

Marking Scheme

Strictly Confidential

(For Internal and Restricted use only)

Senior School Certificate Examination, 2023

SUBJECT NAME: PHYSICAL EDUCATION (SUBJECT CODE P07548) (PAPER CODE 75)

General Instructions: -

- | | |
|----------|---|
| 1 | You are aware that evaluation is the most important process in the actual and correct assessment of the candidates. A small mistake in evaluation may lead to serious problems which may affect the future of the candidates, education system and teaching profession. To avoid mistakes, it is requested that before starting evaluation, you must read and understand the spot evaluation guidelines carefully. |
| 2 | "Evaluation policy is a confidential policy as it is related to the confidentiality of the examinations conducted, Evaluation done and several other aspects. Its' leakage to public in any manner could lead to derailment of the examination system and affect the life and future of millions of candidates. Sharing this policy/document to anyone, publishing in any magazine and printing in News Paper/Website etc may invite action under various rules of the Board and IPC." |
| 3 | Evaluation is to be done as per instructions provided in the Marking Scheme. It should not be done according to one's own interpretation or any other consideration. Marking Scheme should be strictly adhered to and religiously followed. However, while evaluating, answers which are based on latest information or knowledge and/or are innovative, they may be assessed for their correctness otherwise and due marks be awarded to them. In class-X, while evaluating two competency-based questions, please try to understand given answer and even if reply is not from marking scheme but correct competency is enumerated by the candidate, due marks should be awarded. |
| 4 | The Marking scheme carries only suggested value points for the answers These are in the nature of Guidelines only and do not constitute the complete answer. The students can have their own expression and if the expression is correct, the due marks should be awarded accordingly. |
| 5 | The Head-Examiner must go through the first five answer books evaluated by each evaluator on the first day, to ensure that evaluation has been carried out as per the instructions given in the Marking Scheme. If there is any variation, the same should be zero after deliberation and discussion. The remaining answer books meant for evaluation shall be given only after ensuring that there is no significant variation in the marking of individual evaluators. |
| 6 | Evaluators will mark(✓) wherever answer is correct. For wrong answer CROSS 'X' be marked. Evaluators will not put right (✓) while evaluating which gives an impression that answer is correct and no marks are awarded. This is most common mistake which evaluators are committing. |
| 7 | If a question has parts, please award marks on the right-hand side for each part. Marks |

	awarded for different parts of the question should then be totaled up and written in the left-hand margin and encircled. This may be followed strictly.
8	If a question does not have any parts, marks must be awarded in the left-hand margin and encircled. This may also be followed strictly.
9	If a student has attempted an extra question, answer of the question deserving more marks should be retained and the other answer scored out with a note " Extra Question ".
10	No marks to be deducted for the cumulative effect of an error. It should be penalized only once.
11	A full scale of marks _____ (example 0 to 80/70/60/50/40/30 marks as given in Question Paper) has to be used. Please do not hesitate to award full marks if the answer deserves it.
12	Every examiner has to necessarily do evaluation work for full working hours i.e., 8 hours every day and evaluate 20 answer books per day in main subjects and 25 answer books per day in other subjects (Details are given in Spot Guidelines). This is in view of the reduced syllabus and number of questions in question paper.
13	Ensure that you do not make the following common types of errors committed by the Examiner in the past:- <ul style="list-style-type: none">• Leaving answer or part thereof unassessed in an answer book.• Giving more marks for an answer than assigned to it.• Wrong totalling of marks awarded on an answer.• Wrong transfer of marks from the inside pages of the answer book to the title page.• Wrong question wise totalling on the title page.• Wrong totalling of marks of the two columns on the title page.• Wrong grand total.• Marks in words and figures not tallying/not same.• Wrong transfer of marks from the answer book to online award list.• Answers marked as correct, but marks not awarded. (Ensure that the right tick mark is correctly and clearly indicated. It should merely be a line. Same is with the X for incorrect answer.)• Half or a part of answer marked correct and the rest as wrong, but no marks awarded.
14	While evaluating the answer books if the answer is found to be totally incorrect, it should be marked as cross (X) and awarded zero (0)Marks.
15	Any un assessed portion, non-carrying over of marks to the title page, or totalling error detected by the candidate shall damage the prestige of all the personnel engaged in the evaluation work as also of the Board. Hence, in order to uphold the prestige of all concerned, it is again reiterated that the instructions be followed meticulously and judiciously.
16	The Examiners should acquaint themselves with the guidelines given in the " Guidelines for spot Evaluation " before starting the actual evaluation.
17	Every Examiner shall also ensure that all the answers are evaluated, marks carried over to the title page, correctly totalled and written in figures and words.
18	The candidates are entitled to obtain photocopy of the Answer Book on request on payment of the prescribed processing fee. All Examiners/Additional Head Examiners/Head Examiners are once again reminded that they must ensure that evaluation is carried out strictly as per value points for each answer as given in the Marking Scheme.

General Instructions:

- a. The marking scheme carries only suggested value points for the answers.
- b. These are only Guideline and do not constitute the complete answer.
- c. The students can have their own expression and if the expression is correct, the marks be awarded accordingly.
- d. The candidates would be permitted to obtain a photocopy of the Answer book on request on payment of the prescribed processing fee. All Examiners/Additional Head Examiners are once again reminded that they must ensure that evaluation that is carried out strictly as per value points for each answer as given in the marking Scheme.
- e. All the Head Examiners/Additional Head Examiners/Examiners are instructed that while evaluating the answer scripts, if the answer is found to be totally incorrect, (X) should be marking on the incorrect answer and awarded '0' marks.

MARKING SCHEME
 Senior School Certificate –Examination, 2023
PHYSICAL EDUCATION (Subject Code- 048)
[Paper Code -75]

Maximum Marks: 70

Section-A

Q. No.	EXPECTED ANSWER / VALUE POINTS	Marks
1. Ans.	(a) Bhujangasana For visually impaired (a) Bhujangasana	1
2. Ans.	(d) Neuroticism	1
3. Ans.	(c) Buoyant Force	1
4. Ans.	(c) Efficiency of Lungs.	1
5. Ans.	(a) Endurance	1
6. Ans.	(b) Coupling ability	1
7. Ans.	(a) Lactic acid	1
8. Ans.	(a) Weight	1
9. Ans.	(a) Both (A) and (R) are true and (R) is the correct explanation of (A).	1
10. Ans.	(a) Regulate body temperature	1
11. Ans.	(b) Vitamin B and C	1
12. Ans.	(c) Parvatasana	1
13. Ans.	(a) 18	1
14. Ans.	(a) Elimination tournament	1
15. Ans.	(c) 1924	1
16.	(a) I-3, II-1, III-4, IV-2	1

Ans.		
17. Ans.	(a) I-2, II-1, III-4, IV-3	1
18. Ans.	(b) Beginning of menstrual period in women	1
Section-B		
19. Ans.	<p>Briefly explain any two factors determining endurance. Factors determining Endurance: 1.Aerobic capacity a. Oxygen intake b. Oxygen uptake c. Oxygen transport d. Energy reserve 2.Anaerobic capacity 3.Movement Economy 4.Muscle Composition 5.Lactic acid tolerance</p> <p style="text-align: right;">(Explanation of any two)</p>	1+1
20. Ans.	<p>What do you understand by "Goal Setting"? Goal setting is a mental technique that can be used to increase an individual's commitment towards achieving a specific standard of proficiency on a task within a specified time.</p> <p style="text-align: center;">Or</p> <p>The process of establishing a level of performance proficiency that should be reached within a prescribed time period is known as goal setting.</p> <p style="text-align: right;">(Or any other relevant answer)</p>	2
21. Ans.	<p>Define Flexibility and list down its types. Flexibility is the maximum range of movement of a joint Or Flexibility is the quality of the muscles, ligaments and tendons that enables the joint of the body to move easily through a complete range of movement.</p> <p style="text-align: right;">(Or any relevant definition)</p> <p>There are mainly two types of flexibility</p> <ol style="list-style-type: none"> 1. Active Flexibility- Ability of an individual to do the joint movement without any external help- (a)Static Flexibility (b) Dynamic Flexibility 2. Passive Flexibility- The ability to do joint movement with a greater range with an external help or partner. <p style="text-align: right;">(Only types listed one mark to be given)</p>	1+1
22. Ans.	<p>Elucidate any four types of fractures.</p> <ul style="list-style-type: none"> (a) Green Stick-Incomplete break of soft bones of children. (b) Comminuted- A bone breaks into number of pieces. (c) Transverse- It is a straight break right across a bone. (d) Oblique-A bone breaks diagonally. (e) Impacted-When the broken ends of bones are jammed together by force of injury. <p style="text-align: right;">(Any 4 types)</p>	½ x4

23. Ans.	<p>What is BMI? Calculate BMI of a child whose weight is 72 kg and height 1.68 mts. Body mass index (BMI) is a measure of body fat, based on height and weight of a person.</p> <p>Calculation of BMI if: Weight= 72 kgs. Height= 1.68 mts.</p> $BMI = \frac{\text{Weight (kg)}}{[\text{Height(m)}]^2}$ $\text{BMI} = \frac{72}{1.68 \times 1.68} = 25.51$	1+1										
24. Ans.	<p>Differentiate between Macro and Micro Nutrients.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;">Macro Nutrients</td><td style="width: 50%; vertical-align: top; padding: 5px;">Micro Nutrients</td></tr> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;">1. Required in large quantity</td><td style="width: 50%; vertical-align: top; padding: 5px;">1. Required in small quantity</td></tr> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;">2. Have calorific value</td><td style="width: 50%; vertical-align: top; padding: 5px;">2. No calorific value</td></tr> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;">3. Consist of energy and body building elements</td><td style="width: 50%; vertical-align: top; padding: 5px;">3. Consist of protecting elements</td></tr> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;">4. Carbohydrates, fats, Protein, water</td><td style="width: 50%; vertical-align: top; padding: 5px;">4. Vitamins and minerals</td></tr> </table> <p style="text-align: right; margin-top: -10px;">(Any relevant 2 points)</p>	Macro Nutrients	Micro Nutrients	1. Required in large quantity	1. Required in small quantity	2. Have calorific value	2. No calorific value	3. Consist of energy and body building elements	3. Consist of protecting elements	4. Carbohydrates, fats, Protein, water	4. Vitamins and minerals	1+1
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Section -C												
25. Ans.	<p>"Participation in physical activities is advantageous for children with special need." Briefly explain any six advantages.</p> <p>Advantages of physical activities For children with special need.</p> <ul style="list-style-type: none"> 1. Physical improvement 2. Mental improvement 3. Increase self esteem 4. Reduce the level of stress, Anxiety and Depression 5. Reduce the risk of health complications. 6. Improved social interaction 7. Improved cognitive skills 8. Improved emotional and psychological health 9. Mode of recreation and fun 10. Channelizing the surplus energy <p style="text-align: right; margin-top: -10px;">(Any 6 relevant points explained)</p>	½ x6										
26. Ans.	<p>Write the functions of Vitamin D and Vitamin K and mention their sources.</p> <p><u>Functions of Vitamin D</u></p> <ul style="list-style-type: none"> 1. It helps in the absorption of calcium and phosphorus 2. It maintains the functions of Parathormone, the hormone secreted by parathyroid glands. 3. It helps to keep the teeth and bones strong <p><u>Sources of Vitamin D</u></p> <p>Sunrays, milk, fish, liver oil, butter etc.</p> <p><u>Functions of Vitamin K</u></p> <ul style="list-style-type: none"> 1. Helps in blood clotting 2. Enhances bone strength and heart health 3. Helps to facilitate energy production of the mitochondria <p><u>Sources of vitamin K</u></p> <p>Green leafy vegetables and cabbage; milk etc.</p> <p style="text-align: right; margin-top: -10px;">(Any 2 relevant functions and 1 source for each)</p>	1½+1½										

27. Ans.	<p>Briefly explain the functions of Directing and Controlling to organize sports event.</p> <p>Functions of Directing</p> <ol style="list-style-type: none"> 1. Directing requires leadership quality 2. Making the employees aware about their duties and responsibilities 3. Includes supervision and motivation 4. Guiding, inspiring and instructing people to accomplish organizational goal. 5. Ensures coordination <p>Functions of controlling</p> <ol style="list-style-type: none"> 1. Establishing standards 2. Ensure that actual performance is in accordance with the planned performance. 3. Involve imparting instruction to employees to achieve common goal. 4. Help to revise the standard in the light of changing circumstances and environment. <p style="text-align: right;">(Any 3 relevant points for each)</p>	1½+1½
28. Ans.	<p>How can we enhance the sports performance with the help of self-talk and self-esteem? Explain.</p> <p>Self-talk and self-esteem enhance the sports performance by the following ways</p> <p>Self-Esteem</p> <ol style="list-style-type: none"> 1. It controls the negative thoughts 2. It boosts the self confidence 3. It controls emotion and anxiety 4. It helps in skill acquisition 5. Self esteem helps in decision making 6. Taking up challenges 7. Increase in potential to change oneself 8. Increased self esteem leads to improvement in performance, resulting in successful accomplishment of a goal. <p>Self Talk</p> <ol style="list-style-type: none"> 1. Creating and changing mood 2. Building and developing self efficacy 3. Controlling efforts 4. Focusing attention or concentration 5. Improve overall performance 6. Giving oneself instructions to carry out a task. 7. Helps to improve stressful situations 8. Helps to substitute "This is too difficult" to "I can do this" <p style="text-align: right;">(Any six relevant points)</p>	- 1½+1½
29. Ans.	<p>Elucidate any six effects of exercise on muscular system.</p> <ol style="list-style-type: none"> 1. Increased muscle temperature 2. Increased blood supply 3. Increased muscle flexibility 4. Hypertrophy of Muscle 5. Increase in Strength of Ligaments and Tendons 6. Increase in Size and Number of Mitochondria 7. Increase in Myoglobin Storage 8. Increase in Glycogen Storage 9. Increase in oxidation/metabolism 10. Increased in Lactic Acid Tolerance 11. Better posture 12. Delayed fatigue <p style="text-align: right;">(Any six relevant points)</p>	½ x6

<p>30.</p> <p>Ans.</p>	<p>What do you understand by Round shoulders deformity? Suggest any four corrective measures for round shoulders.</p> <p>Round shoulder</p> <p>Round shoulder is a postural deformity in which shoulders are bent forward from the ideal alignment thereby giving a narrow curve to upper back.</p> <p>Or</p> <p>In this postural deformity the shoulders become round and sometimes they seem to be bent forward.</p> <p>Corrective measure for round shoulders</p> <ol style="list-style-type: none"> 1. Perform chakrasana and dhanurasana 2. Hold the horizontal bar 3. Keep your tips of fingers on your shoulders and rotate your elbows in clockwise and anticlockwise direction. 4. Pull ups 5. Perform bhujangasana and ushttasana 6. Pull the shoulders backward and see upward 7. Chest stretches 8. T stretches 9. Wall stretches 10. Handclasp stretch and planks. <p style="text-align: right;">(Any 4 corrective measures)</p>	<p>1</p> <p>2</p>
<p>Section D</p>		
<p>31</p> <p>Ans.</p>	<p>On the basis of above fixture, answer the following questions:</p> <p>(a) Which method is shown in the picture to draw fixture in league tournament?</p> <p>(b) What is the formula to calculate number of matches?</p> <p>(c) In league or Round Robin Tournament winner will be decided on the basis of</p> <p>(d) If 7 teams participate in a league Tournament, ___ number of matches will be played:</p> <p>(a). Staircase method</p> <p>(b). $N \frac{(N-1)}{2}$</p> <p>(c). Points score by teams/no of matches won/ American method/British method</p> <p>(d). 21 matches</p> <p>(For Visually Impaired Candidates)</p> <p>Explain the responsibilities of any four committees required to organize a sports event</p>	<p>1x4</p>

	<p style="text-align: center;">LAYOUT OF ORGANISING COMMITTEE</p> <pre> graph TD TD[Tournament Director/President/Chairman] --> EC[Executive Committee] EC --> OC[Organising Committee] OC --- AC[Accreditation Committee] OC --- FC[Finance Committee] OC --- PC[Publicity Committee] OC --- BL[Boarding & Lodging Committee] OC --- TC[Transport Committee] OC --- RC[Reception Committee] OC --- CD[Ceremony & Decoration Committee] OC --- PC[Prizes & Certificates Committee] BL --- GEC[Ground & Equipment Committee] BL --- RC[Refreshment Committee] BL --- FAD[First Aid Committee] BL --- AC[Announcement Committee] BL --- CO[Committee for officials] BL --- EPC[Entries & Programmes Committee] </pre> <p style="text-align: center;">(Responsibilities of any four committees)</p>	1x4
32.	<p>Study the pictures given below :</p> <p>(A) Stationary Ball (B) Moving Ball</p> <p>Based on your above study and your knowledge, answer the following questions:</p> <p>(a) Which law of motion will be applied to initiate motion of the ball as depicted in the illustration (A)?</p> <p>(b) In illustration (B) which force is acting upon the ball to slow it down?</p> <p>(c) Which law of motion will determine the quality of bounce?</p> <p>(d) _____ of an object directly depends upon the mass of the object and net force applied on it.</p> <p>OR</p> <p>"When a cricket ball is moving with a certain velocity, the player has to apply retarding force to bring the ball at rest in his hands." Which Newton's Law is applied in this illustration?</p> <p>(a) Law of Inertia/Newton's first law of motion</p> <p>(b) Friction</p> <p>(c) Third law –law of action and reaction</p> <p>(d) Acceleration</p> <p>or</p> <p>Newton's second law of motion/Law of acceleration</p> <p>(For Visually Impaired Candidates)</p> <p>By giving suitable examples from sports, explain any two Newton's Laws of Motion in detail.</p> <ol style="list-style-type: none"> 1. Newton's first law 2. Newton's second law 3. Newton's third law <p><u>1st law of Motion-Law of Inertia</u>-Any object will remain in the state of rest or motion until or unless an external force is applied to it.</p> <p><u>Example</u>-A football in the state of rest or motion will remain in that position unless a kick is applied on it.</p> <p><u>2nd law of Motion-Law of Acceleration/Momentum</u>-The rate of change of Acceleration directly proportional to the force applied on the object and inversely proportional to the mass of the object.</p> <p><u>Example</u>-A javelin thrower needs more force to throw a javelin of 800gm than to</p>	1x4
Ans.		2+2

	<p>throw a javelin of 600gm.</p> <p><u>3rd Law of Motion-Law of Action/Reaction</u>-For every action there is an equal and opposite reaction.</p> <p><u>Example</u>-While swimming we push the water backwards and our body moves forward.</p> <p style="text-align: right;">(Any two laws with suitable example)</p>	
33.	<p>In relation to the pictures, answer the following questions:</p>  <p>(a) Logo shown in picture _____ refers to Special Olympic. (b) Who was the founder of Special Olympics? (c) According to figure 'B', the hand shapes of 'OK', 'Good' and 'Great' that overlap each other in a circle, represent the original sign for (d) How many countries participated in the first Paralympic Games in Rome (Italy) in 1960? OR The motto of Paralympics is _____ (a) C (b) Eunice kennedy shriver (c) Deaf Olympics/Deaflympics (d) 23 or Spirit in motion (For Visually Impaired Candidates) Explain any four strategies to make physical activities accessible for children with special needs. Strategies to make physical activities accessible for CWSN 1. Regular medical check up 2. Adaptive physical education 3. Clear communication 4. Modified playfield/court 5. Modified rules 6. Modification in equipment 7. Involve people with disabilities in decision making 8. Encourage community based programme 9. Use different types of instructional strategies 10. Social strategies 11. Psychological strategies 12. Development of voluntary services at various levels</p> <p style="text-align: right;">(Explanation of any 4 points)</p>	1x4
Ans.		
Ans.		1x4
	Section -E	
34.	<p>List down any four asanas used for prevention of Hypertension. Explain the procedure and contraindication of any one of them with help of a stick diagram.</p> <p>Enlist any 4</p> <ol style="list-style-type: none"> 1. Tadasana 2. Katicakrasana 3. Uttanpadasana 4. Ardha Halasana 5. Sarala Matyasana 6 Gomukhasana 	1/4 x4
Ans.		

7.UttanMandukasana

8. Vakrasana

9. Bhujangasana

10. Makarasana

11. Shavasana,

12. Nadishodhanapranayam

13 Sitlpranayam

Draw any one of the following



Tadasana



Katicchakrana



Uttanpadasana



ArdhaHalasana



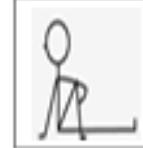
Sarala Matyasana



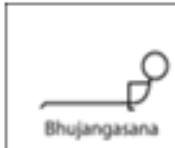
Gomukhasana



UtanMandukasana



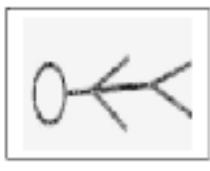
Vakrasana



Bhujangasana



Makarasana



Shavasana



Nadishodhanapranayama



Sitlpranayam

(Explanation of the procedure can be accepted in paragraph /point wise both and it should be relevant to the opted stick diagram.

Contraindications (any two) should be in relevance to the opted stick diagram)

Procedure of Tadasana (as specimen)

Stand straight on the floor/ mat.

Take a small gap between feet.

After deep inhalation, raise both the arms.

Keep arms upward by interlocking fingers.

Come on the toes by raising heels.

Feel the pressure of stretching from toes.

Try to maintain this pose along with slow and deep breathing.

Contraindications

People suffering from headaches, Low blood pressure and insomnia should avoid this asana.

People suffering from diarrhea, neck and spinal injury should avoid this asana

1

2

1

<p>35.</p> <p>Ans.</p>	<p>What is the purpose of Rikli and Jones fitness test? Explain the procedure of its any two test items in detail.</p> <p>Explanation of Purpose</p> <p>The senior citizen fitness test was developed by Rikli and Jones for the purpose of assessment of fitness of senior citizens. This test battery contains six tests which are designed mainly to assess the lower body strength, upper body strength, lower and upper body flexibility, agility and aerobic endurance.</p> <p style="text-align: center;">(Or)</p> <p>(Marks to be given-if student mention the purpose of six items)</p> <ol style="list-style-type: none"> 1. Chair stand test 2. Arm curl test 3. Chair sit and reach test 4. Back Scratch test 5. Eight foot up and go test 6. Six minute walk test <p>Explain the procedure of any two test items from the above -</p> <p>Chair Stand Test (Procedure as specimen)</p> <p><u>Procedure:</u> The chair should be placed against the wall or somewhere it gets stabilized. Initially, the individual will sit on the chair, back straight, arms crossed and feet firmly on the floor shoulder width apart. On the command "Go" the individual will stand up completely, and then return back to the initial position. This will be counted as one stand. The individual should be motivated to do maximum stands in 30 seconds.</p> <p>Maximum number of complete stands will be counted as score. If the individual is in halfway of the stand and time is over, then it will be counted as a full stand.</p>	<p>1</p> <p>2+2</p>
<p>36.</p> <p>Ans.</p>	<p>Define strength and explain any two methods to develop it.</p> <p>Strength is the ability of a muscle to exert force in single muscle contraction.</p> <p style="text-align: center;">OR</p> <p>Strength is the capacity of the whole body or any of its part to exert force.</p> <p style="text-align: center;">OR</p> <p>Strength is the force that a muscle or group of muscles can exert against a resistance in one maximum effort.</p> <p style="text-align: right;">(Or any other relevant definition)</p> <p>Methods to develop strength:</p> <p>Isometric Exercise: These exercises are not visible as there is no direct movement. Therefore, isometric exercises cannot be observed. In these exercises, work performed cannot be seen directly, like pushing a wall. There is no change in the muscle length when such exercises are done. These exercises need less time and equipment and can be performed practically anywhere and everywhere.</p> <p>Isotonic Exercise: In these exercises movements can be seen directly. Isotonic exercises result in toned muscles and increased muscle length. Examples of isotonic exercises include running and jumping on the spot, weight training exercises, and calisthenics exercises.</p> <p>Isokinetic Exercise: These exercises are performed on specially designed machines. In Isokinetic contraction, the muscles apply maximal force throughout the range of motion around the joint. Example: Brisk Walking on a Treadmill, cycling on an exercise bike etc.</p> <p style="text-align: right;">(Any 2 methods explained)</p>	<p>1</p> <p>2+2</p>

<p>37.</p> <p>Ans.</p>	<p>What is Friction? Write the advantages and disadvantages of friction by giving suitable examples from sports.</p> <p>Friction is a force acting over the area of contact between two surfaces in the direction opposite to that of motion.</p> <p style="text-align: center;">Or</p> <p>Friction is a force that acts parallel to the two surfaces.</p> <p style="text-align: center;">Or</p> <p>In other words, it is a force that resists the movement.</p> <p style="text-align: center;">Or</p> <p style="text-align: center;">(Similar kind of explanation)</p> <p><u>Advantages:</u></p> <ol style="list-style-type: none"> 1. Running and walking are the result of friction between ground and the shoes. For e.g.: An athlete uses spikes and a footballer uses studs. 2. The grip in badminton and tennis play a major role in performing a perfect shot. That is why a good grip is used for better friction. 3. The friction between the tyres and the surface prevents cyclist from slipping and skidding. Also, a cyclist uses a pointed helmet to reduce friction. 4. Gymnasts and javelin thrower used Magnesium powder to increase friction. <p><u>Disadvantages:</u></p> <ol style="list-style-type: none"> 1. If the air pressure in the cycle tyres is not appropriate, then due to excessive friction, more energy is used. 2. Flight of an object also depends on friction because air resistance slows down the speed of the projectile. 3. During pole-vault, an athlete may lose grip on the pole if less friction is there between palm and pole and may get injured. 4. Friction can cause injuries because a player slides across the ground during play. <p style="text-align: center;">(Any two advantages and disadvantages or relevant answer)</p>	<p>1</p> <p>2</p> <p>2</p>
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