

## OSDAV Public School, Kaithal Half Yearly Exam. 2024-25

Class: XII

**Subject: Physical Education** 

M.M.: 70

Set A

#### **General Instructions:-**

Time: 3 hrs.

- I. The question paper consists of 5 sections and 34 Questions.
- II. Section A consists of questions 1-18 carrying 1 mark each and is a multiple choice question. All questions are compulsory.
- III. Sections B consist of questions 19-21 carrying 4 marks each and are case study questions.
- IV. Sections C consist of questions 22-26 carrying 2 marks each and are very short answer type and should not exceed 60-90 words.
- V. Sections D consist of questions 27-31 carrying 3 marks each and are short answer type and should not exceed 100-150 words.
- VI. Section E consists of Question 32-34 carrying 5 marks each and are long answer type and should not exceed 200-300 words.

Q.No.	Questions	Marks
	Section -A	
1.	Identify the below given asana	1
	<ul> <li>a) Saral matsyasana</li> <li>b) Matsyasana</li> <li>c) Ardha- chakrasana</li> <li>d) Supta vajrasana</li> </ul>	
2.	Given below are two statements, one labelled as Assertion [A] and the other as Reason(R).	1
	Assertion (A): Bulimia is an abnormal eating disorder characterised by hinge eating followed by purging behaviour.  Reason (R): Bulimia is Considered abnormal because it leads to severe physical and mental health consequences due to the cycle of binge eating and purging.  In the context of the above two statements, which one of the following is correct?	
	a) Buth (A) and (R) are true, and (R) is the correct explanation of (A)	
	b) (Buth (A) and (R) are true, but (R) is not the correct explanation of (A)	
	c) (A) is true, but (R) is false	
	d) (A) is false, but (R) is true.	

3.	A healthy normal menstrual period is called	1
	a) Menorrhagia b) Menarche c) Eumenorrhea d) Amenorrhea	
4.	'Sway Back' is also known as	1
	a) Lordosis b) Kyphosis c) Scoliosis d)Round Shoulders	
5.	Psychological benefits of women participation in sports includes:	1
] 5.	a) Cooperation b) Emotion Control c) Physical Fitness d) Communication	1
	, , ,	1
6.	Polyurea is associated with:	1
	a) excessive sweat b) less urination c) excessive saliva d) excessive urination	
7.	Rule used by special Olympics to achieve the intentions of fairness is referred as:	1
	a) Maximum Effort Rule b) Honest Effort Rule	
	c) )Best Effort Rule d)Minimum Effort Rule	
8.	Grouping process associated with Special Olympics is referred to as	1
	(a) divisioning (b) classification (c) grouping (d) categorization	
9.	Which of the following will be an inclusive school:	1
	a)mainstream school with separate classrooms for different abilities	
	(b)mainstream school with same classroom with different abilities	
	(c)separate school for mainstream and for children with disability	
	(d)all of the above	
10.	Match the following:	1
	(a)World's largest sports organisation for children	
	and adult with intellectual and physical disabilities (i)Eunice Kennedy Shriver	
	(b)Camp Shriver for children with disabilities (ii)Special Olympics	
	(c)First special olympic competition (iii)1988	
	(d)Special Olympics came to India (iv) Chicago	
	a)A-iii, B-iv, C-i, D-ii b)A-iv, B-ii, C-iii, D-i	
	c)A-i, B-iii, C-ii, D-iv d)A-ii, B-i, C-iv, D-iii	
11.	A balanced diet has proteins, fats carbohydrate in a ratio of:	1
	(a) 1:2:4 (b)2:1:3 (c) 1:2:3 (d) 1:1:4	
12.	Fats Contain carbon, Hydrogen, Oxygen in a percentage of, and	1
	respectively.	
	(a)50,40,10 (b)60,32,8 (c)70,18,12 (d)76,12,12	
13.	Which of the following are water soluble vitamins?	1
	(b) Vitamin D&K (b) Vitamin B&C (c) Vitamin A&E (d) Vitamin A&C	
14.	Match List 1 with List 2 and select the correct answer from the code given below:	1

	List 1	List 2		
		202		
	i Vitamin A	1 Pyorrhea		
		- V		
	ii Vitamin B	2 Rickets		
	iii Vitamin C	3 Beriberi	3	
	iv Vitamin D	4 Night Blindnes	55	
		Codes	3	
	l iii	III	iv	
	a 2 4	3	1	
	<b>b</b> 1 2	4	3	
	c 4 3	1	2	
	d 3 1	2	4	
15.	If you want to measur (a)8 Foot Up and Go (c)Back Scratch Test	Test (b) 6 M	te of a senior citizen which test would you use Minute Walk Test Stand Test	1
16			orrect answer from the code given below:	1
	List 1	List 2		
	1	Lower Body Flexibilty		
	-	Lower body Hexibity		
	11 2	Upper Body Strength		
	iii 3	Abdominal Strength and Endurance		
	iv 17 17 4	Speed		
	Codes    i   ii   iii   iv     a   3   2   1   4     b   3   1   4   2     c   3   1   2   4     d   3   4   1   2			
17	i ii iii iiv a 3 2 1 4 b 3 1 4 2 c 3 1 2 4 d 3 4 1 2  Which is the resting care			1
17	i ii iii iiv a 3 2 1 4 b 3 1 4 2 c 3 1 2 4 d 3 4 1 2  Which is the resting care	litres (c)8 lit y rate for an adult minute (b		1 1

19	Anu was assigned project work by her physical education teacher. She had to make a report by checking the health status of all the security guards of her huge gated community. She found out that more than half of them showed a significant deformity in the upper part of their vertebral column.	4
	1. The term used to define this deformity is	
	3. Bending your head backward in standing position helps in getting rid of	
	4. There are three types of spinal deformities: (a) Kyphosis (b) Lordosis (c)	
20	Mr. Shyam aged 50 years is recommended to practice the below asana as a therapeutic measure. He is a software engineer by occupation and spends a lot of time sitting at one place. He developed certain symptoms like frequent urge for urination, tiredness, excessive weight gain along with being anxious and getting easily irritated.	4
	1. The above pose can be identified as	
21		4
	When Jessica was 13 months old she was adopted from Siberia. As she was born with fibular hemimelia she got her lower legs amputated when she was only 18 months old and had to learn how to walk with prostheses. Luckily, none of this stopped her from holding world records and winning gold medals. According to her, her biggest achievement is winning three gold medals in swimming at the 2004 Paralympic Games in Greece, at the age of only 12.	
	<ol> <li>The word "Paralympic" originates from the Greek preposition "para", meaning</li> <li>The International Paralympic Committee (IPC) was founded on in Dussel</li> <li>The IPC acts as theof the Paralympic Movement.</li> <li>The IPC has established disability categories.</li> </ol>	

	(SECTION C)	
22	Numerate the term Seeding and mention it's advantages.	2
23	In which condition knockout tournaments are better than Round Robin?	2
24	Explain the concept of Hypertension?	2
25	Differentiate between Classification and Divisioning in disability Sports?	2
26	What do you mean by "A Healthy Weight"?	2
	SECTION D	
27	Discuss the Procedure to calculate BMI	3
28	What is the difference between slow twitch fibre and fast twitch fibre?	3
29	Briefly explain any three physiological factors determining speed.	3
30	What do you understand by aging? Explain the physiological changes due to aging.	3
31	How is the Plate Tapping test done?	3
	SECTION E	
32	What are hard tissue injuries? Explain the types of fractures.	5
33	Explain the procedure for doing the Sit and Reach test.	5
34	Define Dieting? Explain any four pitfalls of dieting in detail.	5



# OSDAV Public School, Kaithal Half Yearly Exam. 2024-25

Class: XII

**Subject: Physical Education** 

Time: 3 hrs. M.M.: 70

#### **General Instructions:-**

- I. The question paper consists of 5 sections and 34 Questions.
- II. Section A consists of questions 1-18 carrying 1 mark each and is a multiple choice question. All questions are compulsory.

Set B

- III. Sections B consist of questions 19-21 carrying 4 marks each and are case study questions.
- IV. Sections C consist of questions 22-26 carrying 2 marks each and are very short answer type and should not exceed 60-90 words.
- V. Sections D consist of questions 27-31 carrying 3 marks each and are short answer type and should not exceed 100-150 words.
- VI. Section E consists of Question 32-34 carrying 5 marks each and are long answer type and should not exceed 200-300 words.

Q.No.	Questions	Marks
	Section -A	
1.	Given below are two statements, one labelled as Assertion [A] and the other as	
1.	Reason(R).	1
	Assertion (A): Bulimia is an abnormal eating disorder characterised by hinge eating followed by purging behaviour.	1
	Reason (R): Bulimia is Considered abnormal because it leads to severe physical and mental health consequences due to the cycle of binge eating and purging. In the context of the above two statements, which one of the following is correct?	
	a) Buth (A) and (R) are true, and (R) is the correct explanation of (A)	
	b) (Buth (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.	
2.	A healthy normal menstrual period is called Menorrhagia b) Menarche c) Eumenorrhea d) Amenorrhea	
3.	'Sway Back' is also known as Lordosis b) Kyphosis c) Scoliosis d)Round Shoulders	
4.	Psychological benefits of women participation in sports includes: Cooperation b) Emotion Control c) Physical Fitness d) Communication	
5.	Polyurea is associated with: a) excessive sweat b) less urination c) excessive saliva d) excessive urination	
6.	Rule used by special Olympics to achieve the intentions of fairness is referred as:  a)Maximum Effort Rule b) Honest Effort Rule c) )Best Effort Rule d)Minimum Effort Rule	

7.	Grouping process asso (a) divisioning (	ciated with Specia b) classification		s is referred to as grouping (d) categorization	1
3.	Which of the following a)mainstream school w (b)mainstream school for the color of	g will be an inclus with separate classi with same classroom	ive school: rooms for d om with dif	ifferent abilities ferent abilities	1
).	Match the following:				1
	(a)World's largest spor and adult with intellec (b)Camp Shriver for ch (c)First special olympi (d)Special Olympics ca	tual and physical nildren with disable competition	disabilities	(i)Eunice Kennedy Shriver (ii)Special Olympics (iii)1988 (iv) Chicago	
	a)A-iii, B-iv, C-i, D-ii	b)A	A-iv, B-ii, C	C-iii, D-i	
	c)A-i, B-iii, C-ii, D-iv		4-ii, B-i, C-	· · · · · · · · · · · · · · · · · · ·	
10.	A balanced diet has pro (a) 1:2:4 (b)2		-	ratio of: (d) 1:1:4	1
11.				ntage of, and	1
	respectively. (a)50,40,10 (b)6	0.32.8 (c) $70$	),18,12	(d)76,12,12	
12.	Which of the following (b) Vitamin D&K (	g are water soluble	e vitamins?	· / / / /	1
13.				er from the code given below:	1
	List 1	List 2			
	i Vitamin A	1 Pyorrhea			
	ii Vitamin B	2 Rickets			
	iii Vitamin C	3 Beriberi			
	iv Vitamin D	4 Night Blindnes	SS		
		Codes			
	I iii	Ш	iv		
	a 2 4	3	1		
	b 1 2	4	3		
	200 500	1000	2	1	1
	c 4 3 d 3 1	2	4	4	

15.	Match List 1 with List 2 and select the correct answer from the code given below:	1
	i Lower Body Flexibilty	
	ii 2 Upper Body Strength	
	iii Abdominal Strength and Endurance	
	iv Speed	
	Codes    i   ii   iii   iiv     a   3   2   1   4     b   3   1   4   2     c   3   1   2   4     d   3   4   1   2	
16	Which is the resting cardiac output in a normal individual? (a)2 litres (b)6 litres (c)8 litres (d)5 litres	1
17	The normal respiratory rate for an adult  (a)10 to 12 breath per minute  (b) 40 to 60 breath per minute  (c)12 to 20 breath per minute  (d)30 to 40 breath per minute	1
18	a) Saral matsyasana b) Matsyasana c) Ardha- chakrasana d) Supta vajrasana	1
	(SECTION - B)	
19	Mr. Shyam aged 50 years is recommended to practice the below asana as a therapeutic measure. He is a software engineer by occupation and spends a lot of time sitting at one place. He developed certain symptoms like frequent urge for urination, tiredness, excessive weight gain along with being anxious and getting easily irritated.	4

	1. The above pose can be identified as	
20	When Jessica was 13 months old she was adopted from Siberia. As she was born with fibular hemimelia she got her lower legs amputated when she was only 18 months old and had to learn how to walk with prostheses. Luckily, none of this stopped her from holding world records and winning gold medals. According to her, her biggest achievement is winning three gold medals in swimming at the 2004 Paralympic Games in Greece, at the age of only 12.  1. The word "Paralympic" originates from the Greek preposition "para", meaning 2. The International Paralympic Committee (IPC) was founded on in Dussel 3. The IPC acts as the	4
21	Anu was assigned project work by her physical education teacher. She had to make a report by checking the health status of all the security guards of her huge gated community. She found out that more than half of them showed a significant deformity in the upper part of their vertebral column.  1. The term used to define this deformity is	4
	(SECTION C)	
	(BLC HOIVE)	
22	In which condition knockout tournaments are better than Round Robin?	2
23	Explain the concept of Hypertension?	2
24 25 26	Differentiate between Classification and Divisioning in Disability Sports?	2
25	What do you mean by "A Healthy Weight"?	2
26	Numerate the term Seeding and mention its advantages.	2
	SECTION D	
	I .	

27	What is the difference between slow twitch fibre and fast twitch fibre?	3
28	Briefly explain any three physiological factors determining speed.	3
29	What do you understand by aging? Explain the physiological changes due to aging.	3
30	How is the Plate Tapping test done?	3
31	Discuss the Procedure to calculate BMI	3
	SECTION E	
32	Explain the procedure for doing the Sit and Reach test.	5
33	Define Dieting? Explain any four pitfalls of dieting in detail.	5
34	What are hard tissue injuries? Explain the types of fractures.	5

## O.S.D.A.V. Public School Kaithal Sept Exam. (2024) XII Physical Education Answer Key/Marking Scheme Set A

Question	Answer	Mark Distribution
	Section A	
1	D. Supta Vajrasana	1
2	A. both A and R are true and R in the correct explanation of A	1
3	C) Eumenorrhea	1
4	A)Lordosis	1
5	B)Emotion Control	1
6	D) Excessive Urination	1
7	A)Maximum Effort Rule	1
8	A Divisioning	1
9	B. main stream school with same classroom for different abilities.	1
		1
10	(D)	1
11	D. 1:1:4	1
12	D. 76,12,12	1
		1
13	B. Vitamin B and C	1
		1
14	C.	1
15	B. Six Minute Walk Test	1
16	C.	1
17	D. 5 liters	1
18	C. 12 to 20 breadth per minute	1
19	<ol> <li>Kyphosis</li> <li>Round back or Hunchback</li> <li>Kyphosis</li> <li>Scoliosis</li> </ol>	

20	<ol> <li>Salabhasana</li> <li>Diabetes</li> <li>Insulin</li> <li>Asthma</li> </ol>	
21	<ol> <li>beside/ alongside or parallel</li> <li>22 Sept.,1989</li> <li>global governing body</li> <li>10</li> </ol>	
22.	Seeding: In seeding method all the strong teams are selected and placed in the Fixture at appropriate place. It is of two types:  • Simple seeding  • Special seeding  Advantages: Controls the chances of luck which is the main drawback of simple knockout fixture	
23.	<ul> <li>Knockout Tournament is better than League in following conditions:</li> <li>To save time and money</li> <li>When the number of participating team is large.</li> </ul>	
24.	Hypertention: when the blood pressure becomes abnormally high it is called hypertension. A reading of 120/80 is normal blood pressure and 140/90 or higher is high blood pressure.	
25.	The concept of Classification and Divisioning is a process used in disability sports for providing even and fair competition for athletes with disability through grouping of athletes. The purpose is very much similar to grouping system used in mainstream sports according to their age-group, gender, weight etc. The general goal of any classification or divisioning in disability sports is to reduce or minimize the effect of sports performance due to any of the above-mentioned variables like age, gender, weight or even abilities. In this chapter we will understand the two terms 'classification' and 'divisioning', wherein 'classification' is a grouping process associated with Paralympics and para-athletes, and 'divisioning' is a process of grouping associated with Special Olympics. Classification process adopted by Paralympics assigns categories to athletes based on different types of disabilities, on the other hand divisioning process of Special Olympics is a performance based system of grouping athletes bases on their skill level.	
26.	Healthy weight: is that weight which is good for health. According to WHO the BMI between 18.5 to 24.9 is considered as a healthy weight.	
27.	Procedure to calculate BMI:  Measurement of height  Measurement of weight  Calculation of BMI	

		i
	( Explanation of the above points)	
28	<ul> <li>Fast-twitch Fibers:</li> <li>These Fibers can contract swiftly and produce more force.</li> <li>Helpful in speed dominating sports events</li> <li>Helpful in sports events dominating explosive strength</li> <li>Sports person with higher percentage of fast which fibres are superior in strength and speed(anaerobic activities)</li> <li>Slow-twitch Fibers:</li> <li>These fibres contract at a slower speed.</li> <li>They can sustain the contraction for a long duration.</li> <li>Helpful in endurance dominating sports activities</li> <li>Muscle with higher percentage of slow to which fibres are superior in aerobic activities (endurance)</li> </ul>	
29	Physiological factors determining speed:	
30.	Aging: aging means decrease in the efficiency of various body systems due to increase in age. Physiological changes due to aging:	
31	PLATE TAPPING TEST Purpose: Tests speed and coordination of limb movement Infrastructure/Equipment Required: Table (adjustable height), 2 yellow discs (20cm diameter), rectangle (30 x 20 cm), stopwatch Procedure: If possible, the table height should be adjusted so that the subject is standing comfortably in front of the discs. The two yellow discs are placed with their centers 60 cm apart on the table. The rectangle is placed equidistant between both discs. The non-preferred hand is placed on the rectangle. The subject moves the preferred hand back and forth between the discs over the hand in the middle as quickly as possible. This action is repeated for 25 full cycles (50 taps). Scoring: The time taken to complete 25 cycles is recorded	
32	Fractures:  A fracture is a break in a bone. Fractures are caused by a direct impact, such as a fall or a severe tackle. Stress fractures develop over time and are caused by overuse.  • Stress fracture: Stress fractures may occur because of overuse injuries and the failure to have adequate equipment to protect the body. Causes -	

- Stress fractures often result from increasing the amount or intensity of an activity too quickly. Prevention Low impact activities added to exercise regimen to avoid repetitively stressing a particular part of the body. Treatment Rest, cold therapy ice packs, cold compresses, apply ice to the injured area, anti- inflammatory medications such as Ibuprofen, aspirin etc and a recovery time of 6 to 8 weeks is required for healing.
- Greenstick: A fracture in a young, soft bone, in which the bone bends. Causes These fractures most commonly occur with a fall. Prevention Promotion of regular exercise, ensuring the child's safety by providing proper safety equipment and adequate calcium in the child's diet can also help to prevent this kind of fracture. Treatment Removable splints result in better outcomes than casting in children with Torus fractures of the distal radius.
- Comminuted: A fracture in which a bone is broken, splinted, or crushed into number of pieces. Causes Direct and indirect trauma or violence can be causes for commutated fracture. Prevention Maintaining strong bones by eating food that is rich in calcium and regular exercise can help in the prevention of this type of fracture. Treatment An X-ray is important for diagnosing of the condition. An open reduction when the bone fragments are jammed-together using surgical nails, wire plates etc. is required for comminuted fracture.
- Transverse Transverse fracture is when there is a straight break right across a bone. Causes - When a large amount of force is transmitted directly i.e., perpendicularly to the bone. Prevention - Physical activity and weight bearing exercises will make the bones stronger and denser. Bones can also be strengthened by eating foods rich in calcium and taking regular exercise. Treatment - Can be treated at home along with rest and medicine. A back brace (called TSL) or abdominal binder may be prescribed to reduce the pain by limiting motion at the fracture site.
- Oblique Fracture: Oblique fracture is one in which
  the bone breaks diagonally. Causes This fracture
  is usually caused by an injury to the bone as the
  result of a fall, accident, or other trauma.
  Prevention Bones can be strengthened by eating
  food rich in calcium and exercising regularly to help
  prevent this type of fracture. Treatment It
  depends upon the severity of the crack or break.
  Anti- inflammatory medication, reduction (Resetting
  the bone) can also help to some extent.
- Impacted Fracture: This type of fracture occurs when the broken ends of the bones are jammed together by the force of the injury. Causes - It is

	caused mainly when someone falls from height with a great impact. Prevention – Increased physical activity, weight bearing exercises and maintaining good intake of calcium in food can help in preventing this type of fracture. Treatment - In an impacted fracture the bones get broken into fragments. Therefore, a sling or a splint may be required to keep the broken bones in place, so that movement of the sharp ends of the broken bone is prevented. This is essential to prevent further damage to the bone.	
33.	Sit and Reach Test: Purpose: Common measure of flexibility, and specifically measures the flexibility of the lower back and hamstring muscles. This test is important because tightness in this area is implicated in lumbar lordosis, forward pelvic tilt and lower back pain.  Infrastructure/Equipment Required: Sit and Reach box with the following dimensions: 12" x 12" (sides) 12" x 10" (front and back) 12" x 21" (top). Inscribe the top panel with centimeter/mm gradations. It is crucial that the vertical plane against which the subject's feet will be placed is exactly at the 23 cm mark. Flat clean cushioned surface/Gym Mats Procedure: This test involves sitting on the floor with legs stretched out straight ahead. Shoes should be removed. The soles of the feet are placed flat against the Sit and Reach box. Both knees should be locked and pressed flat to the floor - the tester may assist by holding them down. With the palms facing downwards, and hands on top of each other, the subject reaches forward along the measuring line as far as possible. Ensure that the hands remain at the same level, not one reaching further forward than the other. After some practice reaches, the subject reaches out and holds that position for at one-two seconds while the distance is recorded. Make sure there are no jerky movements.  Scoring: The score is recorded (difference between initial position and final position), in cm and mm, as the distance reached by the hand.	
34	Pitfalls of Dieting: Maintaining a calorie deficit always leads to weight loss.  Without exercise, a calorie deficit must be created through a lower calorie intake. The main problem with dieting alone is the sacrifice needed to sustain a very low-calorie intake for a long period of time, which is too much for most people to handle. On a very low-calorie diet, most people tend to breakdown and go back to their old habits causing any weight loss to return quickly. The body's reaction to dieting is also different. In case of a sudden and drastic reduction in calorie intake, the body adjusts its metabolism accordingly. Eating very little calories for a long time would turn body into starvation mode means slowing down metabolic processes which is the body's way of protecting itself against long periods with little or no	

·	
food. This starvation mode causes body to drastically cut its energy requirements and the person stops losing weight.  Diets, especially fad diets or "quick-fix" pills and plans, often lead to failure because diets that cut out entire groups of food, such as carbohydrates or fat, are simply impractical and unhealthy. The key is moderation. Diets that severely cut calories, restrict certain foods, or rely on ready-made meals might work in the short term but don't include a plan for maintaining weight, so the weight quickly comes back Severely restricted diet also lead to deficiency of various other nutrients. Once we start eating normally, we will gain weight until our metabolism bounces back. Special shakes, meals, and programmes are not only expensive, but they aren't practical for long-term weight loss. Hence, instead of dieting alone and looking for miraculous foods to reduce or maintain weight, regular exercise and good eating habits are crucial to health and well-being.	

## O.S.D.A.V. Public School Kaithal Sept Exam. (2024) XII Physical Education Answer Key/Marking Scheme Set B

	Set B	
Question	Answer	Mark Distribution
	Section A	
1	A.both A and R are true and R in the correct explanation of A	1
2	C) Eumenorrhea	1
3	A)Lordosis	1
4	B)Emotion Control	1
5	D) Excessive Urination	1
6	A)Maximum Effort Rule	1
7	A Divisioning	1
8	B. main stream school with same classroom for different abilities.	1
9	(D)	1
10	D. 1:1:4	1
11	D. 76,12,12	1
12	B. Vitamin B and C	1
13	C.	1
14	B. Six Minute Walk Test	1
15	C.	1
16	D. 5 liters	1
17	C. 12 to 20 breath per minute	1
18	D. Supta Vajrasana	1
19	Salabhasana Diabetes Insulin Asthma	
20	<ol> <li>beside/ alongside or parallel</li> <li>22 Sept.,1989</li> <li>global governing body</li> <li>10</li> </ol>	

21	<ol> <li>Kyphosis</li> <li>Round back or Hunchback</li> <li>Kyphosis</li> <li>Scoliosis</li> </ol>	
22.	<ul> <li>Knockout Tournament is better than League in following conditions:</li> <li>To save time and money</li> <li>When the number of participating team is large.</li> </ul>	
23.	<ul> <li>Hyperion: when the blood pressure becomes abnormally high it is called hypertension. A reading of 120/80 is normal blood pressure and 140/90 or higher is high blood pressure.</li> </ul>	
24.	The concept of Classification and Divisioning is a process used in disability sports for providing even and fair competition for athletes with disability through grouping of athletes. The purpose is very much similar to grouping system used in mainstream sports according to their age-group, gender, weight etc. The general goal of any classification or divisioning in disability sports is to reduce or minimize the effect of sports performance due to any of the above-mentioned variables like age, gender, weight or even abilities. In this chapter we will understand the two terms 'classification' and 'divisioning', wherein 'classification' is a grouping process associated with Paralympics and para-athletes, and 'divisioning' is a process of grouping associated with Special Olympics. Classification process adopted by Paralympics assigns categories to athletes based on different types of disabilities, on the other hand divisioning process of Special Olympics is a performance based system of grouping athletes bases on their skill level.	
25.	Healthy weight: is that weight which is good for health.  According to WHO the BMI between 18.5 to 24.9 is considered as a healthy weight.	
26.	Seeding: In seeding method all the strong teams are selected and placed in the Fixture at appropriate place. It is of two types:  Simple seeding Special seeding Advantages: Controls the chances of luck which is the main drawback of simple knockout fixture	
27.	Fast-twitch Fibers:  These Fibers can contract swiftly and produce more force.  Helpful in speed dominating sports events  Helpful in sports events dominating explosive strength  Sports person with higher percentage of fast which fibres	

	are superior in strength and speed(anaerobic activities) Slow-twitch Fibers:  These fibres contract at a slower speed.  They can sustain the contraction for a long duration.  Helpful in endurance dominating sports activities  Muscle with higher percentage of slow to which fibres are superior in aerobic activities (endurance)	
28	<ul> <li>How muscle composition affect Speed:</li> <li>Muscles have two types of fibers namely fast twitch and Slow-twitch Fibers. Slow twitch fibers exert a small force and maintain it for a long time. That is why, higher percentage of slow twitch fibresl is ideal for endurance activities such as a marathon race. However this percentage is determined by a genetic factors. Various findings have shown that world class marathon runners have more than 90% of slow-twitch Fibe fibers in their leg muscles.</li> </ul>	
29	Physiological changes due to aging: <ul> <li>Changing muscle size and strength</li> <li>Changes in body composition and metabolism</li> <li>Changes in bone density</li> <li>Changes in respiratory system</li> <li>Changes in nervous system</li> <li>Changes in digestive system</li></ul>	
30.	PLATE TAPPING TEST Purpose: Tests speed and coordination of limb movement Infrastructure/Equipment Required: Table (adjustable height), 2 yellow discs (20cm diameter), rectangle (30 x 20 cm), stopwatch Procedure: If possible, the table height should be adjusted so that the subject is standing comfortably in front of the discs. The two yellow discs are placed with their centers 60 cm apart on the table. The rectangle is placed equidistant between both discs. The non-preferred hand is placed on the rectangle. The subject moves the preferred hand back and forth between the discs over the hand in the middle as quickly as possible. This action is repeated for 25 full cycles (50 taps). Scoring: The time taken to complete 25 cycles is recorded	
31	Procedure to calculate BMI:	
32	Sit and Reach Test:  • Purpose: Common measure of flexibility, and specifically measures the flexibility of the lower back and hamstring muscles. This test is important because tightness in this area is implicated in lumbar lordosis, forward pelvic tilt and	

lower back pain.

- Infrastructure/Equipment Required: Sit and Reach box with the following dimensions: 12" x 12" (sides) 12" x 10" (front and back) 12" x 21" (top). Inscribe the top panel with centimeter/mm gradations. It is crucial that the vertical plane against which the subject's feet will be placed is exactly at the 23 cm mark. Flat clean cushioned surface/Gym Mats Procedure: This test involves sitting on the floor with legs stretched out straight ahead. Shoes should be removed. The soles of the feet are placed flat against the Sit and Reach box. Both knees should be locked and pressed flat to the floor - the tester may assist by holding them down. With the palms facing downwards, and hands on top of each other, the subject reaches forward along the measuring line as far as possible. Ensure that the hands remain at the same level, not one reaching further forward than the other. After some practice reaches, the subject reaches out and holds that position for at one-two seconds while the distance is recorded. Make sure there are no jerky movements.
- Scoring: The score is recorded (difference between initial position and final position), in cm and mm, as the distance reached by the hand.

#### 33. Pitfalls of Dieting:

Maintaining a calorie deficit always leads to weight loss. Without exercise, a calorie deficit must be created through a lower calorie intake. The main problem with dieting alone is the sacrifice needed to sustain a very low-calorie intake for a long period of time, which is too much for most people to handle. On a very low-calorie diet, most people tend to breakdown and go back to their old habits causing any weight loss to return quickly. The body's reaction to dieting is also different. In case of a sudden and drastic reduction in calorie intake, the body adjusts its metabolism accordingly. Eating very little calories for a long time would turn body into starvation mode means slowing down metabolic processes which is the body's way of protecting itself against long periods with little or no food. This starvation mode causes body to drastically cut its energy requirements and the person stops losing weight.

Diets, especially fad diets or "quick-fix" pills and plans, often lead to failure because diets that cut out entire groups of food, such as carbohydrates or fat, are simply impractical and unhealthy. The key is moderation. Diets that severely cut calories, restrict certain foods, or rely on ready-made meals might work in the short term but don't include a plan for maintaining weight, so the weight quickly comes back

Severely restricted diet also lead to deficiency of various other nutrients. Once we start eating normally, we will gain weight until our metabolism bounces back. Special shakes, meals, and programmes are not only expensive, but they aren't practical for long-term weight loss. Hence, instead of dieting alone and looking for miraculous foods to reduce or maintain weight, regular exercise and good

	eating habits are crucial to health and well-being.	
34	Fractures:  A fracture is a break in a bone. Fractures are caused by a direct impact, such as a fall or a severe tackle. Stress fractures develop over time and are caused by overuse.  • Stress fracture: Stress fractures may occur because of overuse injuries and the failure to have adequate equipment to protect the body. Causes - Stress fractures often result from increasing the amount or intensity of an activity too quickly. Prevention - Low impact activities added to exercise regimen to avoid repetitively stressing a particular part of the body. Treatment - Rest, cold therapy ice packs, cold compresses, apply ice to the injured area, anti- inflammatory medications such as lbuprofen, aspirin etc and a recovery time of 6 to 8 weeks is required for healing.  • Greenstick - A fracture in a young, soft bone, in which the bone bends. Causes - These fractures most commonly occur with a fall. Prevention - Promotion of regular exercise, ensuring the child's safety by providing proper safety equipment and adequate calcium in the child's diet can also help to prevent this kind of fracture. Treatment - Removable splints result in beter outcomes than casting in children with — Torus fractures of the distal radius.  • Comminuted : A fracture in which a bone is broken, splinted, or crushed into number of pieces. Causes - Direct and indirect trauma or violence can be causes for commutated fracture. Prevention - Maintaining strong bones by eating food that is rich in calcium and regular exercise can help in the prevention of this type of fracture. Treatment - An X-ray is important for diagnosing of the condition. An open reduction when the bone fragments are jammed-together using surgical nails, wire plates etc. is required for comminuted fracture.  • Transverse Transverse fracture is when there is a straight break right across a bone. Causes - When a large amount of force is transmitted directly i.e., perpendicularly to the bone. Prevention - Physical activity and weight bearing exercises will make the bones stronger and dens	

food rich in calcium and exercising regularly to help prevent this type of fracture. Treatment - It depends upon the severity of the crack or break. Anti- inflammatory medication, reduction (Resetting the bone) can also help to some extent.  Impacted Fracture: This type of fracture occurs when the broken ends of the bones are jammed together by the force of the injury. Causes - It is caused mainly when someone falls from height with a great impact. Prevention – Increased physical activity, weight bearing exercises and maintaining good intake of calcium in food can help in preventing this type of fracture. Treatment - In an impacted fracture the bones get broken into fragments. Therefore, a sling or a splint may be required to keep the broken bones in place, so that movement of the sharp ends of the broken bone is prevented. This is essential to prevent further damage to the bone.	