

**THE VILLAGE INTERNATIONAL SCHOOL THODUPUZHA**  
**SECOND MODEL EXAMINATION 2023 – 24**

**SUBJECT: PHYSICAL EDUCATION (THEORY) (048)**

**MARKING SCHEME**

**CLASS XII**

**TIME: 3 HOURS**

**DATE:08/01/2024**

**MAX. MARKS: 70**

<b>Q. NO.</b>	<b>ANSWER</b>	<b>MARKS</b>					
<b>(SECTION - A)</b>							
1	(a) Matsyasana	1					
2	(c) (A) is true, but (R) is false	1					
3	<table border="1"> <tr> <td><b>a)</b></td> <td>2</td> <td>3</td> <td>4</td> <td>1</td> </tr> </table>	<b>a)</b>	2	3	4	1	1
<b>a)</b>	2	3	4	1			
4	(d) (A) is false, but (R) is true	1					
5	(b) Talent Identification	1					
6	<table border="1"> <tr> <td><b>d)</b></td> <td>2</td> <td>4</td> <td>1</td> <td>3</td> </tr> </table>	<b>d)</b>	2	4	1	3	1
<b>d)</b>	2	4	1	3			
7	(a) Muscle hypertrophy	1					
8	(a) First Class Lever	1					
9	(c) First	1					
10	(b) Grade I Obesity	1					
11	(d) Niacin	1					
12	(c) Half Spinal Twist Pose	1					
13	(c) Bye	1					
14	(d) Health Run	1					
15	(c) Chicago	1					
16	(a)2016	1					
17	(b)1932	1					
18	(c) Dysmenorrhea	1					
<b>(SECTION - B)</b>							
19	Increased blood supply : During exercise in order to match the demand of fuel to muscle , the supply or concentration of blood increases	1+1=2					

	<p>Increase muscle temperature: During exercise muscle temperature increases</p> <p>Increase muscle flexibility : During exercise muscle flexibility increases</p> <p>Increase in strength of tendons and ligaments.</p>					
20	<table border="1"> <thead> <tr> <th>Introvert</th> <th>Extrovert</th> </tr> </thead> <tbody> <tr> <td> <p>Interested in their own self</p> <p>Reserved</p> <p>Self-aware and introspective</p> <p>Take pleasure in reading, writing</p> <p>Tend to shy away from public</p> <p>Think before acting</p> </td> <td> <p>Highly socialized Broad-minded</p> <p>Expressive and enjoy centre of attention Meet unknown people easily</p> <p>Bold, outgoing an</p> </td> </tr> </tbody> </table>	Introvert	Extrovert	<p>Interested in their own self</p> <p>Reserved</p> <p>Self-aware and introspective</p> <p>Take pleasure in reading, writing</p> <p>Tend to shy away from public</p> <p>Think before acting</p>	<p>Highly socialized Broad-minded</p> <p>Expressive and enjoy centre of attention Meet unknown people easily</p> <p>Bold, outgoing an</p>	1+1=2
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21	<p><b>ISOTONIC:-</b>These are exercises in which movements can be seen directly. Isotonic exercises result in toned muscles and increased muscle length. These exercises hold much importance when it comes to sports. This method is considered to be the best method to develop strength.</p> <p><b>EXAMPLE:-</b> Running and jumping on the spot, weight training exercises, and calisthenics exercises.</p>	1+1=2				
22	<p>Talent identification is defined as the process by which children are encouraged to participate in the sports they are most likely to succeed , based on their parameters.</p> <p>Talent detection</p> <p>Talent identification</p> <p>Talent development</p> <p>Talent selection</p> <p>Talent transfer</p>	1+1=2				
23	<p style="text-align: center;"><b>HARWARD STEP TEST</b></p> <p>Developed by Brouha in 1943.</p> <p>Purpose: To determine aerobic fitness</p> <p>Objective : To perform step test continuously without break for 5 minute or until exhausted .</p>	1+1=2				

	<p>Equipment: Bench 20 inches and stop watch <b>OR</b></p> <p>Eggs Yogurt Cheese Milk Butter Nuts Seeds Fatty fish Meat alternatives</p>	<p>1+1=2</p>
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**(SECTION - C)**

<p>24</p>	<p>Write any three point with explanation</p> <p>(1) Physical improvement: Improvement in concentration.</p> <ul style="list-style-type: none"> <li>* Improvement in flexibility</li> <li>* Improvement in strength</li> <li>* Improvement in endurance</li> <li>* Improvement in cardiovascular efficiency</li> <li>* Decrease the Risk of obesity</li> <li>* Better over all fitness.</li> <li>* Improvement in Motor ability</li> <li>* Minimize joint swelling.</li> </ul> <p>(2) Mental improvement</p> <ul style="list-style-type: none"> <li>* Improvement in mood</li> <li>* Improvement in wellness</li> <li>* Improvement the working of nervous system.</li> <li>* Brain release endorphins that help to feel good and ease from depression anxiety.</li> </ul> <p>(3) Improved the sense of self esteem</p> <ul style="list-style-type: none"> <li>* feeling of greater self-efficiency</li> </ul> <p>(4) Sociological Gains</p> <ul style="list-style-type: none"> <li>* New experiences</li> <li>* New friendship</li> </ul> <p>www.tiwariacademy.com</p> <ul style="list-style-type: none"> <li>* feel of independence</li> <li>* countering of stigmatization</li> </ul> <p>(5) Good health</p>	<p>[1+1+1=3]</p>
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	<p>* Low risk of disease  (6) Enhance Productivity  * Improve the working efficiency</p>	
25	<p>Sports Injuries</p> <p>Soft tissue injuries</p> <p>Abrasion</p> <p>Laceration</p> <p>Incision</p> <p>Strain</p> <p>Sprain</p> <p>Hard tissue injuries</p> <p>Dislocation</p> <p>Fracture</p> <p>Greenstick</p> <p>Comminuted</p> <p>Oblique</p> <p>Transverse</p> <p>Impacted</p>	[1+1+1=3]

26	<p>➤ <b>Technical Committee:</b></p> <p>This committee covers the technical aspect of the events like requisitions to procure sports equipment, conducting matches on time through selected officials (referees, umpires, judges, timekeepers etc.) for their respective games/sports.</p> <p><b>Pre-sports event/ tournament:</b> Before the event, it is the job of the Technical Committee to put forward a requisition to purchase equipment, invitation and confirmation from officials to conduct sports event, cleaning and layout of the fields, arrangement of equipment and stationery, preparation of fixtures, rules and regulation of the sports event.</p> <p><b>During sports event/ tournament:</b> While the tournament is in progress, the Technical Committee is responsible for conducting matches, presence of the jury, cleaning and layout of the fields, collection of score sheets and other related papers from officials, preparation of merit list, etc.</p> <p><b>Post sports event/ tournament:</b> After the event is over, the Technical Committee arranges for the cleaning and layout of the fields, maintenance of the field, and placing of all equipment back to store.</p>	[1 ½ +1 ½ =3]

	<p>➤ <b>Finance Committee:</b></p> <p>The role of the Finance Committee is primarily to provide financial oversight for the event. It is involved in all aspects related to the finances of the sports event like planning, accounting, decision-making etc. Finalization of sponsorship, keeping an eye on inflow and outflow of finances, purchase of equipment and other items required for conducting the event, settling payments of officials are key areas of focus of the committee. It is the backbone of the sports tournament. It pitches to different companies and attracts them for sponsorships for the event.</p> <p><b>Pre sports event/ tournament:</b> Before the event, It is the responsibility of Finance Committee to prepare the budget, to purchase sports equipment, stationery, medals, certificates, and other requirements as desired by the other committees, as well as preparing and finalizing the MoU with sponsors.</p> <p><b>During sports event/ tournament:</b> During the course of the event, the Finance Committee keeps a check on the outflow and inflow of finances including payment and remuneration to officials.</p> <p><b>Post sports event/ tournament:</b> Once the event is over, the Finance Committee examines all records related to settlement of the bills and accounts, and prepares the financial report.</p>	
27	<p>According to first law , a body will remain at rest or continue to move at a constant velocity unless acted upon by an external force . If you slide a hockey puck on ice , eventually it will stop because of friction on the ice</p> <p>According to the second law the rate of change of momentum is proportional to the resultant force . When a ball is thrown kicked or struck with an implement, it tends to travel in the direction of the line of action of the applied force</p> <p>According to third law there is an equal and opposite reaction to every action. In swimming a diver needs to push down on the spring back when he / she dives off a diving board.</p>	[1 ½ +1 ½ =3]

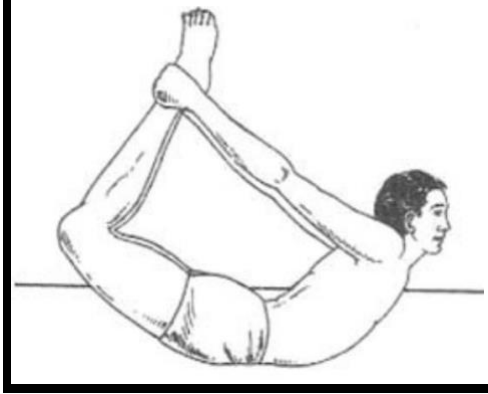
28	<p>➤ <b>Genu valgum:</b></p> <p style="text-align: center;"><b>CAUSES:</b></p> <p>Genu valgum can also develop due to an injury or infection in the knee or leg, rickets, severe lack of vitamin D and calcium, obesity, or arthritis in the knee.</p> <p>It negatively effects walking and running and impedes other legs movement which hinder performance. In case Genu valgum persists beyond childhood, it may have other symptoms besides misaligned knees. They include stiff joints, knee pain and walking with a limp. Stressed ligaments and muscles can also cause pain in the hips, ankles, or feet. If only one knee is out of line, the stance may be unbalanced.</p> <p style="text-align: center;"><b>CORRECTIVE MEASURES:</b></p> <p>Treatment for Genu valgum largely depends on the cause and severity of the problem. Exercises like horse-riding and keeping the pillow between the knees and standing erect for some time are the best. For most people with Genu valgum, Yoga and exercise can help realign and stabilize the knees. Performing padmasana and gomukhasana regularly can help strengthen muscles of the legs and realign the knees. Strengthening exercises can be simple, such as leg raises while seated or lying down. Using of walking callipers is also a big help at pre-puberty stage.</p> <p>Excessive body weight can be a contributing factor to Genu valgum as extra weight puts additional strain on the legs and knees, and this can cause knock-knees to worsen. A person who is overweight should lose weight through a combination of diet and exercise.</p> <p>➤ <b>Flat Foot:</b></p> <p style="text-align: center;"><b>CAUSES</b></p> <p>This problem may be genetic or environmental. At times a foot or ankle injury, obesity, wearing improper shoes (tight shoes, high heels etc.), carrying heavy weight for long time, arthritis or rheumatoid may cause flat feet. It may be caused by a baby being forced to walk in an early stage, or it may be age related. Another condition that might cause flat feet is tarsal coalition. This condition causes the bones of the foot to fuse together unusually, resulting in stiff and flat feet. Tightness in calf muscles may lead to temporary flat feet.</p> <p style="text-align: center;"><b>CORRECTIVE MEASURES</b></p> <p>Exercises like walking, standing or jumping on toes and heels in all four directions, skipping rope, strengthens the muscles of foot which help to develop the arch in the foot. Activities like picking up marbles with toes, writing numbers in the sand with the toes will also help in developing the arch. Yoga asanas like Adhomukhsavasana performed in Surya Namaskar, Vajrasana and other therapeutic massages are also helpful in developing the arch.</p>	[1+1+1=3]

	<p>➤ <b>Bow Legs:</b></p> <p style="text-align: center;"><b>CAUSES</b></p> <p>It may be caused due to lack of Vitamin D, Phosphorus and Calcium and can be easily cured at an early stage. The condition doesn't cause pain or discomfort and is rarely serious. It does not affect running, standing, crawling etc. Bow legs is a condition that usually goes away without treatment, often by the time a child is 3–4 years old and does not affect a child's ability to crawl, walk, or run.</p> <p style="text-align: center;"><b>CORRECTIVE MEASURES</b></p> <p>Use of braces and modified shoes can be along with sufficient intake of balanced diet can prove to be of help. Walking on the inner edge of the feet may also help.</p> <p style="text-align: center;"><b>OR</b></p> <ul style="list-style-type: none"> <li>● <b>Increased Heart Rate</b></li> <li>● <b>Increased Blood Circulation</b></li> <li>● <b>Increased Stroke Volume</b></li> <li>● <b>Increased Cardiac Output (Any three)</b></li> </ul>	[1+1+1=3]
<b>(SECTION - D)</b>		
29	<p>(a) Knock Out Tournament OR Elimination Tournaments</p> <p>(b) 3</p> <p>(c) 06</p> <p>(d) 29</p> <p style="text-align: center;"><b>OR</b></p> <p>(d)15</p>	[1+1+1+1=4]
30	<p>(a) Biomechanics</p> <p>(b) Third</p> <p>(c) Mass</p> <p>(d) Velocity</p> <p style="text-align: center;"><b>OR</b></p> <p>(d) Lesser Displacement</p>	[1+1+1+1=4]
31	<p>(a) Chicago</p> <p>(b) 1988</p> <p>(c) Zurab Tsereteli</p> <p>(d) Eunice Kennedy Shriver</p>	[1+1+1+1=4]



(SECTION - E)

32



[1+2+2=5]

➤ **Technique**

1. Take prone position, legs together, and hands straight by the side of the thighs, chin resting on the ground.
2. Fold the legs at the knee and bring them to the thighs. Knees must remain together.
3. Bring your hands backward and hold the toes of respective legs with the thumb and forefinger of the respective hands.
4. Raise your legs up a bit and simultaneously raise your head and chest.
5. Holding the toes, pull the legs towards your ears and bring the toes near the ear. Gaze in front.
6. While returning to the original position loosen your hands, take legs backward, let the thighs touch the ground, leave the toes and ultimately bring the legs and hand to the first position.

➤ **Breathing awareness**

Inhale deeply in the starting position. Retain breath inside while coming into the final position; Breathe slowly and deeply. Exhale while returning to the starting position.

➤ **Contraindications**

1. A person suffering from high blood pressure, back pain, hernia, headache, migraine or abdomen surgery should not practice dhanurasana.
2. Ladies should not practice this asana during pregnancy and during periods.

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➤ **BODY MASS INDEX (BMI)**

[1+1+1+1+1=5]

***Measuring Height Accurately***

Remove the participant's shoes, bulky clothing, and hair ornaments, and unbraided hair that interferes with the measurement. Take the height measurement on flooring that is not carpeted and against a flat surface such

as a wall with no moulding. Have the participant stand with feet flat, together, and back against the wall. Make sure legs are straight, arms are at sides, and shoulders are level. Make sure the participant is looking straight ahead and that the line of sight is parallel with the floor. Take the measurement while the participant stands with head, shoulders, buttocks, and heels touching the flat surface (wall). Depending on the overall body shape of the participant, all points may not touch the wall. Use a flat headpiece to form a right angle with the wall and lower the headpiece until it firmly touches the crown of the head. Make sure the measurer's eyes are at the same level as the headpiece. Lightly mark where the bottom of the headpiece meets the wall. Then, use a metal tape to measure from the base on the floor to the marked measurement on the wall to get the height measurement. Accurately record the height to the nearest 0.1 centimeter.

### **Measuring Weight Accurately**

Use a digital scale. Avoid using bathroom scales that are spring loaded.

Place the scale on firm flooring (such as tile or wood) rather than carpet.

Have the participant remove shoes and heavy clothing, such as sweaters.

Have the participant stand with both feet in the center of the scale. Record the weight to the nearest decimal fraction (for example, 25.1 kilograms).

#### **➤ ABDOMINAL (PARTIAL CURL-UP)**

The subject lies on a cushioned, flat, clean surface with knees flexed, usually at 90 degrees, with hands straight on the sides (palms facing downwards) closer to the ground, parallel to the body. The subject raises the trunk in a smooth motion, keeping the arms in position, curling up the desired amount (at least 6 inches above/along the ground towards the parallel strip). The trunk is lowered back to the floor so that the shoulder blades or upper back touch the floor.

#### **➤ PUSH UPS (BOYS)/MODIFIED PUSH UPS (GIRLS)**

Standard push up begins with the hands and toes touching the floor, the body and legs in a straight line, feet slightly apart, the arms at shoulder width apart, extended and at a right angles to the body. Keeping the back and knees straight, the subject lowers the body to a predetermined point, to touch some other object, or until there is a 90-degree angle at the elbows, then returns back to the starting position with the arms extended. This action is repeated, and the test continues until exhaustion, or until they can do no more in rhythm or have reached the target number of push-ups. For Girls: push-up technique is with the knees resting on the ground.

#### **➤ SIT AND REACH**

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

	<p>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.</p> <p>➤ <b>600 MTR RUN/WALK</b></p> <p>Participants are instructed to run 600 mts. at the fastest possible pace. The participants begin on signal, “ready, start”. As they cross the finish line, the elapsed time should be announced to the participants. Walking is permitted but the objective is to cover the distance in the shortest possible time.</p> <p>➤ <b>50 MTR DASH (STANDING START)</b></p> <p>A thorough warm up should be given, including some practice starts and accelerations. Start from a stationary position, with one foot in front of the other. The front foot must be on or behind the starting line. This starting position should be static (dead start). The tester should provide hints for maximizing speed (such as keeping low, driving hard with the arms and legs) and encouraged to continue running hard through the finish line.</p>	
34.	<ol style="list-style-type: none"> <li>1. Gravity</li> <li>2. Air resistance</li> <li>3. Speed of release</li> <li>4. Angle of release</li> <li>5. Height of release</li> <li>6. Spin                                   <b>(Any Five)</b></li> </ol> <p style="text-align: center;"><b>OR</b></p> <p>Bye is a privilege given to a team by drawing lots exempting it from playing a match in the first round. While drawing the fixture for teams competing if the number of teams is power of two i.e. 2,4, 8 ,16, 32 in that case Bye shall not be given.</p> <p>First Bye shall be awarded to last team of the lower half. IInd bye to the Is team of upper half. IIIrd bye to the upper most team of lower half. IVth bye to the lower most team of upper half. The rest are awarded in the same order.</p> <p>Draw the fixtures</p>	<p>[1+1+1+1+1=5]</p> <p>[1+1+3=5]</p>

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