

13

GYMNASTICS



HISTORY

Gymnastics is a physical sport that developed in ancient Greece as a method to prepare men for war. It derives its name from the Greek adjective ‘*gymnos*’, meaning ‘naked’ or ‘bare’. This is related to the verb ‘*gymnazo*’, which can be roughly translated as ‘to train naked’. This is because, in ancient Greece, athletes exercised and competed without clothing. As a form of disciplinary exercise, it used to include jumping, wrestling, lifting, running, swimming, among others. Both men and women participated vigorously in gymnastics, as physical and mental fitness was regarded highly in society. After the Romans conquered Greece, they developed the activities into a more rigid sport. Today, gymnastics continues to fascinate us with its intensity and aesthetics. It focuses on the individual’s balance, strength, flexibility, coordination, endurance and control.

In the late eighteenth and early nineteenth century Germany, two physical educators Johann Friedrich GutsMuths (1759–1839) and Friedrich Ludwig Jahn (1778–1852), created exercises for boys and young men on apparatus they had designed, which ultimately resulted in modern gymnastics. The International Federation of Gymnastics (FIG), based in Lausanne, Switzerland, governs most competitive events and was established in the year 1881.

Men’s gymnastics competition was included in the first modern Olympic Games in 1896. Women’s gymnastics was added in the 1928 Amsterdam Olympics. Popularity for the sport increased after the performances of Olga Korbut and Nadia Comaneci in the Olympics of 1972 and 1976 received widespread television coverage. The Gymnastics Federation of India was founded in 1951 and regulates the progress and development of this particular sport in India.

Figure 13.1 Gymnastics combines acrobatics and coordination in an artistic manner.



PLAYING FIELD AND EQUIPMENT

The dimensions of playing field and equipment required are discussed below.

Equipment for Men

Floor Area: 12 m × 12 m

Parallel Bars: length = 3500 mm; distance between bars (adjustable) = 420 mm – 520 mm; height of the bar from the floor = 1750 mm (Fig. 13.2).

Horizontal Bar: diameter = 28 mm; length = 2400 mm; height of the bar = 2550–2700 mm, diameter of

uprights = 50–60 mm, diameter of tension wire = 5–6 mm (Fig. 13.3).

Pommel Horse: length = 1600 mm; height = 1350 mm; adjustable steps in the intervals = 50 mm, run up area = 3.5 m (Fig. 13.4).

Vaulting Table: length = 1200 mm; height = 1250–1350 mm, (Fig. 13.5).

Roman Rings: diameter of the grip = 28 mm; height of stand from the floor = 5500 mm; length of leather straps = 700 mm; width = 35 mm; inside diameter of the ring = 180 mm; height of lower inner side of the rings from the floor = 2500 mm (Fig. 13.6).

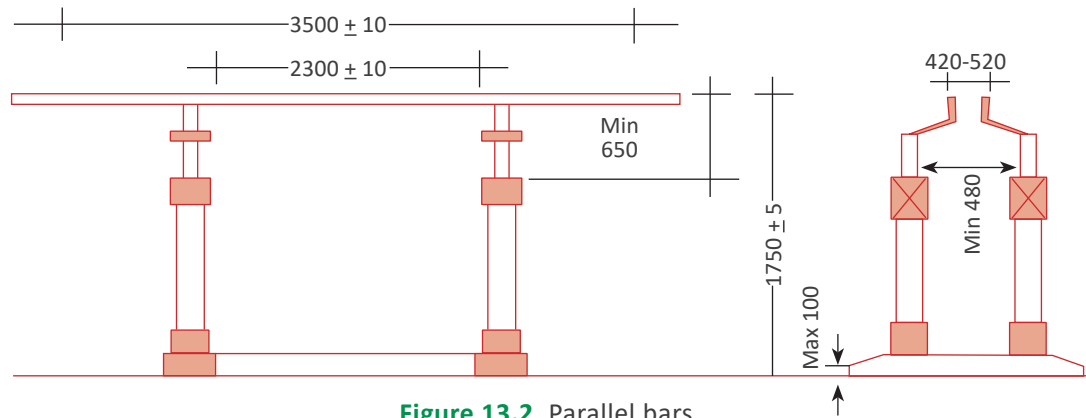


Figure 13.2 Parallel bars

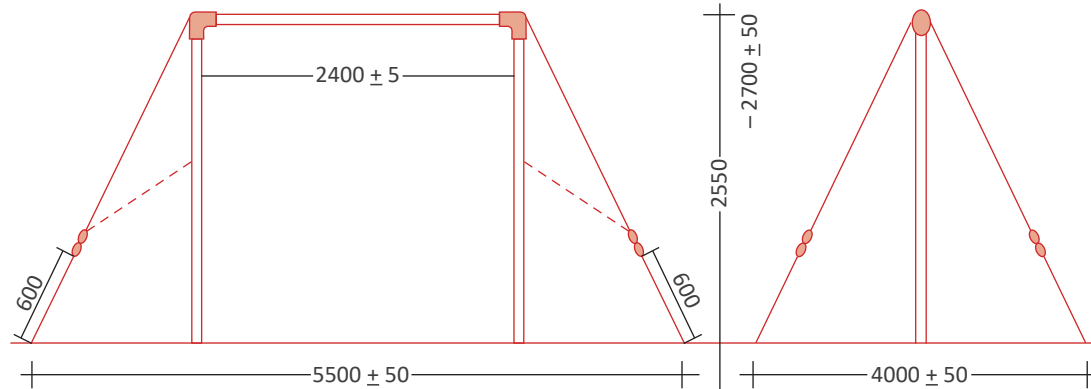


Figure 13.3 Horizontal bars

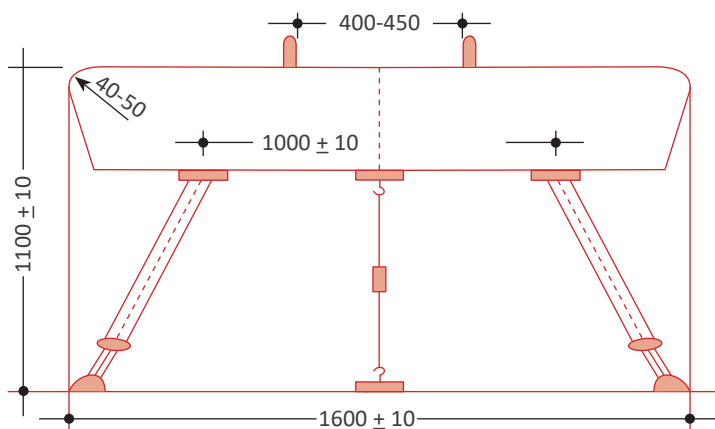


Figure 13.4 Pommel horse

In international and many national gymnastic events, you will see the modern vaulting table, i.e. vault.

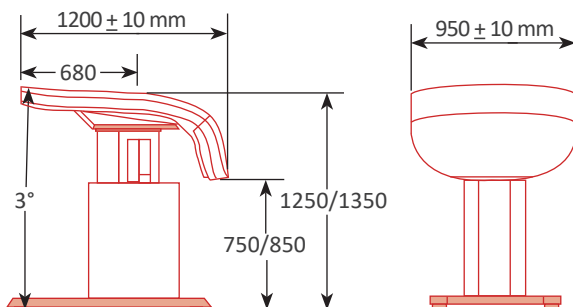


Figure 13.5 Vaulting table

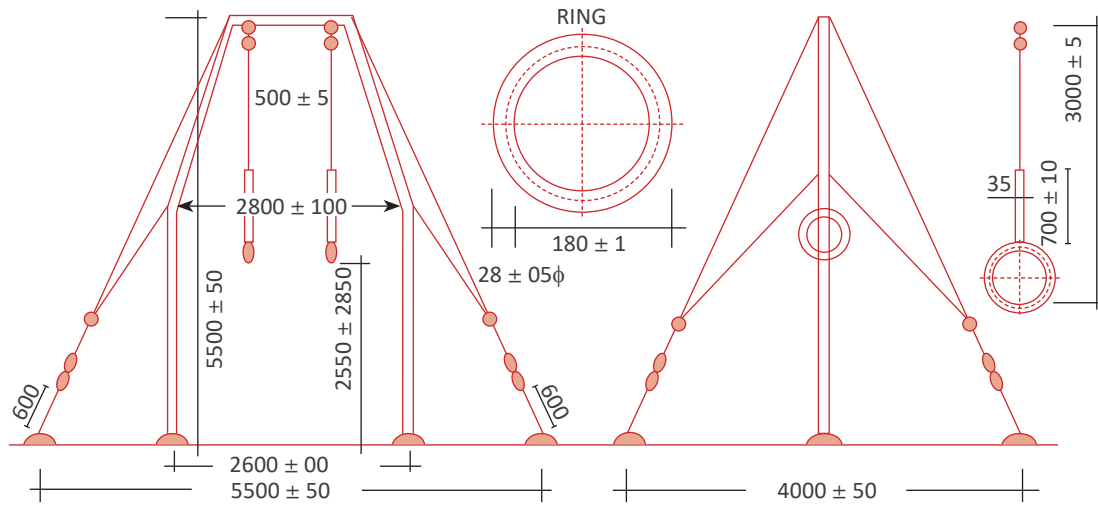


Figure 13.6 Roman rings

Equipment for Women

Floor: 12 m × 12 m

Vaulting Table: length = 1600 mm; height = 1250 mm; run up area = 3.5 m, adjustable steps in the intervals = 100–150 mm.

Beam: length of the beam = 5000 mm; width = 100 mm;

height = 1200 mm, adjustable between = 700–1200 mm (Fig. 13.7).

Uneven Bars or Uneven Parallel Bars: length of the uneven bars = 2400 mm; height of upper bar = 2300 mm; height of lower bar = 1500 mm; distance between the two bars (adjustable) = 580–900 mm; diameter of bar = 50–60 mm (Fig. 13.8).

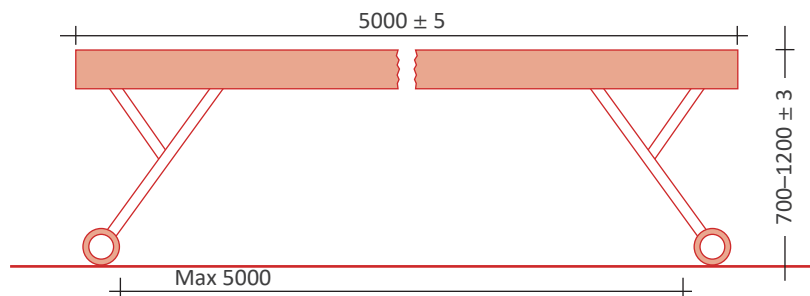


Figure 13.7 Beam (Balancing beam)

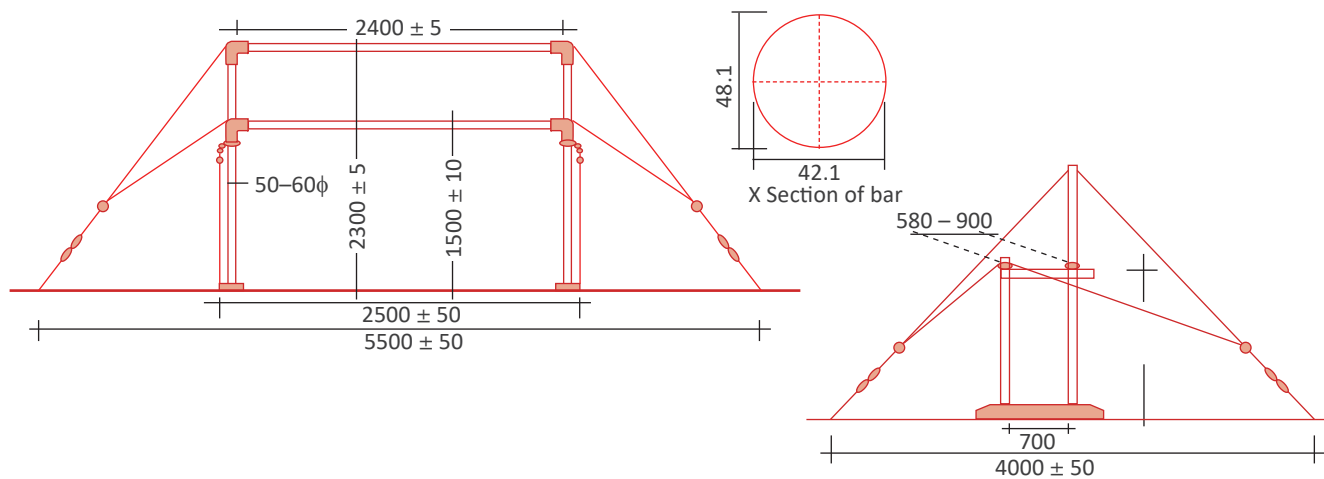


Figure 13.8 Uneven bars

RULES OF THE GAME

1. Men compete in six artistic events: Still rings, parallel bars, horizontal bar, pommel horse, vault and floor exercises.
2. Women compete in four artistic events: vault, uneven bars, beam and floor exercises.
3. Gymnasts present themselves to the judges before and after the performance. They begin their exercise when the signal is given to do so. If they fall during the exercise, they are allowed 30 seconds to remount and continue their routine.
4. A gymnast's final score is a combination of two levels of scoring: The D-score (Difficulty scoring) and the E-score (Execution scoring). The D-score evaluates the performance using three criteria: the Difficulty Value (DV), Composition Requirements (CR) and Connection Value (CV). E-score is technically meant to be awarded on a scale of 1 to 10, 10 being the perfect score. But rather than adding up points, deductions are made for technical errors like faults, crooked legs, etc.
5. In artistic gymnastics, there are two panels of judges: a D-score panel of two and an E-score panel of five. Though scoring is subjective, the judges are provided guidelines to assist them for the sake of fairness. The highest and lowest scores are dropped in order to have a more objective evaluation.
6. Gymnastics combines strength, dexterity, acrobatics, body control and coordination in an artistic and graceful manner. Points are scored on the basis of mastery over these skills.



Figure 13.9 Judges must analyse and optimise the skills and performance of the gymnast.

FUNDAMENTAL SKILLS OF GYMNASTICS

Every sport requires some basic skills to perform it properly. Some fundamental skills for men's and women's events of gymnastics have been discussed below.

Men's Events

Floor Exercises:

1. Forward roll to handstand
2. Backward roll to handstand
3. Forward roll to handspring
4. Handspring to dive roll
5. Round off flick flack
6. One leg handspring
7. Handstand to forward roll with straight legs

Vaulting Table:

1. Straddle vault
2. Squat vault
3. Cartwheel
4. Handstand with cartwheel
5. Handspring

Parallel Bars:

1. Upstart
2. Front uprise
3. Shoulder stand
4. Handstand
5. Handstand with 180° turn
6. Handstand to front turn on the shoulder
7. Backward roll
8. Handstand to cartwheel

Horizontal Bar:

1. Upstart with over grip
2. Upstart with under grip
3. Short circle
4. One leg circle with heel foot
5. Heel foot
6. Swing with through vault

Pommel Horse:

1. Front support position
2. Single leg half circle
3. Double leg circles
4. Front scissors

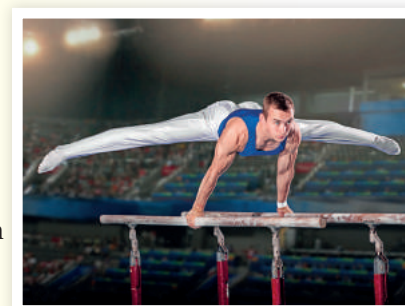


Figure 13.10 Parallel bars

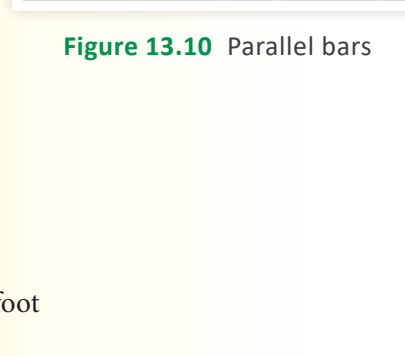


Figure 13.11 Pommel horse





Figure 13.12 Roman rings

Roman Rings:

1. Up start
2. Back circle to back hang
3. Muscle up
4. Back lever
5. Back uprise
6. Dislocation
7. Back uprise with L-position

Women's Events

Floor Exercises:

1. Forward roll to handstand
2. Backward roll to handstand
3. Round off
4. Slow back handspring
5. Split sitting
6. Slow handspring
7. Handspring
8. Headspring



Figure 13.13 Floor exercise

Vaulting Table:

1. Split vault
2. Handspring

Beam:

1. Gallop step with balance
2. Scissor jump
3. Forward roll
4. Backward roll
5. Cartwheel
6. Bridge
7. Balance
8. Dismount



Figure 13.14 Uneven bars

Uneven Bars:

1. Swing on upper bar
2. Back uprise
3. One leg forward circle
4. One leg backward circle
5. Cross balance
6. Handspring

TERMINOLOGY

Apparatus: The name given to the specific equipment used for gymnastics exercises. For example: bars, vaulting tables, Roman rings, etc.

Balance Beam: A wooden horizontal bar used by women gymnasts.

Dismount: The movement performed at the end of the routine, when the gymnast leaves the apparatus and returns to the floor.

Flank: The movement in which the body passes over the apparatus with the hips extended, one pointed towards the apparatus.

Mount: The movement that initiates the routine on an apparatus.

Springboard: A wooden board specially made to give the force required for vaulting and occasionally on parallel bars, balance beam and uneven bars.

Turn: The movement of the body about an axis through the length of the body.

Vault: The movement made to pass over an apparatus by touching it with a part of the body.

IMPORTANT TOURNAMENTS, PERSONALITIES AND AWARDS

Important Tournaments

Summer Olympic Games, World Artistic Gymnastics Championship, Artistic Gymnastics World Cup, Asian Games, Commonwealth Games, National Championship, All India Inter University Gymnastics Championship, Federation Cup, Olympic Games.

International Personalities

Simone Biles (USA), Kohei Uchimura (Japan), George Eyser (Germany), Viktor Chukarin (USSR), Sawao Kato (Japan), Nadia Comaneci (Romania), Larisa Latynina (USSR), Olga Korbut (USSR).

Arjuna Award Winners

- 1961 — Shyam Lal
- 1975 — Montu Debnath
- 1985 — Km Sunita Sharma
- 1989 — Km Krupali Patel
- 2000 — Kalpana Debnath
- 2011 — Ashish Kumar
- 2015 — Dipa Karmakar

Rajiv Gandhi Khel Ratna Award Winner

- 2016 — Dipa Karmakar

Dronacharya Award Winners

- 2011 — Devender Kumar Rathore
- 2016 — Bishweshwar Nandi



SUMMARY

1. Gymnastics is a physical sport that focuses on the individual's strength, flexibility, balance, coordination, endurance and control. It was developed by the ancient Greeks.
2. Men compete in six artistic events and women in four.
3. The judges give scores on two levels: D-score for difficulty and E-score for execution. The two scores are combined to give the final score.
4. The six events for men are still rings, parallel bars, horizontal bar, pommel horse, vault and floor exercises.
5. The four events for women are vault, uneven bars, beam and floor exercises.



QUESTIONS AND ANSWERS FOR VIVA

1. **What is the origin of the word gymnastics?**
Ans. The word gymnastics comes from the word gymnos which means to train naked.
2. **Which two physical educators are responsible for the development of modern gymnastics? What was their contribution?**
Ans. Johann Friedrich GutsMuths and Friedrich Ludwig Jahn were two German physical educators who designed apparatus for boys and young men to exercise on. The introduction of their method eventually led to modern gymnastics.
3. **When did women gymnasts begin participating in the Olympics?**
Ans. Women gymnasts began participating in the Olympics at the 1928 Amsterdam edition.
4. **When was Gymnastics Federation of India founded?**
Ans. Gymnastics Federation of India was founded in 1951.
5. **What are the six artistic events for men in gymnastics?**
Ans. The six artistic events for men in gymnastics are still rings, parallel bars, horizontal bar, pommel horse, vault and floor exercises.
6. **What are the four artistic events for women in gymnastics?**
Ans. The four artistic events for women in gymnastics are vault, uneven bars, beam and floor exercises.
7. **What are the two levels of scoring in gymnastics?**
Ans. The two levels of scoring in gymnastics are D-score for difficulty and E-score for execution.
8. **What are the common exercises performed by men and women in gymnastics?**
Ans. Both men and women participate in vault and floor exercises in gymnastics.
9. **What is the dimension of the floor area in gymnastics?**
Ans. The dimension of the floor area in gymnastics is 12 m × 12 m.
10. **Give three examples of floor exercises performed by men in gymnastics.**
Ans. Round off flick flack, one leg headspring and forward roll to handstand are three examples of floor exercises performed by men in gymnastics.
11. **Which apparatus is used for performing cartwheels and squat vault by men in gymnastics?**
Ans. The vault is used by men in gymnastics to perform cartwheels and squat vaults.
12. **Which two exercises are used by women gymnasts on the vault?**
Ans. Split vault and handspring are used by women gymnasts on the vault.