

ATHLETICS
KENYA SCHOOL OF TVET

**DEPARTMENT OF PHYSICAL EDUCATION / SPORTS AND
RECREATION DEPARTMENT**

INTRODUCTION

Running has flourished as sport form time immemorial, even before the first recorded Olympic Games in 776BC. The other athletic disciplines (events), however have developed over many centuries through man's natural instinct to compete against others in throwing, throwing, or jumping as high as possible as jumping as far as possible.

Modern track and field is amalgam of many different activities. Those events which did not begin in Greek times have in most part growing from the contests in rural medieval Europe, and reflect their parentage in their rules. Wall leaping in Cumberland and wheel throwing in Ireland gave rise to "Polevault and "Hammer throw". Discus throwing and javelin throwing with their metric specification reflect their continent.

During the late nineteenth century local interpretations of the rules were modified, firstly in universities where competitive athletic became organized, and later through the development of the international and Olympic movements, and by 1912 had assumed their present-day form. Few changes have been made since.

The sport however is still developing, with the throwing events beginning to outgrow the confines of the arena, and more events becoming accepted as suitable for women. In recent times we have witnessed the introduction of 400m hurdles for women, 1500, and 3000m races also. Women even ran in marathon.

It is important that teachers continue to instill to the young ones in school the spirit of sports for the good of their health and pride of their nation.

TACK EVENTS

These are events done on the track. They are:-

- (i) Short races i.e. sprints
- (ii) Middle races
- (iii) Long races

1. SPRINTS/ SHORT RACES

They are

- 100m
- 200m
- 400m

These races are run in lanes.

To succeed in these races the competitors must build ability to move their limbs more quickly powerfully and efficiently than others. This can only be achieved through hours of diligent practice

- (a) race of leg striking
- (b) Force and range of the rear leg drive- the extended rear leg kicks hard for a forward drive. The upper leg (thigh) makes almost a 90° to the torso. The strides are wide but controlled
- (c) Balance between arm and leg movement'- the head is over leading. The arms are just pulled to a point in front of the chest and not in front of the face.
- (d) Relaxation and freeline. The whole body must be relaxed – this reflects the general mechanism of the body e.g. circulation, respiration and maculation.

2. THE START OF SPRINTS

- (a) Competitors draw for lanes
- (b) Starting blocks may be used but they must conform to the stipulated specifications e.g.
 - (i) They must be adjustable but must be without springs or other devices to give artificial aid to the runner
 - (ii) They must be constructed entirely of rigid materials
 - (iii) They must be so constructed that both feet are in contact with the ground while starting.
 - (iv) Starting block must be approved by track referee.



Figure 1. An image of a starting block

- (c) While starting the competitor observes the following points
 - (i) The position of the body

“On your marks” position, the competitor takes correct and comfortable position. Hands are outstretched and spread just behind the starting line. The head is leading, the strong leg should be placed in the front block since during starting, and this is the leg which does most work.

THE START

For years, the three standard sprints have been.

- i. **Elongated start**- where in the “take your marks” the knee of the rear leg is level with or slightly behind the heel of the foot front.
- ii. **Medium start**- the knee of the rear leg is placed opposite a point in the front half of the front foot.



Figure 2. A demonstration of a medium start

- iii. **Bunch start** – where the toes of the rear foot are abuts twelve inches to the toes of the lead foot.

Sprinters generally develop starting positions which fall into these general categories and develop efficient starts by experimentation during practices. The actual feet spread is determined by successful starting. The front foot is usually placed from twelve to eighteen inches from the starting line. In general, taller men (usually using an elongated start) place the front foot about eighteen inches away from the line. Short men using a bunch or a modified bunch start move the front foot closer to the starting line.

SPRINTING

In the “get set” position the arms are straight and the weight is equally distributed between the front foot and the hand. The hips should be raised at least to the horizontal with very close foot placement (bunch start) a higher hip elen inch necessary.

Best results are gained by keeping the back leg relaxed and bringing it through fast and low, concentrating on the powerful drive the lead let.

It is a mistake for an athlete in the “get set” position to look the down the track by raising his head no purpose is served and it leads to lenience in the neck and shoulders, and also make the athlete come up too quickly out of his blocks. The face should be practically parallel with the track and the eyes should be fixed five or six yards down the track.



Figure 3. A set position in sprints

In the “get set” position the sprinter must concentrate on the move and not the gun. Constant practices with the gun helps develop an automatic reaction to the sound.

Competent starters will hold the athlete in the “get set” position for the required two seconds. The athlete must be absolutely motionless at that line.

THE RACE

The runner must concentrate his attention on the exposition off the marks. He accompanies the powerful drive form the lead leg with vigorous arm action, as the body drivers forward.

The trailing (rear) must come forward rapidly, with the foot just barely clearing the ground. The ease speed and power with which this leg takes the first determines initial acceleration.

The athlete must **not drive** up this line. He should reach at erect running position too soon.

The left leg compensates for the rapid pull-through of the right leg.

The first step from the blocks, usually onto the right foot, must be natural for the athlete. A very long first step checks the forward momentum. A very short step causes a loss of balance.

SPRINTING

The arm action above all else should be natural and relaxed. In ideal form the forward swing brings the sprinter's hand almost to shoulder height. The rear swing brings the hand back of the hip. The elbow is approximately at a right angle and fixed but not rigid. The arms should swing at the sides in line with the run and should not go across the chest so far that the shoulder and touch would be turned.

The toes must point directly forward at all time. The necessary bounce or rebound found in great sprinter would course be impossible in the athlete who toes out rather than forward.

On the "Set" position, the competitor should raise the hips to just above shoulder. This brings shoulders slightly forward and not completely over the hands. The neck is relaxed. The eyes are focused at about 3 meters down the track.

"Gun fires" This provides a release. The gun is fired then the competitors are completely motionless. The driving leg and ankle must be fully extended and force must be directed more horizontally than vertically. The drive from blocks should be strong and arms should move.

A competitor maintains horizontal drive for with to twelve strides gradually coming upright with each stride.

When running in lane the competitor keeps his lane throughout the competition. Changing of lanes entails disqualification.

3. THE FINISH

The “dip finish” (pushing the chest toward the large) is good if only correctly done.

The most recommended finish is where a competitor maintains a running form right through the tape.

The order in which the competitor’s torso reach the nearer edge of the finishing line determines the finishing position.



Figure 4. ‘Dip finish’ illustration

MIDDLE DISTANCES

They include 800m, 1,500m and 3,000m (steeplechase) races

A middle distance runner must be predominantly interested in improving the following:-

- (a) His oxygen uptake (his ability to take in more oxygen efficiently).
- (b) His oxygen debt tolerance (his oxygen needs)

(a) OXYGEN UPTAKE

It is necessary to run long periods during which your pulse rate remains at 130 beats per minute. This can be achieved through repetition runs of 200m, 300m. During this time a pulse rate of 180 beats per minute is acceptable.

Alternatively, cross country running or road running is of great help of improving oxygen uptake

8 to 10km for 800m/1,500, runner

8 to 30 km for 5000/10,000m runner

(b) OXYGEN DEBT TOLERANCE

(Speed endurance)

The body build ability to withstand large amount of lactic acid, i.e. (Waste product of anaerobic training). This is achieved through larva quantities of high speed running, with relatively little rest.

This is done by:

- (a) Short fast runs, with very short recovery
- (b) Short, very fast runs, with longer recovery
- (c) when running
 - (i) The running action is relaxed
 - (ii) There is a full leg drive but closely controlled
 - (iii) There is slightly forward carriage of the upper body and hips
 - (iv) Elbows are kept to maintain balance and to secure running space especially when runners crowd around
 - (v) The competitor is mentally alert and concentrate on what runner are doing around him. He is ready to increase speed in any critical stage of the race.

TRAINING

(i) Interval running

This is a form of repletion running whereby a competitor is able to improve either oxygen uptake or **oxygen debt tolerance**

This is achieved by:

- (a) Altering the length of the run
- (b) Altering the speed of the run
- (c) Altering the recovery period
- (d) Altering the number of runs

(ii) Speed running

This is training at racing or even faster than racing speed. It is related to the actual event. e.g., 800m runner will run distance of 300m, 400, 600, while 5000m runners will run distances of 800m, 1,500, 1000m, 3000, etc.

5. LONG DISTANCE RACES

5,000m race and 10,000m, consider points as for middle races, but the training is related to the actual event

6. HURDLING

100m, 110m, 400m

A hurdle should consist of two upright supporting a rectangular frame and should have a level top rail. The hurdle may be adjustable in height but must be rigidly flattened at the required height for each event. The hurdle shall conform to the following specification

Overall width 120cmc

Length of bas 70cms

Depth of top bar 70cm

Thickness of top bar 10-25m

Minimum total weight 10kgs

The toppling force required to overturn a hurdle should to between 3kg and 4kg for adults, 2.7kgs and 3kgs hurdle for juniors under 17 years. The top bar should be striped black and while.



Figure 5. A hurdle

(b) When hurdling

- (i) The hurdler should have exact number of strides between flights in most cases 8 strides in high hurdles and 15-18 in low hurdles
- (iii) He should be relaxed in his movement but should be concentrative in his action especially toward the next barrier.
- (iv) Flight over the hurdle is a continuous section with least time lost
- (v) The hurdler keeps his body low over the hurdles and keeps a forward body lean throughout the landing
- (vi) Where international hurdles are used competitor may knock over any number of berries (hurdles) during the race without penalty. where these type of hurdles are not used a competitor may knock a maximum of three without disqualification

- (vii) A hurdler is not allowed to trail his foot or leg around the side of the barrier while clearing it.

HURDLE SPECIFICATIONS

Race distance	Age group	Height of barrier	No. of barriers	From start to the first barrier	Interval between barrier	Distance last meddle to finish
MEN'S						
110m	Adults	10.70cm	10	13.72m	9.14m	14.02m
110m	<19 years	99.00cm	10	13.72m	9.14m	14.02
100m	<17 years	91.40cm	10	13m	8.5m	10.5m
400m	Adults	91.4cm	10	45m	35m	40m
WOMEN'S						
100m	Adults	83.80cm	10	13.0m	8.5m	10.5m
80m	<17 years	96.20cm	8	12.8m	8m	12.0m
400m	Adults	76.2cm	10	45m	35m	40m

7 STEEPLE CHASE

3000m

The steeplechaser must combine the strength and stamina of the 500m runner with speed of 1500m, runner, and the skills of a hurdler.

The hurdles are made of heavy timber so that they are not overturned easily. They should be **91.4cm**, high with tolerance of 3mm above and below. Each should be 3m wide and have a top bar of 12.7cm.

At the water jump the hurdle must be firmly fixed. The water obstacle shall be 3.66m square in plan and have an elevation which slopes from **70cm** deep at the hurdle and to the ground level at the further.



Figure 6. A steeplechase barrier

(a) WHEN JUMPING

- (i) Competitors are allowed to jump, vault or place one foot (stepping) on the barrier while negotiating it.
- (ii) A keen competitor steps on the barrier with one foot and on to the shallow water with the other foot.
- (iii) The competitor concentrates as he approaches the barrier
- (iv) He keeps his body low as he clears this supporting leg
- (v) He places the sole of the supporting foot firmly on top of the hurdle

8. RELAY RACES

4 X 100m

4 X 400m

(a) BATON EXCHANGE

- (i) This is done within the box i.e. 20m box in 4X100m, 10m for 4X400m.

- (ii) Visual L-R –L-R i.e. Receiving the baton with left-hand transferring and carrying it with right-hand.
- (iii) non visual carrying the baton with the same receiving hand i.e the baton is never transferred from one hand to the other in the process of running
- (iv) In all cases the competitors does not see the baton, but feels it when receiving. He receives it while in speed.
- (v) The receiving runner should give enough space within the lane for his partner to run on during change over process



Figure 5. Baton exchange in relays

There are several variations of baton passing in the sprint relays but the only basic differences are to be found in the position of the receiver's hand and in the incoming runner's method of handing off (placing) the baton.

The responsibility of flitting the baton (the outgoing runner's extended hand) is placed on the incoming runner, as the receiver is placing forward when the pass is made.

In this pass the outgoing runner must hold his palm up, for the baton, is placed in his hand a downward motion.

PART 11

FIELD EVENTS

To all field events especially throws, precautionary measures must be exercise to minimize chances of injuries.

1. HIGH JUMP

There are four different style of high jumping namely: scissors, western roll, straddle and fosbury flop.

The last two are the most recommended to beginner. The best performance has been achieved on these styles, although western roll has been dominantly popular for many years.

(a) Straddle technique

(i) Approach (run) Approach the bar in a straight line at an angle of about 35.

- A maximum of a steps distance is sufficient for the man
- Have definite distance

(ii) Take off - be accurate with the make off foot the point of takeoff is specific

- The last 3 strides become more and more flat footed
- Plan the take off foot about 1 meter for the up right. There is a slight

backward lean to gain force from the trunk and hips for the lift. Keep the trunk upright.

(iii) The flight - try to drop the leafing leg and should shown when you are at bar level

(iv) Landing: landing is on the back or on shoulder and upper back

(v)

(b) Fosbury flop (flop)



Figure 7. fosbury flop technique

(i) Approach (run) Approach the bar from a curved run. Improve the curved run to a walking stick run

- The curved run takes you to 1 meter from the upright
- The force of the curved run turns your back toward the bar as you break contact with the ground. The curve should be maintained to give rotation movement over the bar

(ii) Flight:

- Permit your leg to hang loose immediately you take off
- Tuck the heels toward the head. The head looks backward toward the landing area.

(c) Western roll technique

(i) Approach:

- Approach the bar in a straight line at an angle of about 40°.
- Be accurate on check point i.e. on takeoff mark

(ii) Take off
bent.

- Land the takeoff foot on the takeoff mark knee and hip slightly bent.

(iii) The flight

- Lands stretched
- The takeoff leg is stretched as it clears the bar

(iv) The landing

- 3 point landing i.e. the takeoff foot and the hand

(d) Scissors technique

This is a most uneconomical style of jumping. This is because of the amount of body weight to be lifted above bar level in order to clear the lowest part of the body



Figure 8. Scissors technique demonstration

2. RULES OF HIGH JUMP

Height in high-jump heights is measured perpendicularly from the ground to the lowered point of the cross- bar

A competitor fails if he:-

1. Dislodge the bar from the peg
2. Touches the landing area beyond the place of the upright a without first boarding the bar
3. Takes off from both feet

Ties are decided as follows: (TIE BREAK)

1. The competitor with the lowest number of jumps at the higher he place. **Height at which the tie occurs** shall be awarded the higher place.
2. If the tie still remain, the competitor with he lowest number of jumps (whether successful or not) throughout the competition up to and including the height last cleared shall be awarded the higher place

3. If the remains the competitor with the lowest total number of failures throughout the competition up to and including the height last cleared shall be awarded a higher place
4. If the tie remains
 - (i) If for **first place**, the bar shall be raised or lowered by 1 ½ in or half the range it was raised, until the winner is decided
 - (ii) If for any other place the competitors shall be given the **same place**

Central rules

1. The qualifying height is decided by officials before the competition.
2. The competitor may opt to jump or not to jump when called for his turn.
3. The bar is never lowered for a competitor who misses a jump.
4. A competitor is allowed 3 attempts in any one height
5. A competitor is discontinued from further jumping when he makes a consecutive failures at one height
6. A competitor who fails to clear any height, even the qualifying height, is not **awarded any place.**

The table below show soring and tie breaking in high jump

	5,6"	5,8"	5,9"	5,10	5,11"	6,0"	6,1"	T F O A T I A L L U R E S	TJ OU TM AP LS	P O S I T I O N
	1,67	1,72	1,75	1,77	1,80	1,82	1,85			
OPIYO	-	xo	xo	xo	o	Xxo	xxx	8	6	2
KAMAU	-	xxo	xo	xo	xo	Xo	xxx	9	6	3
LETING	O	O	xo	Xo	xxo	Xxo	xxx	10	6	4
MUTISO	-	-	O	xO	xxO	Xo	xxx	7	6	1
NGETHE	Xxx	-	-	-	-	-	-	-	-	-

O = Cleared height, X failed jump and – unattempt

D. COMPETITION RULES

The rules of high jump shall apply in addition to the following rules:-

1. The competitor falls if he touches the ground with his pole beyond the plane of the uprights.
2. If he leavers the ground for the purpose of making a vault and fails to clear the bar.
3. He gails if, he makes 3 runs without completing a vault
4. He fails if, in the process of vaulting be climber the pole
If the pole breaks during vaulting the competitor shall be given another chance.

3 LONG JUMPS

(a) Essential of long jump

- (i) Fast approach which maintains speed right into the take off
- (ii) Powerful vertical lift
- (iii) A flight technique which permits efficient landing position

(b) APPROACH

- (i) Have a definite approach run distance. International jumper will require about 21 to 28 strides to take off. Long jumpers will need 15-19 strides.
- (ii) Have a fast run but controlled on
- (iii) Accelerate onto the take off-board

Take off

- (i) Hit the board with the correct foot, stike up through your hips punching your free knee and opposite arm, skywards
- (ii) The chest and hips should push forward to ensure maximum lift

(c) LIGHT AND LANDING

- (i) Fast hind leg swaung to lead off the board, the arms and behind the trunk
- (ii) Cycling action in the air
- (iii) When landing, feet are brought together and stretched forward heels to touch the ground first.
- (iv) Head is kept low and forward. Hands sweep forward to avoid sitting backward

(d) COMPETITORS

- (i) Each competitor is given 3-6 jumps he is credited on his best jump
- (ii) Incase of a tie the 2nd best jump decides the winner if the tie cannot be diced and it concerns

- (iii) 1st place, the competitors tying shall be given extra jump
- (iv) If the tie concerns other positions the competitors shall be given same position
- (v) At competitor shall take off from the stepboard and not beyond
- (vi) A competitor must land within the landing area only
- (vii) Measurements are taken at right angles front of scratch line to the nearest break in the sand made by any part of the competitor. The measurements are taken to the nearest $\frac{1}{4}$ below the distance covered

4 TRIPLE JUMP

- (a) Essentials in triple jumping
 - (i) Gain maximum distance during each phase of jump without prejudicing the following phase
 - (ii) Place each foot landing so that it given efficient position from which to jump
 - (iii) The flight of top is kept low. The ratio of 12:10:12 is best recommended

(b) Approach

- (i) Have a definite approach run distance
- (ii) Have fast but controlled open
- (iii) Have up and accelerate on to the takeoff board.

(C) TAKE OFF

- (i) Take off from the step board
- (ii) kept the trunk and head upright and drive hips forward and downward away from the board

(c) flight and landing

- (i) Increase the step distance by swinging the free leg high
- (ii) In the step keep the heel of the lead-knee well in “wait the ground to come to meet you, rather than seek it with your front leg”
- (iii) When landing buist sideways to avoid losing distance by setting back into the sand

(d) Competition rules

All rules of long jump apply:-

5. DISCUS

(a) The grip (The hold) Discus is usually held and not griped

- (i) Hold the discus loosely in the hand so that the end joints of your fingers wrap around the discus in

(ii) Stand/ stance

- (i) Stand at the back of the circle facing away from the direction of the throw

(c) The swing

- (i) When the wind up is completed transfer your weight over to the turning foot
- (ii) Keep turning on your toes until the foot bearing your weight is pointing in the direction of the throw.
 - (ii) The turning from the back of the circle to the front part should be smooth and momentum
 - (iii) Keep the turn close to the ground throughout
 - (iv) Do no jump

(D) RELEASE

- (i) The throwing arm in extended behind the shoulder
- (ii) the throwing hip is head of the throwing arm at the centre of the circle

- (iii) As the weight is transferred from the near foot to front foot, the front foot turns towards the direction of throw.
- (iv) Both feet must remain in contact with the circle until the discus has left the hand
- (v) The throwing arm is kept fully extended throughout the throw

(e) Follow through

After the implement leaves the hand the thrower keeps on turning on the throwing leg to a stop

(f) Competition rules

- (i) The discus is thrown from the circle to any point between the two sector lines
- (ii) The competitor should not touch any part of the line of the circle in the process of throwing
- (iii) After throwing the competitor shall leave the circle from the rear half and in a standing position only
- (iv) A foul throw and letting the implement for in an attempt has landed
- (v) The competitor shall leave the circle only when the implement has landed.
- (vi) The measurements shall be taken from the edge of the mark made by the implement which is nearest to the scratch line through the centre of the circle

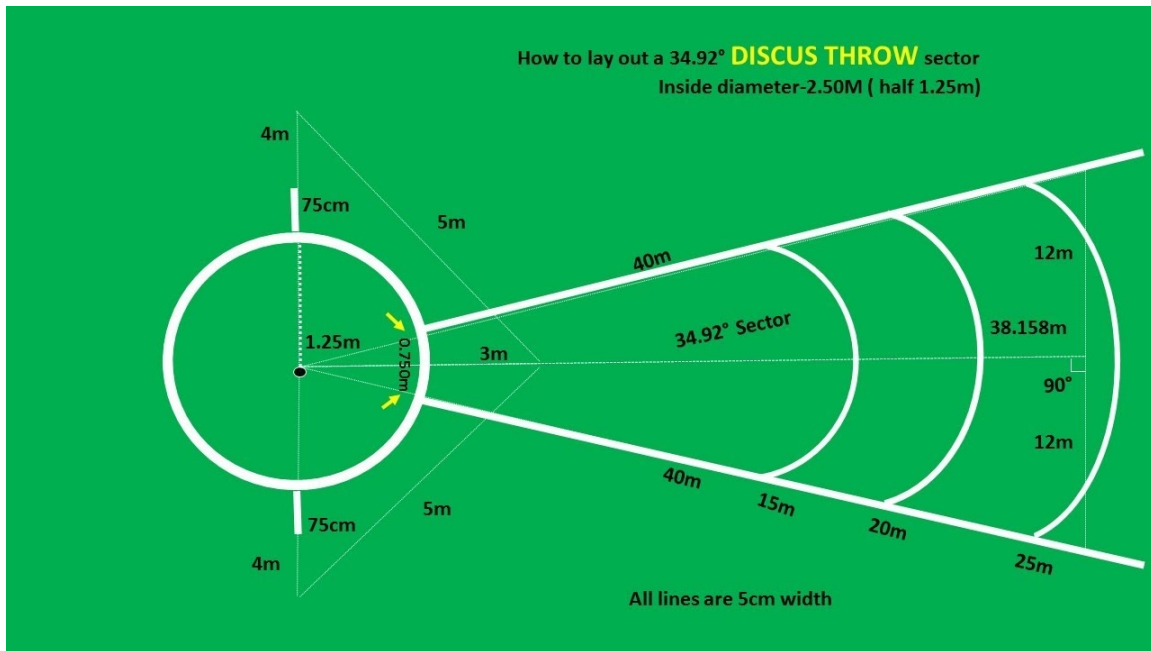


Figure 9. A discus playing field

Weight for discus

Men:	weigh (2kg)
	Diameter (219mm)
Women:	Weight (1kg)
Boys	Weight 1.5kg – 1.75 kgm

6 SHOT-PUT

(a) Stance

- (i) In rotational method the throw face back of the throwing area. In conventional the thrower faces the throwing area
- (ii) Be relaxed
- (iii) Feet are hip width apart, and left arm high

(b) The hold (grip)

- (i) Hold the shot against the middle three fingers with the thumb and little finger giving lateral support. (The shot is actually preposed and not gripped)
- (ii) The shot must touch or be in close proximity to neck and must remain there until release
- (iii) Right elbow is well out

(c) Shift (glide) and release

- (i) Start at the back of the circle facing away from the direction of throw, and with the right leg.

(d) Follow through

- (i) Keep the shot moving forward
- (ii) Drive the right hip up hard and chase the shot out with your finger tips.
- (iii) Drive the right hip up ward and chase the shot out with your finger tip
- (iv) Keep balance using reverse – foot action effected by transfer of whole weight from back foot to front foot.

(e) Competition rules

- (i) The competitor shall be allowed 3-6 throws and shall be credited on this best throw
- (ii) In case of a tie, the 2nd best throw shall decide the winner. If the tie remains the next best shall decide the winner. When the throw does not decide the positioning the competitor are placed in one position unless the tie concerns 1st position of
- (iii) The weight shall be put from the shoulder with one hand only and not behind one place of shoulder
- (iv) the weight must fall within the edges of the sector lines

- (v) The competitor is not allowed to touch any part of the circles in the process of throwing but however, he may touch the inside part of the stop board.
- (vi) The competitor must not leave the circles until the implement has touched the ground and then he must leave only from the rear half of the circle, in a standing position
- (vii) The measurement is taken from the edges of the mark which is nearest to the scratch line. The distance is near off at the inside of encircle. Measurement is taken to the nearest 1 ½ inch fellow the distance covered.
- (viii) The measurement is taken from the edge of the mark: which is nearest to the secretion line. The distance is near off at the inside of hecircle. measurement is taken to the nearest 1 ½ inch below the distance covered

Figure 10. A shot-put playing field

7. JAVELIN

(a) The grip

- (i) The javelin rests along the palm of the hand
- (ii) The finger or fingers and thumb, through which force is applied, pull against the near edge of the binding
- (iii) The other fingers should spread out along the grip and they should hold firmly

(B) THE RUN UP/ APPROACH

- (i) During the run the javelin is carried above the shoulder with the palm facing upwards. The elbow is kept under the javelin
- (ii) The javelin is carried pointing slightly upwards or even horizontally. The grip is kept firm and javelin in position throughout

(C) THE RELEASE

- (i) Javelin is withdrawn back into its throwing position behind the throwing shoulder
- (ii) The throwing leg takes a long stride landing on the heel in front of the body
- (iii) The whole weight is transferred from the rear foot to the front foot
- (iv) The hand remains high. The javelin is pulled from a point slightly behind the shoulder. The elbow passes close to the ear, and the hand is outstretched for a release. The body turns side – ways to avoid crossing of the front line.

(D) THE LANDING

- (i) The angle of projection is approximated $40^\circ - 50^\circ$.
- (ii) The javelin lands point/the head first
- (iii) The javelin must land in the sector of 28.96°

(E) PRECAUTIONARY MEASURES

In order to avoid accidents competitors must be given instruction Hal that, implements must be thrown during proper practice or competition only. After throwing, the implement must be returned by hand not thrown back to the staving area.

The referee or official concerned shall disqualify form competing in the vents, and athlete who willfully disobeys the above instructions having his a attention drawn to them

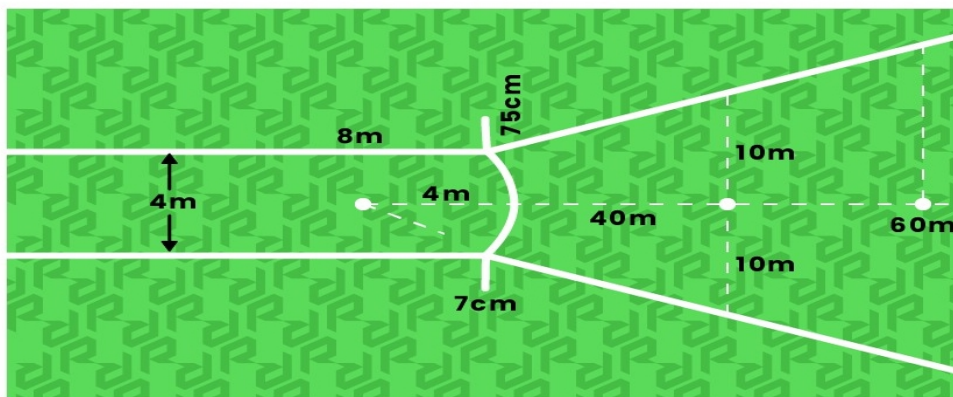


Figure 11. A javelin playing field

RULEs OF COMPETITIONS

- (i) A foul throw or letting go of the implement in an attempt to throw shall be reckoned as trial
- (ii) If the implement breaks in the air, it shall not be counted as a trial
- (iii) The javelin shall be thrown with one hand only, and must be held at the grip. It shall be thrown over the shoulder and it must not be along or hurled
- (iv) At no time the competitor may turn round or has back towards the throwing are in the reprocess of throwing

- (v) The throw shall not be measured if the javelin does not strike the ground point first
- (vi) The throw shall not be measured if the competitor crosses the scratch line or its extension
- (vii) The throw shall not be measured if the competitor crosses the scratch line or its extension

8. HAMMER

Hammer throwing required rotational speed, strength, coordination ability and keen sense of rhythm

(a) stance

- (i) Stand behind of the circle near the edge in the rear half
- (ii) Face behind the throwing area
- (iii) Be relaxed. Feet should be shoulder width apart

(b) The grip

- (i) Hold the handle in the palm of your left hand. You may wear gloves on your left hand to avoid formation of blisters due to friction.
- (ii) The head of the hammer on its farthest position on the right side of the foot

(c) The swings

- (i) Start the swing from the right side to the left
- (ii) Get the longest radius by stretching arms to the full
 - (iii) Bend the knees but keep the trunk straight and upright
 - (iv) Move the hips to maintain balance during the swings (“heel-toe “ turns)

(d) The turn

Three swings are enough to start the turn

- (i) Start turning as the hammer comes in front of you
- (ii) The weight from the right toes is transferred to the left heel and the hips continue to turn
- (iii) The bent knees still maintained (sitting like positions).

(e) Deliver – release

Two three turns are enough to release the hammer

- (i) The release begins as a sharp lift with your legs, finished off by your arms
- (ii) Stretch arms to the full face the hammer as it flies
- (iii) The balance is maintained as the right foot follows through for another step

(f) Rules of competition

- (i) A competitor is allowed 3-6 throws and is credited on his best throw, in case of a tie, the rule of tie shall apply a competitor is not allowed to touch the circle line or the ground outside the circle during the process of throwing. However, the head of the hammer may touch the ground when swinging
- (ii) It is a foul for a competitor to stop throwing and begin again
- (iii) A competitor leaves the circle after the hammer has landed. He shall leave through the rear half of the circle and from a standing position
- (iv) Measure each throw to the nearest $\frac{1}{4}$ inch below the distance covered. If the wire breaks in the air the competitor shall be given another chance

The throwing circle is 2.135m in diameter. There must be protection cage

Weight

Senior men: 7.26kg

Senior women: 4kg

The total length of the chain and the hammer is 117.5 to 121.5 cm.



Figure 12. an image of hamer