Course Material for Certificate Course
ATHLETICS- OFFICIATING IN TRACK & FIELD

1. **Objectives:**
   1. Marking and Calculation of Track and Field
   2. To teach and assist in officiating in athletic events/athletic meets.
   3. To provide teaching, learning and training of athletics events
   4. To explore the ways of motivating other person to do this course
   5. To learn to design, implement, and modify training programme based on individual needs of athletics.
2. **Out comes / Scope of the Course**

   After the successful completion of the certificate course, the candidates will be able to:
   - To understand, how to do calculate for the marking of track and field
   - To know the duties and responsibilities of technical official in athletics.
   - Practical knowledge as technical official in athletics leading to an efficient technical official of athletics.
   - Strategically implement the right training programme for athletes based on their aims-objectives, goal, priorities, exercise components, modifications, and program evaluation.
3. **Eligibility- preference wise**

   (i) A graduate in physical education having completed a three year degree course in physical education and sports sciences B.Sc./B.P.E/B.P.Ed from a recognized university. Or

   (ii) A graduate degree in any subjects from a recognized university with evidence of participation in sports. Or

   (iii) A 10+2 senior secondary course with certificate in physical education / certificate recognized institution/university or NIS certificate/diploma.
4. **Teaching methods**
   - Course Materials- Textbooks, Journals & Periodicals.
   - Instruction Method- Lecture, Group Discussions, Demonstrations, Laboratory, & Field Practical.
5. **Course Evaluation**

   The students will be assigned class activities (both in and out of the class) by the course instructors to evaluate their knowledge and abilities. The course instructors will choose from the following options for evaluation of the students:
   - Written Exam/Tests.
   - Oral Presentations.
   - Group Project work.
   - Written Assignments.
   - Practical skill tests.
   - Attendance.
6. **Course Grading**

   The final grading of the students will be determined by the following grading system:* (Marks in percentage)
   - 100-90 marks - A
   - 89-80 marks –B
   - 79-70 marks – C
   - 69-60 marks –D
   - 59 marks or Below – FAIL

Note*- Subject to Approval by the Appropriate Competent Authority.

Certificate Course in Athletics (Officiating in Track & Field)

(i) Specific Aim of the course:- This course aims to enable the candidates in the fundamentals of theory and practice in officiating and marking procedures in all Track & Field events in Athletics with emphasis on the following:-

- Calculation and marking of standard tracks- calculate and marking of the radius, straights, staggers distance, curve distance. ,
- To know the functions of technical official and officiating in Athletics
- To understand the learning and practicing of the different technical procedure for officials-general and for different events.
- To become eligible to work as technical official in track and field

(ii) Course Contents-Theory (40 Hrs.)

- Introduction to Track and Field events of Athletics formulae of calculation of the 200m. and 400m Tracks- calculation of various distances- diagonal distance radius, straight distance, staggers of different lanes, curve distance.
- Guidelines for marking of the 200m and 400m Tracks in theory and practical in field
- Duties and Responsibilities of various technical officials- Jury of Appeal, Director of Meet, technical Manager, technical delegates, Referees for track events / field events / combined events and events held out side the Stadium (marathon and race walking)
- Duties and responsibilities of official at track events such as- chief time keeper, time keeper, chief judge at finish, judges at finish, track empires, relay empires, hurdles/steeple chase race empires.
- Judges at photo-finish apparatus and their functions.
- Duties and responsibilities of officials for field events- chief judges at jumping events, judges at jumping events.
- Duties and responsibilities of officials for field events- chief judges at throwing events, judges at throwing events.
- Duties and responsibilities of officials for road running-cross-country and marathon.
- Duties and responsibilities of officials for race walking.
- Duties and responsibilities of officials for combined events- heptathlon and decathlon.
- Details of different championships and meets of athletics / track and field.

(iii) Practical-

- Practical for marking the track and field. Illustration and demonstrative marking of a 200m and a 400m track.
- Practical demonstration of officiating teaching-learning of track events.
- Practical demonstration of officiating teaching-learning of jumps events.
- Practical demonstration of officiating teaching-learning of throws events.
- Practical demonstration of officiating teaching-learning of combined events.
- Practical officiating teaching-learning of road running events.

MARKING / CONSTRUCTION OF 400m TRACKS (Distance in meters)

Construction radius of curve (including the raised kerb on inside of track	**36.500**
Radius of measurement line (line of running) in lane 1 (0.30m outside raised kerb)	**36.800**
Length of each straight section	**84.390**
Length of each bend on construction line (kerb line)	**114.668**
Length of each bend along line of running	**115.611**
Length of track on construction line (kerb line)	**398.116**
Length of track along line of running	**400.001**
Width of lanes (including 0.05m on outside)	**1.220**
Length of Steeplechase lap along line of running where the water jump is inside the 400m track	**396.084**
With the exception of lane 1, all lanes are measured 0.20m out from the outer edge of the inner line.	
All race distances are measured in a clockwise direction from the edge of the finish line nearer to the start to the edge of the appropriate line farther from the finish.	
Marking of start, relay and hurdle positions: With measuring tape on straights only; with theodolite on the bends according to the centre angles of the nominal arc segments.	
Marking with measuring tape on bends only as a backup method: E.g. checking, correcting and supplementing. In each lane, always measure from the start (A,C) or end (B,D) of the arc.	

LANE STAGGERS IN M, MEASUREMENT LINE DISTANCE 0.20M FROM LANE LINE

(WIDTH OF LANES 1.22)

Dist. of line of Running	No.of Bend	Lane-2	Lane-3	Lane-4	Lane-5	Lane-6	Lane-7	Lane-8
200m	1	3.519	7.352	11.185	15.017	18.850	22.683	26.516
400m	2	7.038	14.714	22.370	30.034	37.700	45.366	53.032
800m	1	3.526	7.384	11.260	15.151	19.061	22.989	26.833
4X400m	3	10.564	22.088	33.630	45.185	56.761	68.355	79.965

- The inner edge of the track is 398.116m in length (36.50m x 2 x π + 84.39m x 2) where π = 3.1416.
- This length for the inner edge gives a length of 400.001m (36.8m x 2 x π +84.39m x 2) for the theoretical line of running (measurement line) at a distance of 0.30m from the kerb.
- A or D and CP2/M2 - B or C or diagonal distance= 91.945m
- **Rectangular Interior- Width** 73.00 /80.000/ 72.00 /69.740 and **Length** 84.39/ 79.996 /98.52/ 97.256
- Straight with at least 6 lanes (100m + 0.02m x 1.22m ± 0.01m for sprints and 110m + 0.02m x 1.22m ± 0.01m for hurdles) starting area: 3m min.

ADDITIONAL USE TRACK

It is normal for an athletics track to be used for other sports. Generally, this involves using the interior of the 400m tracks as a pitch for soccer, American football or rugby. Obstacle-free sports areas in the segments at the same level as the playing field without kerbs over which sportsmen could stumble can be included in the safety zones.

TRACK AND FIELD FACILITIES MANUAL

In order to comply with modern standards of construction, the International Association of Athletics Federations decided to publish this "Track and Field Facilities Manual" in addition to the IAAF Competition Rules. The manual contains detailed and more clearly defined specifications for the planning and construction of Track and Field facilities than those contained in the IAAF Competition Rules. The aim is to pay greater attention to technical and performance requirements of Track and Field facilities.

MARKING / CONSTRUCTION OF 200m TRACKS (Distance in meters)

Construction radius of curve (including the raised kerb on inside of track	**17.200**
Radius of measurement line (line of running) in lane 1 (0.30m outside raised kerb)	**17.496**
Inclination angle of banking	**10.00^{0}**
Distance between centres of constant banked bends	**44.990**
Length of each straight section	**35.688**
Length of each ascending / descending section on construction line (kerb line)	**19.750**
Length of each ascending / descending section along line of running	**20.012**
Length of each quarter of constant banked bend on construction line (kerb line)	**11.939**
Length of each quarter of constant banked bend along line of running	**12.144**
Length of track on construction line (kerb line)	**198.132**
Length of track along line of running	**200.000**
Width of lanes - oval (including 0.05m on outside)	**0.900**
Width of lanes - infield straight (including 0.05m on the right side)	**1.220**
With the exception of lane 1, all lanes are measured 0.20m out from the outer edge of the inner line.	
All race distances are measured in a clockwise direction from the edge of the finish line nearer to the start to the edge of the appropriate line farther from the finish.	
Marking of start, relay and hurdle positions: With measuring tape on straights and, ascending & descending parts of the track only; with theodolite on the constant inclination bends according to the centre angles of the nominal arc segments.	
Marking with measuring tape on bends only as a backup method: E.g. checking, correcting and supplementing. In each lane, always measure from the start (A,C) or end (B,D) of the arc.	

Lane Staggers Measurement Line Distance 0.20m from Lane Line
(Width of Lanes 0.90m)

Dist. of line of running	No. of Bend	Lane-2	Lane-3	Lane-4	Lane-5	Lane-6
200m	2	4.983	10.589	16.198	21.809	27.423
400m,4X400	1	4.992	10.630	16.293	21.981	27.695
800m	1	2.500	5.335	8.194	11.077	13.984
4X200m	3	7.483	15.924	24.392	32.885	41.406

GENERAL RULES TRACK AND FIELD EVENTS

The field events of four throwing events are Shot Put, Discus Throw, Javelin Throw and Hammer Throw and Four Jumping Events - Long Jump, Triple Jump, High Jump and Pole Vault known as field events in athletics.

At the competition area and before the beginning of the event, each athlete may have two practice trials. In the case of long and triple jumps and throwing events, the practice trials will be in draw order and always under the supervision of the Judges. Once a competition has begun, athletes are not permitted to use for practice purposes, as seems appropriate as per the rule-

(a) the runway or take-off area, (b) implements, (c) the circles or the ground within the sector with or without implements.

Markers- (a) In all field events where a runway is used, markers shall be placed alongside it, except for High Jump where the markers can be placed on the runway. An athlete may use one or two markers (supplied or approved by the Organising Committee) to assist him in his run-up and take-off. If such markers are not supplied, he may use adhesive tape but not chalk or similar substance nor anything which leaves indelible marks.

(b) For throws made from a circle, an athlete may use one marker only. This marker may be placed only on the ground in the area immediately behind or adjacent to the circle. It must be temporary, in position only for the duration of each athlete's own trial, and shall not impair the view of the judges. No personal markers (other than those under Rule 187.21) may be placed in or beside the landing area.

Competing Order- The athletes shall compete in an order drawn by lot. If there is a qualifying round, there shall be a fresh drawing of lot for the final

Trials- In all Field Events, except for the High Jump and Pole Vault, where there are more than eight athletes, each athlete shall be allowed three trials and the eight athletes with the best valid performances shall be allowed three additional trials. Except for the High Jump and Pole Vault, no athlete shall have more than one trial recorded in any one round of the competition.

Where there are eight athletes or fewer, each athlete shall be allowed six trials. If more than one fails to achieve a valid trial during the first three rounds, such athletes shall compete in subsequent rounds before those with valid trials, in the same relative order according to the original draw.

Reverse Order- (a) the competing order for the fourth and fifth rounds shall be in the reverse ranking order recorded after the first three rounds. The competing order for the final round shall be in the reverse ranking order recorded after the fifth round.

(b) When the competing order is to be changed and there is a tie for any position, those tying shall compete in the same relative order according to the original draw.

In competitions under rules the competing order for the last three rounds may be in the reverse order of the ranking recorded after the first three trials. In all International Competitions, except the World Championships (Outdoor, Indoor, Junior, and Youth) and Olympic Games, the number of trials in the horizontal Field Events may be reduced. This shall be decided by the National or International body having the control over the competition. Except in competitions held under rules the organisers may determine that Vertical Jump competitions be held in a different format to that provided under this rule, including limiting the total number of heights or trials which an athlete may attempt.

Completion of trials- The judge shall not raise a white flag to indicate a valid trial until a trial is completed. The completion of a valid trial shall be determined as follows: (a) in the case of vertical jumps, once the judge has determined that there is no failure according to rules.
(b) In the case of horizontal jumps once the athlete leaves the landing area in accordance with rule.
(c) In the case of throwing events, once the athlete leaves the circle or runway in accordance with rule.

Qualifying Competition- A qualifying round shall be held in field events in which the number of athletes is too large to allow the competition to be conducted satisfactorily in a single round (final). When a qualifying round is held, all athletes shall compete in, and qualify through, that round. Performances accomplished in a qualifying round shall not be considered as part of the competition proper. The athletes shall be divided into two or more groups. Unless there are facilities for the groups to compete at the same time and under the same conditions, each group should start its warm-up immediately after the previous group has finished. It is recommended that, in competitions of more than three days, a rest day be provided between qualifying competitions and the finals in the vertical jumping events. The conditions for qualifying, the qualifying standard and the number of athletes in the final, shall be decided by the Technical Delegate(s). If no Technical Delegate(s) have been appointed the conditions shall be decided by the Organising Committee. For competitions conducted under rules, there should be at least 12 athletes in the final. In a qualifying competition, apart from the High Jump and the Pole Vault, each athlete shall be allowed up to three trials. Once an athlete has achieved the qualifying standard, he shall not continue in the qualifying competition. In the qualifying competition for the High Jump and the Pole Vault, the athletes, not eliminated after three consecutive failures, shall continue to compete according to rule. Until the end of the last trial at the height set as the qualifying standard, unless the number of athletes for the final has been reached as defined in rule, If no athletes, or fewer than the required number of athletes, achieve the pre-set qualifying standard, the group of finalists shall be expanded to that number by adding athletes according to their performances in the qualifying competition. When a qualifying competition for the High Jump and Pole Vault is held in two simultaneous groups, it is recommended that the bar be raised to each height at the same time in each group. It is also recommended that the two groups be of approximately equal strength.
Obstruction- If, for any reason, an athlete is hampered in a trial, the Referee shall have the authority to award him a substitute trial.
Delay- an athlete in a field event, who unreasonably delays making a trial, renders himself liable to have that trial disallowed and recorded as a failure. It is a matter for the Referee to decide, having regard to all the circumstances, what is an unreasonable delay. The official responsible shall indicate to an athlete that all is ready for the trial to begin, and the period allowed for this trial shall commence from that moment. If an athlete subsequently decides not to attempt a trial, it shall be considered a failure once that period allowed for the trial has elapsed. For the Pole Vault, the time shall begin when the crossbar has been adjusted according to the previous wishes of the athlete. No additional time will be allowed for further adjustment. If the time allowed elapses after an athlete has started his trial, that trial should not be disallowed.

The following times should not normally be exceeded: -**Individual Events**

Number of athletes left in the competition	**High Jump**	**Pole Vault**	**Others Events**
More than 3	1min	1min	1min
2 or 3 athletes	1.5min	2min	1min
1 athlete	3min	5min	**---**
Consecutive trials	2min	3min	2min
	Combined Events		
More than 3	1min	1min	1min
2 or 3 athletes	1.5min	2min	1min
1 athlete	2min*	3min*	---
Consecutive trials	2min	3min	2min

* When there is only one athlete left, the mentioned times will be followed in the first trial only if the previous trial was made by the same athlete.

Note (i): A clock which shows the remaining time allowed should be visible to an athlete. In addition, an official shall raise and keep raised, a yellow flag, or otherwise indicate, during the final 15 seconds of the time allowed.

Note (ii): In the High Jump and Pole Vault, any change in the time period allowed for a trial shall not be applied until the bar is raised to a new height, except that the time specified for consecutive trials shall be applied whenever any athlete has two or more consecutive trials.

Note (iii): For the first trial of any athlete upon entering the competition, the time allowed for such trial will be one minute.

Note (iv): When calculating the number of competitors remaining in the competition this should include those athletes who could be involved in a jump off for first place.

Ties- In long and triple jumps, except for the High Jump and Pole Vault, the second best performance of the athletes tying shall resolve the tie. Then, if necessary, the third best, and so on. If the tie remains and concerns first place, the athletes having achieved the same results will compete again in the same order in a new trial until the tie is resolved.

Result- Each athlete shall be credited with the best of all his trials, including those achieved in resolving a tie for the first place, qualifying round and practice trials will not considered for final result.

Vertical Jumps

Before the competition begins, the Chief Judge shall announce to the athletes the starting height and the subsequent heights to which the bar will be raised at the end of each round, until there is only one athlete remaining having won the competition, or there is a tie for first place.

Trials- An athlete may commence jumping/vaulting at any height previously announced by the Chief Judge and may jump/vault at his own discretion at any subsequent height. Three consecutive failures, regardless of the height at which any of such failures occur, disqualify from further jumping/vaulting except in the case of a tie for first place. The effect of this Rule is that an athlete may forego his second or third trial at a particular height (after failing first or second time) and still jump/vault at a subsequent height. If an athlete forgoes a trial at a certain height, he may not make any subsequent trial at that height, except in the case of a tie for first place. Even after all the other athletes have failed, an athlete is entitled to continue jumping until he has forfeited his right to compete further. Unless there is only one athlete remaining and he has won the competition:

(a) the bar should never be raised by less than 2cm in the High Jump and 5cm in the Pole Vault after each round; and (b) the increment of the raising of the bar should never increase.

These rule (a) and (b) shall not apply once the athletes still competing agree to raise it to a World Record height directly. After an athlete has won the competition, the height or heights to which the bar is raised shall be decided by the athlete, in consultation with the relevant Judge or Referee. Note: This does not apply for a Combined Events Competition. In a Combined Events Competition held under Rules 1.1(a), (b), (c) and (f), each increase shall be uniformly 3cm in the High Jump and 10cm in the Pole Vault throughout the competition.

Measurements- All measurements shall be made, in whole centimetres, perpendicularly from the ground to the lowest part of the upper side of the bar. Any measurement of a new height shall be made before athletes attempt such height. In all cases of Records, the Judges shall check the measurement when the bar is placed at the Record height and they shall re-check the measurement before each subsequent Record attempt if the bar has been touched since last measured.

Crossbar- The crossbar shall be made of fibre-glass, or other suitable material but not metal, circular in cross-section except for the end pieces. The overall length of the crossbar shall be 4.00m ±2cm in the High Jump and 4.50m±2cm in Pole Vault. The maximum weight of the crossbar shall be 2kg in the High Jump and 2.25kg in Pole Vault. The diameter of the circular part of the crossbar shall be 30mm±1mm. The crossbar shall consist of three parts - the circular bar and two end pieces, each 30-35mm wide and 15-20cm long for the purpose of resting on the supports of the uprights. These end pieces shall be circular or semicircular with one clearly defined flat surface on which the bar rests on the crossbar supports. This flat surface may not be higher than the centre of the vertical cross section of the crossbar. The end pieces shall be hard and smooth. They shall not be covered with rubber or any other material which has the effect of increasing the friction between them and the supports. The crossbar shall have no bias and, when in place, shall sag a maximum of 2cm in the High Jump and 3cm in Pole Vault. Control of elasticity: Hang a 3kg weight in the middle of the crossbar when in position. It may sag a maximum of 7cm in the High Jump and 11cm in Pole Vault.

Ties- Ties shall be resolved as follows:

(a) The athlete with the lowest number of jumps at the height at which the tie occurs shall be awarded the higher place.

(b) If the tie still remains, the athlete with the lowest total of failures throughout the competition up to and including the height last cleared shall be awarded the higher place.

(c) If the tie still remains: (i) If it concerns the first place, the athletes tying shall have one jump at the next height, after the height last cleared by the athletes tying, and if no decision is reached, the bar shall

be raised if the tying athletes were successful, or lowered if not, 2cm for the High Jump and 5cm for the Pole Vault. They shall then attempt one jump at each height until the tie is resolved. Athletes so tying must jump on each occasion when resolving the tie (See example).
(ii) If it concerns any other place, the athletes shall be awarded the same place in the competition.
Note: This Rule will not apply to Combined Events.

High Jump – A Example

Heights announced by the Chief Judge at the beginning of competition:
1.70m; 1.75m; 1.80m; 1.83m; 186m; 1.89m; 1.91m; 1.99m…

Athlete	Heights								Jump Off			Position
	1.70m	1.75m	1.80m	1.83m	1.86m	1.89m	1.91m	Failures	1.86m	1.84m	1.86m	
A-	O	XO	O	XO	X-	XX		2	X	O	X	2	
B -	-	XO	-	XO	-	-	XXX	2	X	O	O	1	
C -	O	XO	X	O	-	XXX		2	X	X		3	
D -	X	O	XO	XO	XXX			3				4	

O = Cleared **X = Failed** **– = Did not Jump**

A, B, C and D all cleared 1.83m. The Rule regarding ties now comes into operation; the Judges add up the total number of failures, up to and including the height last cleared, i.e. 1.88m. “D“ has more failures than “A“, “B“ or “C“, and is therefore awarded fourth place. “A“, “B“ and “C“ still tie and as this concerns the first place, they shall have one more jump at 1.86m which is the next height. All fails at 1.86m,at 1.84m A & B cleared, C failed so got third place, again at 1.86m B cleared and A failed so B stood first place.

HIGH JUMP

The Competition- An athlete shall take off from one foot. An athlete fails if:- (a) After the jump, the bar does not remain on the supports because of the action of the athlete whilst jumping; or (b) He touches the ground including the landing area beyond the vertical plane through the nearer edge of the crossbar, either between or outside the uprights with any part of his body, without first clearing the bar. However, if when he jumps, an athlete touches the landing area with his foot and in the opinion of the Judge, no advantage is gained, the jump for that reason should not be considered a failure. To assist in the implementation of this Rule a white line 50mm wide shall be drawn (usually by adhesive tape or similar material) between points 3m outside of each upright, the nearer edge of the line being drawn along the vertical plane through the nearer edge of the crossbar.

The Runway and Take-off Area- The minimum length of the runway shall be 15m except in competitions held under rules where the minimum shall be 20m. Where conditions permit, the minimum length should be 25m. The maximum overall inclination in the last 15m of the runway and take-off area shall not exceed 1:250 along any radius of the semicircular area centred midway between the uprights and having the minimum radius specified in rule. The landing area should be placed so the athlete’s

approach is up the inclination. The take-off area shall be level or any inclination shall be in accordance with the requirements of Rule 182.4 and the IAAF Track and Field Facilities Manual.

Apparatus- The Uprights- Any style of uprights or posts may be used, provided they are rigid. They shall have supports for the crossbar firmly fixed to them. They shall be sufficiently tall as to exceed the actual height to which the crossbar is raised by at least 10cm. The distance between the uprights shall be not less than 4.00m nor more than 4.04m. The uprights or posts shall not be moved during the competition unless the Referee considers that either the take-off or landing area has become unsuitable. In such a case the change shall be made only after a round has been completed. Crossbar supports. The supports shall be flat and rectangular, 4cm wide and 6cm long. They shall be firmly fixed to the uprights and immovable during the jump and shall each face the opposite upright. The ends of the crossbar shall rest on them in such a manner that, if the crossbar is touched by an athlete, it will easily fall to the ground, either forwards or backwards. The supports shall not be covered with rubber or with any other material which has the effect of increasing the friction between them and the surface of the crossbar, nor may they have any kind of springs.

The supports shall be the same height above the take-off area. There shall be a space of at least 1cm between the ends of the crossbar and the uprights.

The Landing Area- The landing area should measure not less than 5m long x 3m wide. It is recommended that the landing area be not smaller than 6m long x 4m wide x 0.7m high. The uprights and landing area should also be designed so that there is a clearance of at least 10cm between them when in use, to avoid displacement of the crossbar through a movement of the

POLE VAULT

Athletes may have the crossbar moved only in the direction of the landing area so that the edge of the crossbar nearest the athlete can be positioned at any point from that directly above the back end of the box to a point 80cm in the direction of the landing area. An athlete shall, before the competition starts, inform the appropriate official of the position of the crossbar he requires for his first trial and this position shall be recorded.

If subsequently an athlete wants to make any changes, he should immediately inform the appropriate official before the crossbar has been set in accordance with his initial wishes. Failure to do this shall lead to the start of his time limit. A line, 1cm wide and of distinguishable colour, shall be

An athlete fails if:

(a) after the vault, the bar does not remain on the pegs because of the action of an athlete whilst vaulting; or

(b) he touches the ground, including the landing area beyond the vertical plane through the back end of the box with any part of his body or with the pole, without first clearing the bar; or

(c) after leaving the ground he places his lower hand above the upper one or moves the upper hand higher on the pole.

(d) during the vault an athlete steadies or replaces the bar with his hand(s). It is not a failure if an athlete runs outside the white lines

The Runway- The minimum length of the runway shall be 40m and where conditions permit, 45m. It shall have a width of 1.22m ± 0.01m and shall be marked by white lines 5cm in width. For all tracks constructed before 1 January 2004 the runway may have a width of maximum 1.25m. 7. The maximum

lateral inclination of the runway shall be 1:100 and in the last 40m of the runway the overall downward inclination in the direction of running shall not exceed 1:1000.

Apparatus- Box- The take-off for the Pole Vault shall be from a specified box. It shall be constructed of suitable material, preferably with rounded upper Uprights. Any style of uprights or posts may be used, provided they are rigid. The metallic structure of the base and the lower part of the uprights must be covered with padding of appropriate material in order to provide protection to the athletes and the poles.

Crossbar Support- The crossbar shall rest on pegs so that if it is touched by an athlete or his pole, it will fall easily to the ground in the direction of the landing area. The pegs shall be without notches or indentations of any kind, of uniform thickness throughout and not more than 13mm in diameter. They shall not extend more than 55mm from the supporting members,

Vaulting Poles- Athletes may use their own poles. No athlete shall use any other athlete's pole except with the consent of the owner. The pole may be of any material or combination of materials and of any length or diameter, but the basic surface must be smooth. The pole may have protective layers of tape at the grip and at the bottom end.

The Landing Area

12. The landing area should measure not less than 5m long (excluding the front pieces) x 5m wide. The sides of the landing area nearest to the box shall be placed 10cm to 15cm from the box and shall slope away from the box at an angle of approximately 45°.

HORIZONTAL JUMPS

Measurements

In all horizontal jumping events, distances shall be recorded to the nearest 0.01m below the distance measured if the distance measured is not a whole centimetre.

Runway- The minimum length of the runway shall be 40m, measured from the relevant take-off line to the end of the runway. It shall have a width of 1.22m ± 0.01m and shall be marked by white lines 5cm in width. For all tracks constructed before 1 January 2004 the runway may have a width of maximum 1.25m. The maximum lateral inclination of the runway shall be 1:100 and in the last 40m of the runway the overall downward inclination in the direction of running shall not exceed 1:1000.

Wind Measurement- The wind speed shall be measured for a period of 5 seconds from the time an athlete passes a mark placed alongside the runway, for the Long Jump 40m from the take-off line and for the Triple Jump 35m. If an athlete runs less than 40m or 35m, as appropriate, the wind velocity shall be measured from the time he commences his run. The wind gauge shall be placed 20m from the take-off board. It shall be positioned 1.22m high and not more than 2m away from the runway. The wind gauge shall be the same as described in Rule 163.11. It shall be operated and read as described in Rules 163.12 and 163.10 respectively.

LONG JUMP

The Competition- An athlete fails if:

(a) he while taking off, touches the ground beyond the take-off line with any part of his body, whether running up without jumping or in the act of jumping; or

(b) he takes off from outside either end of the board, whether beyond or before the extension of the take-off line.
(c) he touches the ground between the take-off line and the landing area.
(d) he employs any form of somersaulting whilst running up or in the act of jumping.
(e) in the course of landing he touches the ground outside the landing area closer to the take-off line than the nearest break made in the sand.
(f) when leaving the landing area, his first contact with the ground outside the landing area is closer to the take-off line than the nearest break made in the sand on landing, including any break made on overbalancing on landing which is completely inside the landing area but closer to the take-off line than the initial break made on landing. It is not a failure if an athlete runs outside the white lines marking the runway at any point. If a part of an athlete's shoe/foot is touching the ground outside either end of the take-off board, before the take-off line. It is not a failure if in the course of landing, an athlete touches, with any part of his body, the ground outside the landing area, unless such contact is the first contact. It is not a failure if an athlete walks back through the landing area after having left the landing area in a correct way. If an athlete takes off before reaching the board it shall not, for that reason, be counted as a failure.
When leaving the landing area, an athlete's first contact by foot with its border or the ground outside shall be further from the take-off line than the nearest break in the sand. This first contact is considered leaving. All jumps shall be measured from the nearest break in the landing area made by any part of the body to the take-off line, or take-off line extended. The measurement shall be taken perpendicular to the take-off line or its extension.

The Take-off Board

1. The take-off shall be marked by a board sunk level with the runway and the surface of the landing area. The edge of the board which is nearer to the landing area shall be the take-off line. Immediately beyond the take-off line there shall be placed a plasticine indicator board for the assistance of the Judges.
2. The distance between the take-off line and the far end of the landing area shall be at least 10m.
3. The take-off line shall be placed between 1m and 3m from the nearer end of the landing area.
4. Construction. The take-off board shall be rectangular, made of wood or other suitable rigid material and shall measure 1.22m ± 0.01m long, 20cm (±2mm) wide and 10cm deep. It shall be white.
5. Plasticine Indicator Board. This shall consist of a rigid board, 10cm (±2mm) wide and 1.22m ± 0.01m long made of wood or any other suitable material and shall be painted in a contrasting colour to the take-off board. Where possible, the plasticine should be of a third contrasting colour. The board shall be mounted in a recess or shelf in the runway, on the side of the take-off board nearer the landing area. The surface shall rise from the level of the take-off board to a height of 7mm (±1mm). The edges shall either slant at an angle of 45° with the edge nearer to the runway covered with a plasticine layer along its length 1mm thick or shall be cut away such that the recess, when filled with plasticine shall slant at an angle of 45° .

The Landing Area

The landing area shall have a minimum width of 2.75m and a maximum width of 3m. It shall, if possible, be so placed that the middle of the runway, if extended, would coincide with the middle of the landing

area. When the axis of the runway is not in line with the centre line of the landing area, a tape, or if necessary, two tapes, should be placed along the landing area so that the above is achieved.The landing area should be filled with soft damp sand, the top surface of which shall be level with the take-off board.

TRIPLE JUMP

The Rules for the Long Jump apply to the Triple Jump with the following additions:

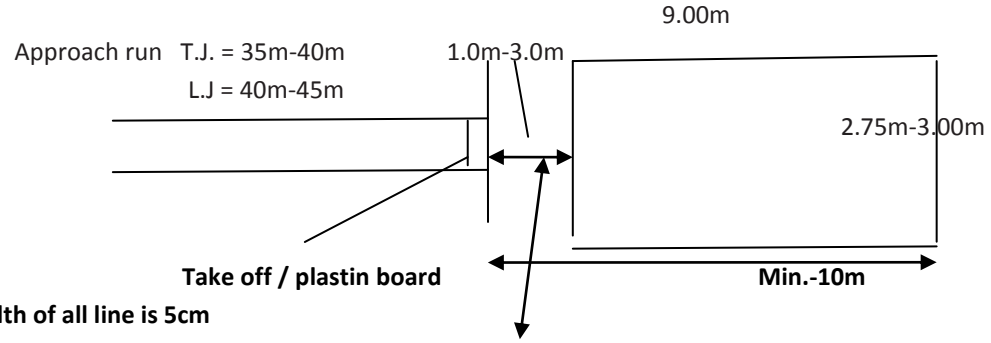
The Competition

1. The Triple Jump shall consist of a hop, a step and a jump in that order.
2. The hop shall be made so that an athlete lands first on the same foot as that from which he has taken off; in the step he shall land on the other foot, from which, subsequently, the jump is performed. It shall not be considered a failure if an athlete, while jumping, touches the ground with the "sleeping" leg.

The Take-off Board

1. The distance between the take-off line for men and the far end of the landing area shall be at least 21m.
2. For International Competitions, it is recommended that the take-off line shall be not less than 13m for men and 11m for women from the nearer end of the landing area. For any other competition, this distance shall be appropriate for the level of competition.
3. Between the take-off board and the landing area there shall, for the step and jump phases, be a take-off area of 1.22m ± 0.01m wide providing firm and uniform footing. For all tracks constructed before 1 January 2004, this take-off area may have a width of maximum 1.25m.

LONG JUMP AND TRIPLE JUMP PIT /ARENA



Note- width of all line is 5cm

TRIPLE JUMP = MEN =13M AND WOMEN = 11

THROWING EVENTS

Official Implements

1. In all International Competitions, the implements used shall comply with IAAF specifications. Only implements which hold a current valid IAAF certificate of approval may be used. The following table shows the implement to be used by each age group:-

Events	Girls/Women Youth Junior Senior	Boys-Youth	Men- Junior	Men - senior
Shot	**4.000kg**	**5.000kg**	**6.000kg**	**7.260kg**
Discus	**1.000kg**	**1.500kg**	**1.750kg**	**2.000kg**
Hammer	**4.000kg**	**5.000kg**	**6.000kg**	**7.260kg**
Javelin	**600g**	**700g**	**800g**	**800g**

2. Except as provided below, all such implements shall be provided by the Organising Committee. The Technical Delegate(s) may, based on the relevant Technical Regulations of each competition, allow athletes to use their own implements or those provided by a supplier, provided that such implements are IAAF certified, checked and marked as approved by the Organising Committee before the competition and made available to all athletes. Such implements will not be accepted if the same model is already on the list of those provided by the Organising Committee.

3. No modification shall be made to any implements during the competition.

Personal Safeguards-

(a) An athlete shall not use any device of any kind - e.g. the taping of two or more fingers together or using weights attached to the body - which in any way provides assistance when making a trial. An athlete shall not use tape on the hand except when tape is needed to cover an open cut or wound. However an athlete in the Hammer Throw may tape individual fingers. The taping should be shown to the Chief Judge before the event starts.

(b) An athlete shall not use gloves except in the Hammer Throw. In this case, the gloves shall be smooth on the back and on the front and the tips of the glove fingers, other than the thumb, shall be open.

(c) In order to obtain a better grip, an athlete may use a suitable substance on his hands only. In addition, hammer throwers may use such substances on their gloves, and shot putters may use such substances on their neck.

(d) In order to protect the spine from injury, an athlete may wear a belt of leather or other suitable material.

(e) In the Shot Put an athlete may wear a bandage at the wrist in order to protect it from injury.

(f) In the Javelin Throw, an athlete may wear an elbow protection.

(g) An athlete may wear other protection e.g. knee support, provided the athlete has IAAF approval on medical advice for its use in competition.

Throwing Circle

The rim of the circles shall be made of band iron, steel or other suitable material, the top of which shall be flush with the ground outside. The ground surrounding the circle may be concrete, synthetic, asphalt, wood or any other suitable material. The interior of the circle may be constructed of concrete, asphalt or some other firm but not slippery material. The surface of this interior shall be level and 2cm±6mm lower than the upper edge of the rim of the circle. In the Shot Put, a portable circle meeting these specifications is permissible.

The inside diameter of the circle shall be 2.135m±5mm in the Shot Put and the Hammer Throw and 2.50m±5mm in the Discus Throw. The rim of the circle shall be at least 6mm thick and shall be white. The hammer may be thrown from the discus circle provided the diameter of this circle is reduced from 2.50m to 2.135m by placing a circular ring inside.

Javelin Throw Runway

In the Javelin Throw the minimum length of the runway shall be 30m. Where conditions permit, the minimum length shall be 33.5m. It shall be marked by two parallel white lines 5cm wide and 4m apart. The throw shall be made from behind an arc of a circle drawn with a radius of 8m. The arc shall consist of a strip painted or made of wood 7cm wide. It shall be white and be flush with the ground. Lines shall be drawn from the extremities of the arc at right angles to the parallel lines marking the runway. These lines shall be white, 75cm long and 7cm wide. The maximum lateral inclination of the runway shall be 1:100 and in the last 20m of the runway the overall downward

Landing sector

The landing sector shall consist of cinders or grass or other suitable material on which the implement makes an imprint. The maximum overall downward inclination of the landing sector, in the throwing direction, shall not exceed 1:1000. (a) Except for the Javelin Throw, the landing sector shall be marked with white lines 5cm wide at an angle of 34.92° such that the inner edge of lines, if extended, would pass through the centre of the circle. The 34.92° sector may be laid out accurately by making the distance between the two points on the sector lines 20m from the centre of the circle 12m (20x0.60m) apart. Thus for every 1m from the centre of the circle, the distance across shall be increased by 60cm

In the Javelin Throw, the landing sector shall be marked with white lines 5cm wide such that the inner edge of the lines, if extended, would pass through the two intersections of the inner edges of the arc, and the parallel lines marking the runway and intersect at the centre of the circle of which the arc is part. The sector is thus about 29°.

Trials

In the Shot Put, Discus Throw and Hammer Throw, implements shall be thrown from a circle, and in the Javelin Throw from a runway. In the case of trials made from a circle, an athlete shall commence his trial from a stationary position inside the circle. An athlete is allowed to touch the inside of the rim. In the Shot Put he is also allowed to touch the inside of the stop board. It shall be a failure if an athlete in the course of a trial:

(a) improperly releases the shot or the javelin,

(b) after he has stepped into the circle and begun to make a throw, touches with any part of his body the top of the rim or the ground outside the circle,

(c) in the Shot Put, touches with any part of his body the top of the stop board,

(d) in the Javelin Throw, touches with any part of his body the lines which mark the runway or the ground outside.

It will not be considered a failure if the discus or any part of the hammer strikes the cage after release provided that no other

Provided that, in the course of a trial, the Rules relative to each throwing event have not been infringed, an athlete may interrupt a trial once started, may lay the implement down inside or outside the circle or

runway and may leave it. When leaving the circle or runway he shall step out as required in paragraph 17 before returning to the circle or runway to begin a fresh trial. All the moves permitted by this paragraph shall be included in the maximum time for a trial. It shall be a failure if the shot, the discus, the hammer head or the tip of the javelin in contacting the ground when it first lands touches the sector line or the ground outside the sector line. An athlete shall not leave the circle or runway until the implement has touched the ground.

(a) For throws made from a circle, when leaving the circle, an athlete's first contact with the top of the rim or the ground outside the circle shall be completely behind the white line which is drawn outside the circle running, theoretically, through the centre of the circle. The first contact with the top of the rim or the ground outside the circle is considered leaving.

(b) In the case of the Javelin Throw, when an athlete leaves the runway, the first contact with the parallel lines or the ground outside the runway shall be completely behind the white line of the arc at right angles to the parallel lines. Once the implement has touched the ground, an athlete will also be considered to have left the runway, upon making contact with or behind a line (painted, or theoretical and indicated by markers beside the runway) drawn across the runway, four metres back from the end points of the throwing arc. Should an athlete be behind that line and inside the runway at the moment the implement touches the ground, he shall also be considered to have left the runway. After each throw, implements shall be carried back to the area next to the circle or runway and never thrown back.

Measurements- In all throwing events, distances shall be recorded to the nearest 0.01m below the distance measured if the distance measured is not a whole centimetre.

The measurement of each throw shall be made immediately after-

(a) from the nearest mark made by the fall of the shot, discus and hammer head, to the inside of the circumference of the circle along a line to the centre of the circle;

(b) in Javelin Throw, from where the tip of the javelin first struck the ground to the inside edge of the arc, along a line to the centre of the circle of which the arc is part.

Markers

A distinctive flag or marker may be provided to mark the best throw of each athlete, in which case it shall be placed along, and outside, the sector lines. A distinctive flag or marker may also be provided to mark the existing World Record and, when appropriate, the existing Area, National or Meeting Record.

SHOT PUT

The Competition rule- The shot shall be put from the shoulder with one hand only. At the time an athlete takes a stance in the circle to commence a put, the shot shall touch or be in close proximity to the neck or the chin and the hand shall not be dropped below this position during the action of putting. The shot shall not be taken behind the line of the shoulders. A cart wheeling techniques are not permitted.

The Stop Board

Construction- The board shall be white and made of wood or other suitable material in the shape of an arc so that the inner edge coincides with the inner edge of the rim of the circle. It shall be placed mid-way between the sector lines, and be so made that it can be firmly fixed to the ground.

Measurements- The board shall measure 11.2cm to 30cm wide, with a chord of 1.21m ±0.01m for an arc of the same radius as the circle and 10cm ±0.2cm high in relation to the level of the inside of the circle.

The Shot

Construction- The shot shall be of solid iron, brass or any metal not softer than brass, or a shell of such metal filled with lead or other material. It shall be spherical in shape and its surface shall have no roughness and the finish shall be smooth. To be smooth, the surface average height must be less than 1.6µm, i.e. a roughness number N7 or less.

It shall conform to the following specifications:-

Weight of Shot

Minimum weight for admission to competition and acceptance of a Record:-

- For women/ junior women/ youth girls 4.000kg for supply of 4.005kg.- 4.025kg with diameter in between-95mm 100mm
- For Junior boys - 5.000kg with Range 5.005kg 5.025kg , Diameter range of 100mm 120mm
- For youth boys - 6.000kg with 6.005kg - 6.025kg, Diameter range of 105mm 125mm
- For men and senior boys- 7.260kg with 7.265kg- 7.285kg, Diameter range of 110mm 130mm

DISCUS THROW

The Discus Construction- The body of the discus may be solid or hollow and shall be made of wood, or other suitable material, with a metal rim, the edge of which shall be circular. The cross section of the edge shall be rounded in a true circle having a radius of approximately 6mm. There may be circular plates set flush into the centre of the sides. Alternatively, the discus may be made without metal plates, provided that the equivalent area is flat and the measurements and total weight of the implement correspond to the specifications.

Each side of the discus shall be identical and shall be made without indentations, projections or sharp edges. The sides shall taper in a straight line from the beginning of the curve of the rim to a circle of a radius of 25mm to 28.5mm from the centre of the discus. The profile of the discus shall be designed as follows. From the beginning of the curve of the rim the thickness of the discus increases regularly up to the maximum thickness D. This maximum value is achieved at a distance of 25 mm to 28.5mm from the axis of the discus Y. From this point up to the axis Y the thickness of the discus is constant. Upper and lower side of the discus must be identical, also the discus has to be symmetrical concerning rotation around the axis Y. The discus, including the surface of the rim shall have no roughness and the finish shall be smooth (see Rule 188.4) and uniform

2. It shall conform to the following specifications:- Discus

- For women/ junior women/ youth girls 1.000kg for with Range supply of 1.005kg.- 1.025kg with Outside diameter of metal rim- Min. 180mm Max. 182mm, Diameter of metal plate or flat centre area Min. 50mm- Max. 57mm, Thickness of metal plate or flat centre area Min.37mm- 39mm, Thickness of metal rim (6mm from edge) 12mm- Max. 13mm

- For Junior boys - 1.500kg with Range supply of 1.505kg 1.525kg , with Outside diameter of metal rim- Min. 200mm Max. 202mm, Diameter of metal plate or flat centre area Min. 50mm- Max. 57mm, Thickness of metal plate or flat centre area 38mm-40mm, Thickness of metal rim (6mm from edge) Min. 12mm- Max. 13mm.
- For youth boys - 1.750kg with Range supply 1.755kg-1.775kg with Outside diameter of metal rim- Min. 210mm Max. 212mm, Diameter of metal plate or flat centre area Min. 50mm- Max. 57mm, Thickness of metal plate or flat centre area 41mm- 43mm, Thickness of metal rim (6mm from edge) Min. 12mm- Max. 13mm.
- For men and senior boys- 2.000kg with Range supply of 2.005kg-2.025kg with Outside diameter of metal rim- Min. 219mm Max. 221mm, Diameter of metal plate or flat centre area Min. 50mm- Max. 57mm, Thickness of metal plate or flat centre area 44mm- 46mm, Min. Thickness of metal rim (6mm from edge)12mm- Max. 13mm

Discus Cage

1. All discus throws shall be made from an enclosure or cage to ensure the safety of spectators, officials and athletes. The cage specified in this Rule is intended for use when the event takes place in the arena with other events taking place at the same time or when the event takes place outside the arena with spectators present. Where this does not apply, and especially in training areas, a much simpler construction may be satisfactory. The hammer cage specified in Rule 192 may also be used for Discus Throw, either by installing 2.135/2.50m concentric circles, or by using the extension of the gates of that cage with a separate discus circle installed in front of the hammer circle.

2. The cage should be designed, manufactured and maintained so as to be capable of stopping a 2kg discus moving at a speed of up to 25 metres per second. The arrangement should be such that there is no danger of ricocheting or rebounding back towards the athlete or over the top of the cage. Provided that it satisfies all the requirements of this Rule, any form of cage design and construction can be used.

3. The cage should be U-shaped in plan as shown in Figure 19. The width of the mouth should be 6m, positioned 7m in front of the centre of the throwing circle. The end points of the 6m wide mouth shall be the inner edge of the cage netting. The height of the netting panels or draped netting at their lowest point should be at least 4m. Provision should be made in the design and construction of the cage to prevent a discus forcing its way through any joints in the cage or the netting or underneath the netting panels or draped netting. The arrangement of the rear panels/netting is not important provided the netting is a minimum of 3.00m away from the centre of the circle.

4. The netting for the cage can be made from suitable natural or synthetic fibre cord or, alternatively, from mild or high tensile steel wire. The maximum mesh size shall be 44mm for cord netting and 50mm for steel wire.

Note: Further specifications for the netting and safety inspection

HAMMER THROW

1. An athlete, in his starting position prior to the preliminary swings or turns, is allowed to put the head of the hammer on the ground inside or outside the circle.

2. It shall not be considered a failure if the head of the hammer touches the ground inside or outside the circle, or the top of the rim. The athlete may stop and begin the throw again, provided no other rule has been breached.

3. If the hammer breaks during a throw or while in the air, it shall not count as a failure, provided the trial was otherwise made in accordance with this Rule. Nor shall it count as a failure if an athlete thereby loses his balance and as a result contravenes any part of this rule. In both cases the athlete shall be awarded a new trial.

The Hammer Equipment

1. Construction. The hammer shall consist of three main parts: a metal head, a wire and a handle.

2. Head. The head shall be of solid iron or other metal not softer than brass or a shell of such metal, filled with lead or other solid material. If a filling is used, this shall be inserted in such manner that it is immovable and that the centre of gravity shall not be more than 6mm from the centre of the sphere.

3. Wire. The wire shall be a single unbroken and straight length of spring steel wire not less than 3mm in diameter and shall be such that it cannot stretch appreciably while the hammer is being thrown. The wire may be looped at one or both ends as a means of attachment.

4. Handle. The handle shall be rigid and without hinging joints of any kind. The total deformation of the handle under a tension load of 3.8kN shall not exceed 3mm. It shall be attached to the wire in such a manner that it cannot be turned within the loop of the wire to increase the overall length of the hammer. The handle may have a curved or straight grip with a maximum length inside of 110mm. The minimum handle breaking strength

5. Connections for wire. The wire shall be connected to the head by means of a swivel, which may be either plain or ball bearing. The handle shall be connected to the wire by means of a loop. A swivel may not be used.

6. The hammer shall conform to the following specifications: Hammer

- For women/ junior women/ youth girls 4.000kg for supply of 4.005kg.- 4.025kg with diameter head in between-95mm 100mm and Length of Hammer measured from inside of handle- Min. 1160mm Max. 1195mm.
- For Junior boys - 5.000kg with Range 5.005kg 5.025kg , Diameter range of head in between 100mm 120mm, Length of Hammer measured from inside of handle -1165mm- 1200mm.
  For youth boys - 6.000kg with 6.005kg - 6.025kg, Diameter range of head in between 105mm 125mm, Length of Hammer measured from inside of handle 1175mm1215mm
- For men and senior boys- 7.260kg with 7.265kg- 7.285kg, Diameter range of head in between 110mm 130mm, Length of Hammer measured from inside of handle 1175mm1215mm

Hammer Cage

1. All hammer throws shall be made from an enclosure or cage to ensure the safety of spectators, officials and athletes. The cage specified in this Rule is intended for use when the event takes place in the arena with other events taking place at the same time or when the event takes place outside the arena with spectators present.

Where this does not apply, and especially in training areas, a much simpler construction may be satisfactory. Advice is available on request from national organisations or from the IAAF Office.

2. The cage should be designed, manufactured and maintained so as to be capable of stopping a 7.260kg hammer head moving at a speed of up to 32 metres per second. The arrangement should be such that there is no danger of ricocheting or rebounding back towards the athlete or over the top of the cage. Provided that it satisfies all the requirements of this Rule, any form of cage design and construction

JAVELIN THROW

Throwing Rule-

1. (a) The javelin shall be held at the grip. It shall be thrown over the shoulder or upper part of the throwing arm and shall not be slung or hurled. Non-orthodox styles are not permitted.

(b) A throw shall be valid only if the tip of the metal head strikes the ground before any other part of the javelin.

(c) Until the javelin has been thrown, an athlete shall not at any time turn completely around, so that his back is towards the throwing arc.

2. If the javelin breaks during a throw or while in the air, it shall not count as a failure, provided the trial was otherwise made in accordance with this Rule. Nor shall it count as a failure if an athlete thereby loses his balance and as a result contravenes any part of this Rule. In both cases the athlete shall be awarded a new trial.

The Javelin Equipment

1. Construction- The javelin shall consist of three main parts: a head, a shaft and a cord grip. The shaft may be solid or hollow and shall be constructed of metal or other suitable material so as to constitute a fixed and integrated whole. The shaft shall have fixed to it a metal head terminating in a sharp point. The surface of the shaft shall have no dimples or pimples, grooves or ridges, holes or roughness, and the finish shall be smooth (and uniform throughout. The head shall be constructed completely of metal. It may contain a reinforced tip of other metal alloy welded on to the front end of the head provided that the completed head is smooth and uniform along the whole of its surface.
2. The grip, which shall cover the centre of gravity, shall not exceed the diameter of the shaft by more than 8mm. It may have a regular non-slip pattern surface but without thongs, notches or indentations of any kind. The grip shall be of uniform thickness.
3. The cross-section shall be regularly circular throughout as whilst the cross section should be circular, a maximum difference between the largest and the smallest diameter of 2% is permitted. The mean value of these two diameters shall correspond to the specifications of a circular javelin. The maximum diameter of the shaft shall be immediately in front of the grip. The central portion of the shaft, including the part under the grip, may be cylindrical or slightly tapered towards the rear but in no case may the reduction in diameter, from immediately in front of the grip to immediately behind, exceed 0.25mm. From the grip, the javelin shall taper regularly to the tip at the front and the tail at the rear. The longitudinal profile from the grip to the front tip and to the tail shall be straight or slightly convex. The shape of the longitudinal profile may be quickly and easily checked using a metal straight edge at least 500mm long and two feeler gauges 0.20mm and 1.25mm thick. For slightly convex sections of the profile, the straight edge will rock while being in firm contact with a short section of the javelin. For straight sections of the profile, with the straight edge held firmly against it, it must be impossible to insert the 0.20mm gauge between the javelin and the straight edge anywhere over the length of contact. This shall not apply immediately behind the joint between the head and the shaft. At this point it must be impossible to insert the 1.25mm gauge that there shall be no abrupt alteration in the overall diameter, except immediately behind the head and at the front and rear of the grip, throughout the length of the javelin. At the rear of the head, the reduction in

the diameter may not exceed 2.5mm and this departure from the longitudinal profile requirement may not extend more than 300mm behind the head.

The javelin shall conform to the following specifications: Javelin Minimum weight for admission to competition and for acceptance of a Record (inclusive of the cord grip)

Specification of Javelin Equipment-

- Weight for women & Girls- 600g, Range for supply of implement-605g-625g, Overall length- Min. 2.20m Max. 2.30m, Length of metal head- Min. 250mm Max. 330mm, Distance from tip of metal head to centre of gravity- Min. 0.80m Max. 0.92m, Diameter of shaft at thickest point- Min. 20mm Max. 25mm, Width of cord grip- Min. 140mm Max. 150mm
- Weight for youth boys-700g Range for supply of implement-705g-725g, Overall length- Min. 2.30m Max. 2.40m, Length of metal head- Min. 250mm Max. 330mm, Distance from tip of metal head to centre of gravity- Min. 0.86m Max. 1.00m, Diameter of shaft at thickest point- Min. 23mm Max. 28mm, Width of cord grip- Min. 150mm Max. 160mm
- Weight for youth boys-800g Range for supply of implement 805g-825g, Overall length- Min. 2.60m Max. 2.70m, Length of metal head- Min. 250mm Max. 330mm, Distance from tip of metal head to centre of gravity- Min. 0.90m Max. 1.06m, Diameter of shaft at thickest point- Min. 25mm Max. 30mm, Width of cord grip- Min. 150mm Max. 160mm

Others Rule Of Javelin

The javelin shall have no mobile parts or other apparatus, which during the throw could change its centre of gravity or throwing characteristics.

The tapering of the javelin to the tip of the metal head shall be such that the angle of the point shall be not more than 40°. The diameter, at a point 150mm from the tip, shall not exceed 80% of the maximum diameter of the shaft. At the midpoint between the centre of gravity and the tip of the metal head, the diameter shall not exceed 90% of the maximum diameter of the shaft.

The tapering of the shaft to the tail at the rear shall be such that the diameter, at the midpoint between the centre of gravity and the tail, shall not be less than 90% of the maximum diameter of the shaft. At a point 150mm from the tail, the diameter shall be not less than 40% of the maximum diameter of the shaft. The diameter of the shaft at the end of the tail shall not be less than 3.5mm.

COMBINED EVENTS COMPETITIONS

Men Junior and Senior (Pentathlon and Decathlon)

1. The Pentathlon consists of five events which shall be held on one day in the following order: Long Jump; Javelin Throw; 200m; Discus Throw; and 1500m.

2. The Men's Decathlon consists of ten events which shall be held on two consecutive days in the following order:

First day: 100m; Long Jump; Shot Put; High Jump; 400m.

Second day: 110m Hurdles; Discus Throw; Pole Vault; Javelin Throw; 1500m.

Women Junior and Senior (Heptathlon and Decathlon)

1. The Heptathlon consists of seven events, which shall be held on two consecutive days in the following order:

First day: 100m Hurdles; High Jump; Shot Put; 200m.

Second day: Long Jump; Javelin Throw; 800m.

2. The Women's Decathlon consists of ten events which shall be held on two consecutive days in the following order:

First day: 100m; Discus Throw; Pole Vault; Javelin Throw; 400m.

Second day: 100m Hurdles; Long Jump; Shot Put; High Jump; 1500m.

Boys Youth (Octathlon)

The Octathlon consists of eight events, which shall be held on two consecutive days in the following order:

First day: 100m; Long Jump; Shot Put; 400m.

Second day: 110m Hurdles; High Jump; Javelin Throw; 1000m.

Girls Youth (Heptathlon)

The Heptathlon consists of seven events, which shall be held on two consecutive days in the following order:

First day: 100m Hurdles; High Jump; Shot Put; 200m.

Second day: Long Jump; Javelin Throw; 800m.

General

1. At the discretion of the Combined Events Referee, there shall, whenever possible, be an interval of at least 30 minutes between the time one event ends and the next event begins, for any individual athlete. If possible, the time between the finish of the last event on the first day and the start of the first event on the second day should be at least 10 hours.

2. In each separate event, except the last, of a Combined Event competition, the heats and groups shall be arranged by the Technical Delegate(s) or Combined Events Referee, as applicable, so that the athletes with similar performances in each individual event during a predetermined period shall be placed in the same heat or group. Preferably five or more, and never less than three, athletes shall be placed in each heat or group. When this cannot be achieved because of the timetable of events, the heats or groups for the next event should be arranged as and when athletes become available from the previous event. In the last event of Combined Events Competition, the heats should

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