable Joints Freely Movable Joints	1+1+1
28	Flexion: Bending parts at a joint so that the angle between them decreases and parts come closer together (bending the lower limb at the knee). Abduction means moving a part away from the midline (lifting the upper limb horizontally to form a right angle with the side of the body). Circumduction: Circumduction is that movement which takes place between the head of a bone and its articular cavity. This kind of motion is best seen in the shoulder and hip joints.	1 ½ +1 ½
	OR Linear Method: In this method the Training Load is increased gradually and continuously over a period of time. E.g. Increment of one Push Up daily starting from the base load of 5. i.e. 5 Push up in first day then 6 Push Up the next day and gradually increasing one push up each day. Step Method: In this method the Training Load is kept constant over a period of time and then is increased further for the next period of time. E.g. Increment of 3 Push Up after performing 5 push up for One Week. Linear increase in load Increasing load in the form of staircase	1+1+1

(SECTION D)

Q. NO.	ANSWER	MARKS
31	a) Kriyas	1
	b) Neti	1
	c) Kapalbhati	1
	d) Dhauti	1
32	a) Children with special need	1
	b) Physiotherapist	1
	c) Occupational Therapist	1
	d) Physical Education	1
	OR	
	Adapted Physical Education	
33	a) Inertia	1
	b) Flexion	1
	c) Extension	1
	d) Saggital Plane	1

(SECTION E)

Q. NO.	ANSWER	MARKS
32	TEACHING CAREER COACHING CAREER FITNESS RELATED CAREER SPORTS MEDIA AND JOURNALISM SPORTS ADMINISTRATION SPORTS MANAGEMENT SPORTS MARKETING SPORTS PHOTOGRAPHY (Any Five)	5
33	Counsellor - Specialist member of Education team providing valuable assistance to Students. - Assist teaching staff with strategies for dealing with CWSN. - Developmental programmes related to Stress Management, Anger Management, conflict Management & Positive Thinking. - Helps CWSN to become productive member of the Society Occupational Therapist - Helps CWSN to perform Self-care skills like Eating, dressing, bathing and grooming i.e. activities related i.e. Fine motor Skills - Help CWSN to participate & interact with others - Also works on coordinative skills e.g. eye-hand coordination (hitting a ball)	2.5 2.5

	Physiotherapist ▪ Concerned with Gross Motor Skills and mobility of CWSN ▪ Assess and manage CWSN with movement disorder. ▪ Focus on problems related to Muscles, bones, circulation etc. ▪ Evaluates Movement & Function of body Physical Education Teacher ▪ Determine abilities of the CWSN ▪ Determine & implement methods for participation of CWSN in Games & Sports. ▪ Help in increasing fitness of CWSN ▪ Helps in developing feeling of Self-Esteem ▪ Organise various programmes for CWSN Speech Therapist ▪ Provides treatment, support and care for CWSN who have difficulties in communication. ▪ Help CWSN to communicate through Speech & Language. ▪ Helps CWSN having difficulty in producing sounds and uttering a word. ▪ Helps in dealing with fluency disorder like stoppages, repetitions or prolonged sounds in words.																					
34	AAHPERD: American Association for Health Physical Education Recreation & Dance. Body Composition: Triceps and subscapular skinfolds Low Back Hamstring Flexibility: Sit and Reach Abdominal Muscle Strength/Endurance: Bent knee sit-ups in one minute Cardiorespiratory Endurance : Mile run/walk or Nine-minute run/walk	5																				
	OR <table><tr><th>PROBLEM</th><th>MANAGEMENT</th></tr><tr><td>Physical Problems</td><td>Education of Motor Development</td></tr><tr><td>Mental Problems</td><td>Education of Psychology</td></tr><tr><td>Aggressive Behaviour</td><td>Moral Education</td></tr><tr><td>Lack of Stability</td><td>Vocational Guidance</td></tr><tr><td>Emotional Problems</td><td>Suitable Environment</td></tr><tr><td>Problem related to Gender</td><td>Sex Education</td></tr><tr><td>Problems of Self-Support</td><td>Suitable Environment</td></tr><tr><td>Feeling of Importance</td><td>Adequate Independence</td></tr><tr><td>Social Problems</td><td>Social Education</td></tr></table> (Any Five)	PROBLEM	MANAGEMENT	Physical Problems	Education of Motor Development	Mental Problems	Education of Psychology	Aggressive Behaviour	Moral Education	Lack of Stability	Vocational Guidance	Emotional Problems	Suitable Environment	Problem related to Gender	Sex Education	Problems of Self-Support	Suitable Environment	Feeling of Importance	Adequate Independence	Social Problems	Social Education	1+1+1+1+1
PROBLEM	MANAGEMENT																					
Physical Problems	Education of Motor Development																					
Mental Problems	Education of Psychology																					
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Lack of Stability	Vocational Guidance																					
Emotional Problems	Suitable Environment																					
Problem related to Gender	Sex Education																					
Problems of Self-Support	Suitable Environment																					
Feeling of Importance	Adequate Independence																					
Social Problems	Social Education																					

SAMPLE PAPER 4

BLUE PRINT

Sl.	Name of Chapter/Unit	Multiple Choice (01 Marks)	VSA (02 Marks)	SA (03 Marks)	Case Study Assertion/ reason (4 Marks)	LA (5 Marks)	Total Questions (Marks)
1	Changing Trends & Career in Physical Education	4(1)		1(3)	1(4)		6(11)
2	Olympism	1(1)	1(2)	1(3)			3(6)
3	Yoga	2(1)			1(4)	1 (5)	4(11)
4	Physical Education & Sports for CWSN	1(1)	1(2)	1(3)			3(6)
5	Physical Fitness, Health and Wellness	1(1)			1(4)	1 (5)	3(10)
6	Test, Measurement & Evaluation	1(1)	1(2)				2(3)
7	Fundamentals of Anatomy, Physiology in Sports	2(1)	1(2)	1(3)		1 (5)	5(12)
8	Fundamentals of Kinesiology and Biomechanics in Sports	3(1)		1(3)			4(6)
9	Psychology & Sports		1(2)	1(3)			3(6)
10	Training and Doping in Sports	3(1)	1(2)			1 (5)	5(10)
	Total Questions Note: Along with options	18 Questions	6 Questions	6 Question	3 Questions	4 Questions	37 Questions
	To be attempted	18 Questions (18 marks)	5 Questions (10 marks)	5 Question (15 marks)	3 Questions (12 marks)	3 Questions (15marks)	34 Questions (70 marks)

SAMPLE QUESTON PAPER

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) Section E consists of Question 34-37 carrying 5 marks each and is Long Answer types and should not exceed 200-300 words. Attempt any 3.

(SECTION A)

(18x1 Marks)

- Q1. The main objective of physical education is _____
- a) Physical development
 - b) Mental development
 - c) Social development
 - d) All the above
- Q2. M.P.Ed is referred as
- a) Master of physical education
 - b) Mentor of physical earning
 - c) Master of physique education
 - d) Member of physical education
- Q3. What is the role of physical education teacher?
- a) Teaching
 - b) Guideline
 - c) Engage
 - d) Physical Education and Psychomotor
- Q4. Which of the below is not an objective of physical education?
- a) Physical development
 - b) Neuro muscular development
 - c) Disease development
 - d) Emotional development

Q5. How many rings are there in the Olympics Symbol?

- a) 4
- b) 5
- c) 6
- d) 7

Q6. In Yoga the element 'Pranayama' is related with:

- a) Meditative exercises
- b) Breathing exercises
- c) Concentration exercises
- d) Slow stretching

Q7. Pranayama is the _____ limb of Yoga

- a) First
- b) Second
- c) Third
- d) Fourth

Q8. What is the role of physical education teacher for CWSN?

- a) Teaching them the importance of Physical Activity
- b) Guide them to become familiar with different sports
- c) To engage them with regular children in Physical Education & Sports
- d) All of the Above

Q9. Performing daily routine activities without any fatigue is:

- a) Mental wellness
- b) Dynamic ability
- c) Physical Fitness
- d) None of these

Q10. The flexibility that is increased with the help of someone or support is called

- a) Active Flexibility
- b) Passive Flexibility
- c) Both (a) and (b)
- d) All of the above

Q11. Which of the following is an organ of respiratory system?

- a) Lungs
- b) Bones
- c) Muscles
- d) Liver

Q12. Which of the following is a part of skeletal system?

- a) Lungs
- b) Bones
- c) Muscles

d) Liver

Q13. While doing Bicep curl, when the dumbbell is brought close to the biceps, the movement is known as:

- a) Flexion
- b) Extension
- c) Abduction
- d) Adduction

Q14. While doing Jumping jacks, when the arm moves away from the body, the movement is known as:

- a) Flexion
- b) Extension
- c) Abduction
- d) Adduction

Q15. The plane that divides the body into left and right half is known as:

- a) Frontal plane
- b) Sagittal Plane
- c) Transverse plane
- d) None of the above

Q16. Which of the following prohibited substance is used to increase Muscle mass and Strength?

- a) Anabolic Steroids
- b) Diuretics
- c) Stimulants
- d) Beta Blockers

Q17. Which of the following prohibited substance is used to Increase alertness and delay fatigue?

- a) Anabolic Steroids
- b) Diuretics
- c) Stimulants
- d) Beta Blockers

Q18. Which of the following are principles of Sports Training?

- a) Principle of Continuity
- b) Principle of Overload
- c) Principle of Individual Difference
- d) All of the above

(SECTION B)

(5x2 Marks)

Q19. In which year was the Olympic Ring created by Pierre de Coubertin? Mention the colour of the five interlocking rings.

Q20. What is the aim of Adaptive Physical Education?

Q21. Mention two importance of Anatomy & Physiology in Sports

Q22. Mention any four conditions which come under the preview of 'Doping'.

Q23. Define Psychology along with one importance this domain in the field of Physical education & Sports.

Q24. Briefly explain Test & Measurement.

(SECTION C)

(5x3 Marks)

Q25. What are wearable gears and sports equipment? Discuss.

Q26. Describe the Olympic Values.

Q27. How can a Speech therapist help CWSN children?

Q28. Write down the types of Synovial joints along with one examples of each joint.

Q29. Briefly explain the three types of Planes applied in the movement of body.

Q30. Write down Six adolescence problems.

(SECTION D)

(3x4 Marks)

Q31. Praveen is a good player. He wished to win in sports and make his country proud at the national and international level, but he does not get proper coaching and guidance. He takes it as a challenge and wants to pursue a career in sports so that he can provide coaching and proper guidance to such children. He wants to make them aware of the various schemes run by Government of India and encourages them to participate in these schemes so that they are able to make their country proud in the field of sports.

On the basis of the above situation, answer the following questions:

- a) State one National and one International competition in sports.
- b) Mention one career prospects in physical education?
- c) Mention one scheme run by govt of Indian for promotion of Sports?
- d) Mention the educational qualification requires to become a coach?

Q32. Yoga practices involve assuming and maintaining various postures and positions. This is the third limb of yoga called Asanas. While it is believed that over 84 lakh asanas exist, most people learn and practise about 70-75 asanas. Asanas are classified on the basis of their

specific application or their positions. Most Asanas serve to revitalise many body parts together and benefit many organ systems at the same time. Of course specific asanas to alleviate specific health conditions exist as well and today modern yoga helps in almost all lifestyle diseases.

- a) How many limbs of Yoga are there as per 'Astang Yoga'?
- b) Which one is the last limb of Yoga?

OR

Which one is the first limb of Yoga?

- c) Mention one application of Yoga
- d) What is Yoga?

Q33. In today's time, doing well at studies and scoring high marks in examination is the sole focus of many students and their parents. Many consider taking part in sports and physical activities as waste of time as this requires taking time off from their studies. But this is a misconception as a fit body is a must for a fit mind. Currently, wellness and fitness are part of a better lifestyle and this is gradually gaining importance. To do well one needs to feel well and sports contributes a lot to this. We now understand that both these are multidimensional and interlinked. Keeping this in mind, answer the questions below:

- a) How do we define physical fitness?
- b) What is the general misconception regarding participating in Physical activity?
- c) Fit _____ resides in FIT body.
- d) Interlink of which two domain has been discussed in the passage?

(SECTION E)

(3x5Marks)

Q34. Define yoga and write its importance.

Q35. Write in detail the components of physical fitness.

Q36. Briefly explain any five Functions of Circulatory system.

Q37. Explain any five principles of Sports Training.

**ANSWER KEY
(SECTION A)**

Q. NO.	ANSWER	MARKS
1	d) All the above	1
2	a) Master of physical education	1
3	d) Physical Education and Psychomotor	1
4	c) Disease development	1
5	b) 5	1
6	b) Breathing exercises	1
7	c) Third	1
8	d) All of the above	1
9	c) Physical Fitness	1
10	b) Passive Flexibility	1
11	a) Lungs	1
12	b) Bones	1
13	a) Flexion	1
14	c) Abduction	1
15	b) Sagittal Plane	1
16	a) Anabolic Steroids	1
17	c) Stimulant	1
18	d) All of the Above	1

(SECTION B)

Q. NO.	ANSWER	MARKS
19	1913	1
	blue, yellow, black, green and red	1
20	▪ To help or aid differentially able students to achieve physical, mental, emotional and social growth proportionate to their potential through special planned programme of regular physical education and recreational activities. ▪ To provide equal opportunity to the differentially abled children to participate in physical education programmes, safely and successfully, in a least restrictive environment.	1+1
21	• Helps in physical fitness. • Provides knowledge about body structure. • Helps in selection of games. • Protects from sports injuries. • Helps in the process of rehabilitation. • Helps in maintaining healthy body.	1+1

	Helps to know about individual differences (Any Two)	
22	- Presence of a prohibited substance or method - Use or attempt to use a prohibited substance or method - Refusing to submit sample collection after being notified - Failure to file athlete's whereabouts after being notified - Tampering with any part of the doping control process. - Possession of a prohibited substance or method. - Trafficking a prohibited substance or method - Administering or attempting to administer a prohibited substance or method to an athlete. (Any two)	1+1
23	Ross – "It is the interpretation & explanation of behaviour in mental or Physical terms" (or any other definition by author) - Enhances Physiological Capacities - Assist to learn Motor Skills - Aids in understanding Behaviour - Helps in controlling Emotions - Prepares an Athlete for competition - Supports emotional needs of Sports Persons (Any one)	1+1
24	A Test is a tool which is used to evaluate the quality, performance and reliability of a task completed by a person. Measurement is about collection of data and information about certain skills or levels of fitness of an individual by using tests and relevant techniques. Evaluation - It is the process of evaluation of the test conducted & measurements recorded.	1+1

(SECTION C)

Q. NO.	ANSWER	MARKS
25	Wearable Gears: Smart watches: Use of smart watches or Fitness trackers provides instant measurement of many internal body functions which has revolutionised the Fitness Industry	1.5+1.5

	Clothing: Advance clothing material has made participation in games and sports more comfortable and enhances the performance of many sports.	
26	Excellence : Encouraging people to be the best they can be. Friendship : It encourages to see sports as an instrument for mutual understanding between individuals and between people all over the world. Respect : For Self, Rules & Regulation, Opponents, Sports, Environment and other people.	1+1+1
27	- Provides treatment, support and care for CWSN who have difficulties in communication. - Help CWSN to communicate through Speech & Language. - Helps CWSN having difficulty in producing sounds and uttering a word. - Helps in dealing with fluency disorder like stoppages, repetitions or prolonged sounds in words. (Any Three)	1+1+1
28	Ball and socket joint – the rounded head of one bone sits within the cup of another, such as the hip joint or shoulder joint. Movement in all directions is allowed. Saddle joint – this permits movement back and forth and from side to side, but does not allow rotation, such as the joint at the base of the thumb. Hinge joint – the two bones open and close in one direction only (along one plane) like a door, such as the knee and elbow joints. Condylloid joint – this permits movement without rotation, such as in the jaw or finger joints. Pivot joint – one bone swivels around the ring formed by another bone, such as the joint between the first and second vertebrae in the neck. Gliding joint – or plane joint. Smooth surfaces slip over one another, allowing limited movement, such as the wrist joints	0.5X6
29	Saggital Plane- Divides the body into left and right halve Frontal Plane-Divides the body into front and rear halve Transverse / Horizontal Plane- Divides the body into top & Bottom halve	1+1+1
30	- Physical Problems - Mental Problems - Aggressive Behaviour - Lack of Stability - Emotional Problems - Problem related to Gender	1+1+1

	▪ Problems of Self-Support ▪ Feeling of Importance ▪ Social Problems (Any Three)	
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(SECTION D)

Q. NO.	ANSWER	MARKS
31	a) Any National & International Competition b) Teacher, Coach, Player, Sports Photographer, Sports Journalists etc c) Khelo India d) Coaching Diploma	05+0.5 1 1 1
32	a) 8 b) Samadhi OR Yam c) Alleviate specific health conditions d) Maintaining various postures and positions	1 1 1 1
33	a) Ability to do daily routine task without Fatigue b) Sports and physical activities as waste of time as this requires taking time off from their studies c) Mind d) Physical Activity & Wellness	1 1 1 1

(SECTION E)

Q. NO.	ANSWER	MARKS
34	• Yoga- 'Joining of individual self with Almighty' Importance of Yoga (Any four) ▪ Physical Purity: In mean cleanliness of internal body and in yoga we are able to purify our internal organs with different yogic / <i>shuddhi kriyas</i>. ▪ Postural Deformities: Good Posture is imp for leading a good physical appearance and it can be maintained by yoga. If we do Yoga daily, we can prevent our body from various postural Deformities. ▪ Prevention from Diseases: Through due regularity of yoga we can prevent from various disease fighting Resistance. ▪ Enhancing Flexibility: If we do yoga a sans daily so we can enhance our flexibility which are very imp for leading a healthy life. It prevent us from injuries and sports and body movement become quick.	1 1+1+1+1

	▪ Mental Relaxation: Yoga is helpful for reducing mental stress everybody wants to free from anger, anxiety and emotional disturbances which is possible by the regular practice of yoga. ▪ Reduce Obesity: Through the yogic exercises we can reduce obesity and make our body fit.	
35	Physical Fitness ▪ <i>Skill related Physical Fitness</i> ▪ Speed ▪ Strength ▪ Endurance ▪ Flexibility ▪ Coordination ▪ <i>Health Related Physical Fitness</i> ▪ Cardiovascular Endurance ▪ Muscular Endurance ▪ Strength ▪ Flexibility ▪ Body Composition	2.5 2.5
36	● Circulates OXYGEN and removes Carbon Dioxide. ● Provides cells with NUTRIENTS. ● Removes the waste products of metabolism to the excretory organs for disposal. ● Protects the body against disease and infection. ● Clotting stops bleeding after injury	5
37	▪ Principle of Continuity ▪ Principle of Overload ▪ Principle of Individual Difference ▪ Principle of General and Specific Preparation ▪ The principle of Progression ▪ The Principle of Specificity ▪ The principle of Active involvement ▪ The principle of Variety (Any Five)	1+1+1+1+1

SAMPLE PAPER 5

BLUE PRINT

Sl.	Name of Chapter/Unit	Multiple Choice (01 Marks)	VSA (02 Marks)	SA (03 Marks)	Case Study Assertion/ reason (4 Marks)	LA (5 Marks)	Total Questions (Marks)
1	Changing Trends & Career in Physical Education	4(1)		1(3)	1(4)		6(11)
2	Olympism	1(1)	1(2)	1(3)			3(6)
3	Yoga	2(1)			1(4)	1 (5)	4(11)
4	Physical Education & Sports for CWSN	1(1)	1(2)	1(3)			3(6)
5	Physical Fitness, Health and Wellness	1(1)			1(4)	1 (5)	3(10)
6	Test, Measurement & Evaluation	1(1)	1(2)				2(3)
7	Fundamentals of Anatomy, Physiology in Sports	2(1)	1(2)	1(3)		1 (5)	5(12)
8	Fundamentals of Kinesiology and Biomechanics in Sports	3(1)		1(3)			4(6)
9	Psychology & Sports		1(2)	1(3)			3(6)
10	Training and Doping in Sports	3(1)	1(2)			1 (5)	5(10)
	Total Questions Note: Along with options	18 Questions	6 Questions	6 Question	3 Questions	4 Questions	37 Questions
	To be attempted	18 Questions (18 marks)	5 Questions (10 marks)	5 Question (15 marks)	3 Questions (12 marks)	3 Questions (15marks)	34 Questions (70 marks)

SAMPLE QUESTION PAPER

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) Section 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)

(18x1 Marks)

Q1. In Physical education the word "Physical " is referred as _____

- a) Physical Education
- b) Education
- c) Body actions
- d) Emotional development

Q2. B.P.Ed is referred as

- a) Bachelor of physical education
- b) Business of Physical Education
- c) Biomechanics of physics education
- d) Behavior of physical education

Q3. FIT Indian Mission was launched in which year?

- a) 2018
- b) 2019
- c) 2020
- d) 2021

Q4. Which of the below course/qualification can make your career in physical education.

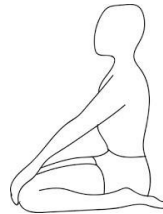
- a) B.P.ED
- b) B.A(History)
- c) B.COM
- d) M.A (Political Science)

Q5. The first Ancient Olympic is believed to have been played in:

- a) 776BC
- b) 394 AD
- c) 1898
- d) 1894

Q6. Identify the asana in the below image

- a) Matsya Asana
- b) Paschimottan Asana
- c) Tada Asana
- d) Vajra Asana



Q7. Kapalbhathi improves the functioning of the:

- a) Lungs
- b) Knees
- c) Joints
- d) Liver

Q8. What is role of speech Therapist?

- a) Identification
- b) Assessment
- c) Communication
- d) Supporting good practice across universal

Q9. Which one of these is a Traditional Sport?

- a) Cricket
- b) Billiards
- c) Golf
- d) Kabaddi

Q10. Match the following

- | | |
|----------------|---|
| a. Endurance | (i) The capacity of the muscles to overcome resistance |
| b. Speed | (ii) The ability to continue an activity for a longer duration
Without fatigue |
| c. Flexibility | (iii) Covering the maximum distance in minimum time |
| d. Strength | (iv) Maximum extension of the joints |

- 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

Q11. Which of the following is an organ of circulatory system?

- a) Lungs
- b) Bones
- c) Heart
- d) Liver

Q12. Which of the following is a part of respiratory system?

- a) Diaphragm
- b) Bones
- c) Muscles
- d) Liver

Q13. While doing Bicep curl, when the dumbbell is brought away from the biceps, the movement is known as:

- a) Flexion
- b) Extension
- c) Abduction
- d) Adduction

Q14. While doing Jumping jacks, when the arm moves close to the body, the movement is known as:

- a) Flexion
- b) Extension
- c) Abduction
- d) Adduction

Q15. The plane that divides the body into front and rear half is known as:

- a) Transverse plane
- b) Saggital Plane
- c) Verticial plane
- d) None of the above

Q16. Which of the following prohibited substance is used to Reduce weight Quickly?

- a) Anabolic Steroids
- b) Diuretics
- c) Stimulants
- d) Beta Blockers

Q17. Which of the following prohibited substance is used to slow heart rate and steady body movements?

- a) Anabolic Steroids
- b) Diuretics
- c) Stimulants
- d) Beta Blockers

Q18. Which of the following are principles of Sports Training?

- a) The Principle of Specificity
- b) The principle of Active involvement
- c) The principle of Variety
- d) All of the above

(SECTION B)

(5x2 Marks)

- Q19. For the first time Olympic Flags was hoisted in which year? What does the interlocked Rings signify?
- Q20. Mention two objectives of Adaptive Physical Education?
- Q21. Mention any two type of Joint along with its scientific names.
- Q22. Mention one effect and one complications of using 'Anabolic Steroids'.
- Q23. What do you understand by 'Team Cohesion'?
- Q24. Briefly explain Measurement & Evaluation.

(SECTION C)

(5x3 Marks)

- Q25. Briefly explain any three career options in Physical Education.
- Q26. Describe the Olympic Motto.
- Q27. How can a Physiotherapist help CWSN children?
- Q28. Name three organs associated with respiratory system along with its function.
- Q29. Mention three types of body movement along with one example of each.
- Q30. Write down Six adolescence problems

(SECTION D)

(3x4 Marks)

Q31. Most students in a school did not think that PE has career opportunities. One day an international cricket star attended the school Annual Day function as chief guest. He spoke about his struggles and how he was transformed by an active career that resulted from taking physical education subject in school seriously. He also talked about starting his own coaching academy. He explained as to how there were a lot of good career options available in PE. This gave students a clear understanding of the various career options available in PE which only aroused their interest in the subject and most of them started taking PE seriously.

- a) Name one career opportunity in Physical Education
- b) What is the minimum educational qualification is required to teach in Schools?
- c) Is Sports Journalism considered as a Career option in Physical Education?
- d) If you have a good Photographic skill. Can you think of an career in Physical Education.

Q32. In many cultures, yoga is now a way of life. There are eight elements to modern yoga and each is focused on a particular facet of modern-day life. While an average person can perform basic actions in yoga regularly to help achieve better health, experts can do hundreds

of different postures. Modern lifestyle diseases can be alleviated with regular practice of yoga and there is worldwide understanding of and enthusiasm for yoga. The world now celebrates International Day of Yoga and a lot of focus is on the practice of yoga at all levels in educational institutions as well.

- a) What is the seventh element yoga?
- b) When is the international yoga day celebrated?
- c) What is Yoga?
- d) Mention one benefit of practicing Yoga that is mentioned in the passage.

Q33. Arun was training to take part in the 10000 m run for the national school games to be held six months later. His impression was that if he could attain an ideal weight, he would do well at the competition but he was unable to do so at the school trials. He then consulted his school PE instructor who explained to him that physical fitness was multi-factorial and not merely being having at ideal weight. Over the next three months, while working with the coach, he paid attention to all the five components of physical fitness with special focus on Endurance. The coach also focused on regular stretching and weight training in between. Thanks to his coach's understanding of fitness, he won the race on the final day.

- a) Which component of Physical Fitness was mainly required by Arun?
- b) The Coach emphasized stretching for the improvement of which component?
- c) Weight training is done for improvement of which component?
- d) Mention one athletic event where Speed plays an important role.

(SECTION E)

(3x5Marks)

Q34. Briefly explain the eight limbs of 'Astang Yoga'.

Q35. Write in detail the components of physical Wellness.

Q36. Briefly explain any five Functions of Respiratory system. Draw the structure of respiratory system.

Q37. Explain any concept of Blood Doping and mention the types of Blood Doping.

ANSWER KEY

(SECTION A)

Q. NO.	ANSWER	MARKS
1	c) Body Actions	1
2	a) Bachelor of Physical Education	1
3	b) 2019	1
4	a) B.P.Ed	1
5	a) 776 BC	1
6	d) Vajrasana	1
7	a) Lungs	1
8	d) Supporting good practice across universal	1
9	d) Kabaddi	1
10	c) a–ii, b–iii, c–iv, d–i	1
11	c) Heart	1
12	a) Diaphragm	1
13	b) Extention	1
14	d) Adduction	1
15	c) Frontal Plane	1
16	b) Diuretics	1
17	d) Beta Blockers	1
18	d) All of the above	1

(SECTION B)

Q. NO.	ANSWER	MARKS
19	First time it was hoisted in the 1920 Olympic Games in Antwerp. The rings are five interlocking rings, coloured blue, yellow, black, green and red on a white field, known as the "Olympic rings". He appears to have intended the rings to represent the five continents: Europe, Africa, Asia, the Americas, and Oceania.	1 1
20	Ensure service to meet Special Needs Develop Motor Skills Enhance Self-Esteem & Self- Image Ensure participation in Physical Education Programmes Improve Physical Fitness Motivate Students to Protect Themselves Promote Sportsman Qualities Develop knowledge of Good Mechanics	1+1

	Improve Social Adjustments (Any Two)	
21	Immovable Joints - Synarthrosis Slightly Movable Joints - Amphiarthrosis Freely Movable Joints - Diarthrosis (Any Two)	1+1
22	Effect: Increase Muscle Mass & Strength Complication: Heart & Liver Disease	1+1
23	Team cohesion happens when a team remains united while working to achieve a common goal.	1+1
24	Measurement is about collection of data and information about certain skills or levels of fitness of an individual by using tests and relevant techniques. Evaluation- It is the process of evaluation of the test conducted & measurements recorded.	1+1

(SECTION C)

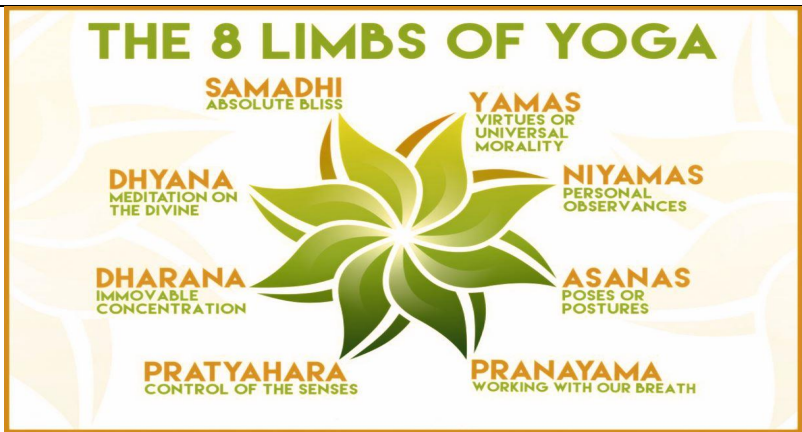
Q. NO.	ANSWER	MARKS
25	Teacher, Coach, Player, Sports Photographer, Sports Journalists, etc. (Any Three)	1+1+1
26	The Olympic Motto is inscribed under the emblem which consists of three Latin words – CITIUS- Run Faster ALTIUS- Jump Higher FORTIUS- Throw Stronger	1+1+1
27	Physiotherapist: Concerned with Gross Motor Skills and mobility of CWSN Assess and manage CWSN with movement disorder. Focus on problems related to Muscles, bones, circulation etc. Evaluates Movement & Function of body	1+1+1
28	Lungs- To Intake Oxygen and excel out Carbon di oxide Diaphragm- To assist in expansion and contraction of Lungs Wind Pipe- To channelise the flow of air to lungs	1+1+1
29	Flexion: When two bones of a joint comes close to each other Extension: When two bones of a joint moves away from each other Abduction: When the bones moves away from the body Adduction: When the bones moves closer to the body	1+1+1

30	Physical Problems Mental Problems Aggressive Behaviour Lack of Stability Emotional Problems Problem related to Gender Problems of Self-Support Feeling of Importance Social Problems (Any six)	0.5x6
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(SECTION D)

Q. NO.	ANSWER	MARKS
31	a) Teacher, Coach, Player, Sports Photographer, Sports Journalists, etc. b) B.P.Ed c) Yes d) Sports Phototgapher	1 1 1 1
32	a) Dhyan b) 21 st June c) yoga is now a way of life d) Modern lifestyle diseases can be alleviated with regular practice of yoga	1 1 1 1
33	a) Endurance b) Flexibility c) Strength d) 100m, 200m etc	1 1 1 1

(SECTION E)

Q. NO.	ANSWER	MARKS
34		5

35	Wellness ▪ Physical Wellbeing ▪ Mental Wellbeing ▪ Social Wellbeing ▪ Emotional Wellbeing ▪ Spiritual Wellbeing	1+1+1+1+1
36	Gas exchange, acid-base balance, phonation, pulmonary defence and metabolism, and the handling of bioactive materials.	1+1+1+1+1
37	Blood Doing The process of artificially increasing the RBC and in turn increased Oxygen carrying capacity of the blood Autologous Blood doping • Athlete's blood is taken out few weeks before competition • Injected back into the body before the competition Homologous Blood doping • Someone else blood is injected into the body before the competition	1+2+2



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