Maximum Marks: 70   **Time: 3:00Hrs.**
_____
1. **The question paper consists of 30 questions and all are compulsory**
2. **Question 1-12 carry 01 mark each and are Multiple Choice Questions**
3. **Questions 13-16carry 02 marks each and shall not exceed 40-60 words**
4. **Questions 17-26 carry 03 marks each and shall not exceed 80 -100 words**
5. **Questions 27 - 30 carry 05 marks each and shall notexceed 150-200words**

Q1. Interval Training is used for developing
   a. Flexibility
   b. Agility
   c. Endurance
   d. Speed
              OR
   Resistance ability against fatigue is called
   a. Strength
   b. Speed
   c. Endurance
   d. Agility

Q2. Acceleration of an object will increase as the net force increases depending on its
   a. Density
   b. Mass
   c. Shape
   d. Volume

Q3. Physiological factor determining speed:
   a. Explosive strength
   b. Body weight
   c. Muscle composition
   d. Both a) & c)

              OR
   _____ bone comes out of socket in hip dislocation.
   a. Femur
   b. Humerus
   c. Tibia
   d. Fibula

Q4. The word Meso in Mesomorph is related to
   a. Fat
   b. Lean
   c. Muscular
   d. None of the above

Q5. . A pattern of disobedience can be observed in children suffering from
   a. ODD
   b. ADHD
   c. OCD
   d. SPD

Q6. What is Bye?
   a. It's a method of drawing fixture.
   b. Point system for team games.
   c. Advantage given to a team to not to play in initial round.
   d. Placing of teams according to previous performance.

Q7. Dislocation is related to
   a. Bone injury
   b. Skin Injury
   c. Muscular Injury
   d. Joint injury
            OR
   Fracture where a part of broken bone enters another bone
   a. Simple fracture
   b. Compound fracture
   c. Impacted fracture
   d. Green stick fracture

Q8. Ability to achieve maximum speed from stationary position is called_____?
   a. Speed endurance
   b. Acceleration ability
   c. Locomotors ability
   d. Movement speed

Q9. What is the value placed for Male in VO_2 MAX formula?
   a. 1
   b. 0
   c. 0.85
   d. 0.72

Q 10. One of the possible causes for Obesity could be?

    a. Heredity
    b. Excessive eating
    c. Fast metabolism
    d. Both a) & b)

Q 11. Given below are the two statements labeled Assertion (A) andReason (R).

    A. Assertion (A): Planning is the foremost function in sports.
    B. Reason (R): Planning gives a view of future course of action

In the context of 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, but (R) is not the correct explanation of (A).
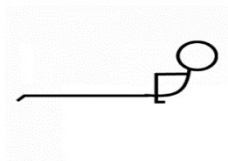   c. (A) is true, but (R) is false.
    d. (A) is false, but (R) is true

Q 12. Match List – I with List – II and select the correct answer from the code given below:

LIST - I		LIST - II	
Vitamin		**Disease**	
i	Vitamin A	i	Pyorrhea
ii	Vitamin B	ii	Rickets
iii	Vitamin C	iii	Beriberi
iv	Vitamin D	Iv	Night Blindness

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

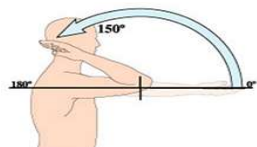Q 13. Identify the below given Asanas and write the names

a.

_____

b.

_____
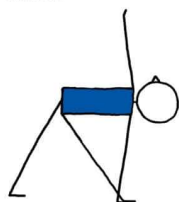
c.

_____

d.

_____

Q 14.Identify the human movement and give their names

a.

150°
180°   0°

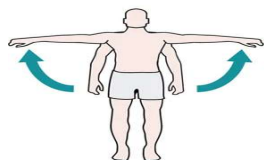_____
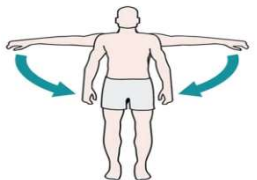
b.

150°
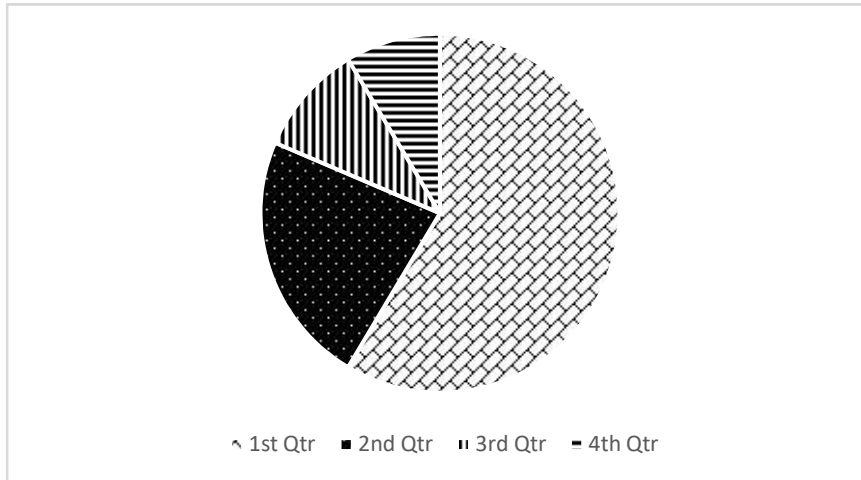180°   0°

_____
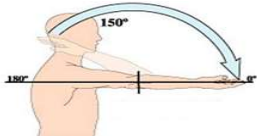
c.

_____

d.

_____

Q 15. Design a free hand four exercises programme for curing Round Shoulders.

Q 16. Differentiate between 'ODD' and'SPD' on the basis of their symptoms (any two)
OR
Differentiate between 'ADHD' and'ASD' on the basis of their symptoms (any two)

Q 17. Below given is the BMI data of a school's health check-up

^ 1st Qtr   ■ 2nd Qtr   ꁁ 3rd Qtr   ▬ 4th Qtr

18.5-24.9   <18.5   25-29.9   30-34.9

On the basis of the above data; answer the following questions:

A. In which category does the major student population falls into?

   a. Obese
   b. Normal weight
   c. Under weight
   d. Over weight

B. The school has to develop an activity based program to decrease the number of:

   a   b   c   d

C. Which category is related to underweight?

a	b	c	d

Q 18. Raman is a student of class XII and is suffering from Obesity. During a recent medical check-up at school he was advised to practice yogasana (as given in the syllabus) and participate in sports activities for curing it.

Based on this case answer the following questions:

1. The yoga instructor at the school has asked Raman to perform

   a. Bhujangasana
   b. Pawanmuktasana
   c. Vajrasana
   d. Chakrasana

2. The BMI index for an Obese person is
   a. <18.5
   b. 18.5-24.9
   c. >30
   d. >25

3   Due to the Obesity; Raman is also suffering from knock knees for which he is advised to

   a. Walk on inner edge of foot
   b. Walk on outer edge of foot
   c. Walk on heels
   d. Walk on toes

Q 19. Compare any three Micro minerals on the basis of their sources and benefits.
      OR
Compare any three Fat soluble vitamins on the basis of their sources and benefits.

Q 20. Create a flow chart for common Sports Injuries while enlisting the sub parts.

Q 21. Name the tests used to calculate cardio vascular fitness. Write the formula for short term and long term fitness index and calculate long term fitness index if duration of exercise is 300sec and sum of heart rate is 230.
OR
List the components of Motor fitness test. Explain any two of them in detail.

Q 22. State Newton's laws of motion and explain their implication in Sports of your choice.

Q 23. Explain any three types of coordinative abilities.

Q 24. Plan a strategy for making physical activity accessible for Children with Special Need.

Q 25. There are 11 teams participating in a Knock-out Tournament. Explain the procedureto calculate number of 'Byes' and also with the help of diagram allot 'Byes'.

Q 26. "Extrinsic motivation sometimes may kill intrinsic motivation". Justify.

OR

Explain aggression in Sports. Discuss the role of aggression in context to its types.

Q 27. Enlist the Big Five TheoryPersonalities and describe any three of them while comparing their characteristics.

Q 28. Define spinal curvature deformities and list their causes and precautions.

OR

Create a table and explain: Different Stages of Growth and Development; Characteristics of Development and Exercise Guidelines.

Q 29. Which are the Asanaspracticed for preventing Hypertension? Write in detail about any two of them.
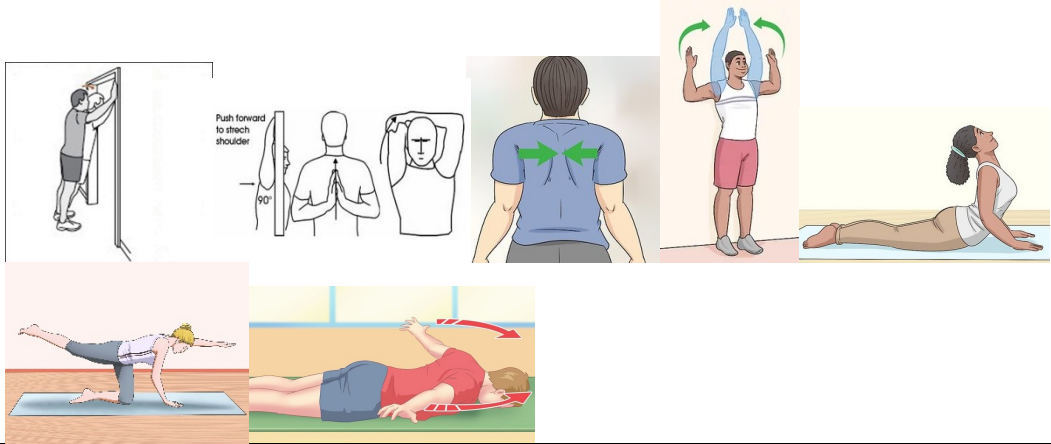
OR

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

Q 30. Rudra is working on a project to collect data for assessing Physical Fitness amongst Senior Citizens at his residential complex. He plans to administer test for assessing Lower Body Flexibility; Upper Body Flexibility and Lower Body Strength.List the test(s) he should conduct and also explain in detail the procedure of its administration along with scoringsystem.

Q.NO.	ANSWER	MARKS DISTRIBUTION
1.	c. Endurance	1
	c. Endurance	
2.	b. mass	1
3.	d. Both a & c	1
	a. Femur	
4.	c. muscular	1
5.	b. ODD	1
6.	c. Advantage given to a team to not play in initial round.	1
7.	d. Joint injury	1
	c. Impacted fracture	
8.	b. Acceleration ability	1
9.	a. 1	1
10.	d. Both a & b	1
11.	a. Both (A) and (R) are true and (R) is the correct explanation of (A).	1
12.	c. 4 3 1 2	1
13.	a. Bhujangasana b. Trikonasana c.Paschimmottanasana d. Ardhmatsyendrasana	0.5X4=2
14.	a. Flexion b. Extension c. Abduction d. Adduction	0.5X4=2
15.	**Free hand Exercises to cure round shoulders:** 	0.5X4=2
16.	**Oppositional Defiant Disorder:(ANY TWO)** 1. Disruptive behavior 2. Pattern of disobedience 3. Rebellious 4. Anger outburst 5. Deliberately annoy 6. Refuse to obey	**Sensory processing disorder: (ANY TWO)** 1. Difficulty in responding. 2. Neurological jam 3. Reading is difficult 4. Problem in senses 5. Difficulty in motor responses.	0.5X4=2

	Attention deficit hyperactivity disorder (ANY TWO) 1. Anxiety attack 2. Impulsive 3. Mood swing 4. Easily distracted 5. Talk excessively	**Autism spectrum disorder.(ANY TWO)** 1.Avoid eye contact 2.Prefer to remain alone 3.Can't express felling 4.Repititive behavior	
17.	A. b normal weight B. C.		1+1+1=3
18.	c. Vajrasana c.>30 b.Walk on outer edge of foot		1+1+1=3
19.	**Micro minerals: (ANY THREE)** 1 **Iodine**: harmones,growth,giotre, mental retardation (sea foods,salt,fish) 2.**Iron**:Anemia,(liver, dry fruits,banana) 3.**Chromium**:Insuline,diabeties(soyabean,black gram,barley) 4. **Copper: hemoglobin** (egg,pulses, green veg.) **Fat soluble vitamins:(ANY THREE)** 1.**Vit A**: Night blindness,Xerophthalmia (papaya,spinach,milk,curd,carrot) 2.**Vit D**:Teeth,bones,calcium (sunlight,milk,egg yolk) 3.**Vit E:** Fertility,Adreline gland,skin (fresh fruits,butter,cotton seeds) 4.**Vit K**: Clotting of blood, anemia (cauliflower,cabbage,spinach)		1+1+1=3
20.	**Common sports injuries** **Soft tissue injuries** a) Contusion b) Bruises c) Sprain d) Strain e) Abrasion	**Bone injuries** a)simple fracture b) complicated fracture c) impacted fracture d) green stick fracture e) compound fracture f) comminuted fracture	**Joint injuries** a) shoulder dislocation b)hip dislocation c) lower jaw dislocation (ANY TWO from each)	1+1+1=3
21.	**1. Rockport Walk Test (One MileTest)** The formula used to calculate VO$_2$ max is: 132.853-(0.0769×weight)-(0.3877×age)+(6.315xgender)-(3.2649×time)-(0.1565×HeartRate) D. **Harvard StepTest** TheHarvardSteptestisatestofaerobicfitness,developedbyBrouhaandhisassociates(1943) intheHarvardFatigueLaboratoriesduringWWIIforcollegestudents.Itwasaverysimpleandpromising field test for measuring cardiovascular endurance of human beings by using easily available and inexpensiveequipment. **FitnessIndex(shortform)**= 100*test duration(seconds)/5.5*pulse count (1-1.5min) **Fitness Index (long form)-** (100 × test duration in seconds)/(2 × Sum of hearts beats in Pulse 1, 2 and 3) **Ans=65.2**		1+1+1=3

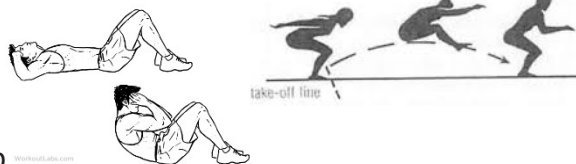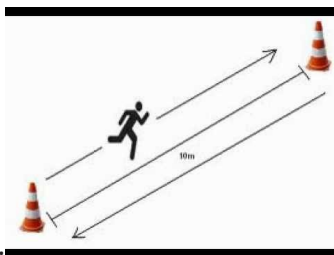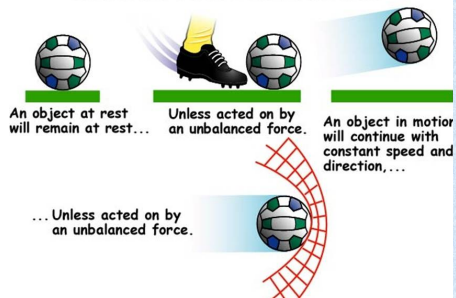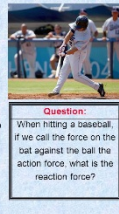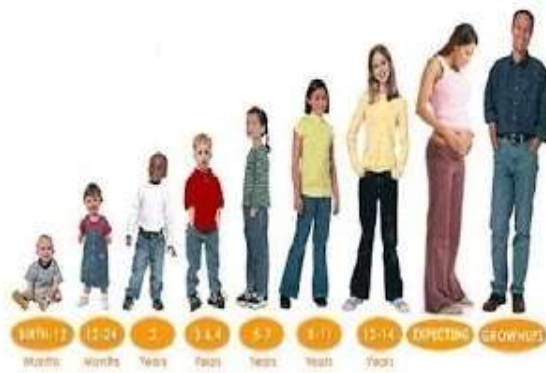|		
	MOTOR FITNESS TEST (ANY TWO WITH FIGURE) 1. 50 M Standing Start 2. 600 M Run/Walk 3. Sit &Reach, 4. Partial Curl Up 5. Push Ups (Boys), Modified Push-Ups (Girls) 6. **Standing Broad Jump** 7. **Agiity-4×10 M Shuttle Run.**	1+1+1=3
22.	**Newton's First Law of Motion** An object at rest will remain at rest... Unless acted on by an unbalanced force. An object in motion will continue with constant speed and direction,... ...Unless acted on by an unbalanced force. **Newton's 2nd Law of Motion (cont.)** • **Sports Example:** – When hitting a tennis ball, the force of the racquet swing causes the ball to accelerate in the direction of the swing force. – A heavier ball is slower than a lighter one. **Newton's Third Law - Reaction** "For every action there is an equal and opposite reaction" • For every force between two objects there is always an equal but oppositely directed force. • The normal reaction force is the support force exerted upon an object which is in contact with another stable object. Normal reaction force Weight **Question:** When hitting a baseball, if we call the force on the bat against the ball the action force, what is the reaction force?	1+1+1=3
23.	**Types of CoordinativeAbilities (ANY THREE)** 1. **Orientationability:**Itisanabilitytorealizepositionofthebodyoritspartsinspacean dtime. 2. **Couplingability:**Couplingabilityistheabilitytocombinethemovementsofdifferen tbody partsforperformingperfectsportsmovements 3. **Reactionability:**Itistheabilitytoreactquicklyandeffectivelytoasignal 4. **Balanceability**:Balanceabilityistheabilitytokeepbodyanditspartsinarelativelyst	1+1+1=3

	able positioninbothstaticanddynamicconditions 5. **Rhythmability**Itistheabilitytounderstandtherhythmofmovementandtodothe movement with the required rhythm 6. **Adaptationability:**Itistheabilitytoadjustorbringaboutaneffectivechangeinthe movement onthebasisofchangesoranticipatedchangesinthesituation 7. **Differentiationability:**Theabilitytoattainahighdegreeofaccuracyandeconomyof separate bodymovementsandmovementphases	
24.	**Stratergies to make physical activities accessible for CWSN: (ANY SIX)** 1. Medical check up 2. Interest of child to be considered 3. Modified Equipment to be used 4. Provide specific environment 5. Variety of instruction 6. Modified rules 7. Previous knowledge to be considered.	0.5X 6=3

25.	Number of team -11
	No of Bye= 2^n- No of team
	     = 2^4- 11
	     = 16-11
	     = 5
	
	           IR
	     1 2B
	     2
	     3
	Uppar Half 4
	     5
	     6 4B
	     7 3B
	     8
	Lower Half 9
	     10 5B
	     11 1B
	1. First Bye is given to last team of lower half.
	2. Second bye is given to first team of upper half
	3. Third bye is given to first team of lower half
	4. Fourth bye is given to last team of upper half
		1+2=3

26.	Motivation "Drive to strive"
	1. Intrinsic motivation:
	    a. learning
	    b. Social contact
	    c. Curiosity
	    d. Respect
	2. Extrinsic motivation:
	    a) Salary
	    b) Awards
	    c) Promotion
		1+1+1=3

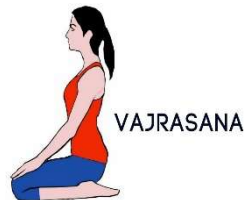|				
	d) Appreciation			
	Hostile Agression: (Reactive aggression) 1. To cause harm 2. Physical or psychological 3. Eg: Delibrate bouncer in cricket	**Instrumental Aggression** (channelled aggression) 1. To win comp. 2. Without actual anger 3. Eg:Aggressive tackle in football	**Assertive Behaviour** 1. Legitimate force 2. Psychological discomfort 3. Eg: sledging	
27.				1X5=5
28.				1+1+3=5

Different stages of a human life

- Infancy (1-2 years)
- Toddler (2-4 years)
- Early school age (5-7 years)
- Middle school age (8-12 years)
- Early adolescence (13-17 years)
- Later adolescence (18-25 years)
- Early adulthood (25-30 years)
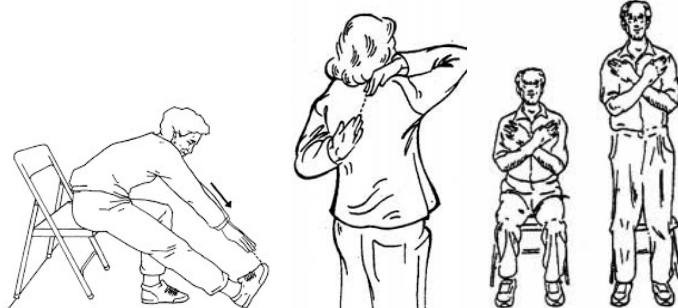- Middle adulthood (30-50 years)
- Later adulthood (50 and up)

29	**HYPERTENSION (ANY TWO ASANAS)**	1+2+2=5

Tadasana

VAJRASANA

PAWANMUKTASANA

BHUJANGASANA
BEST YOGA ASANA

SHAVASANA
MEDITATION YOGA

ASTHMA (ANY TWO ASANAS)

BHUJANGASANA
BEST YOGA ASANA

PASCHIMOTTANASANA
Seated Forward Bend Yoga Pose

MATSYASANA
Fish Pose

30	**Rikli and Jones Senior citizen fitness test:**	1+2+2=5
	1. **Chair stand test**	
	2. **Chair sit and reach test**	
	3. **Back scratch test**	