

A TEXTBOOK OF
PHYSICAL EDUCATION
Book 12

TEACHER'S HANDBOOK



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UNIT I
PLANNING IN SPORTS

P. 27–30

A. Objective Type/ Multiple-Choice Questions

(1 mark)

I. Give one word answers.

1. Which committee is responsible for selecting the officials involved in a sports event?

Ans. Committee for Officials

2. Calculate the number of matches in a single league tournament if there are 8 participants in the first stage of tournament.

Ans. 28

3. Name the tournaments which are organised to give a second chance to the defeated players in knockout tournaments.

Ans. Consolation Tournaments

4. Name any one method which can be used for preparing fixtures in a league tournament.

Ans. Cyclic method

5. Write the name of the competitions which are conducted between 'different institutions'.

Ans. Extramural competitions

II. Fill in the banks.

1. A is a dummy team that participates in the second round to even out the number.

Ans. bye

2. are made in a league tournament through the staircase method.

Ans. Fixtures

3. The committee is responsible for welcoming guests, players and officials during the sports events.

Ans. reception

4. competitions are useful at bringing out hidden talents.

Ans. Intramurals

5. If thirteen teams are participating in a knockout tournament, then byes will be allotted.

Ans. three

III. State True or False

1. Announcement committee is responsible for making announcements of the dates and venue of the tournaments.

Ans. False

2. There are four types of combination tournaments.

Ans. True

3. Intramural competitions are held within the 'same institutions'.

Ans. True

4. In tabular method, fixtures are made just like a ladder.

Ans. False

IV. Multiple-Choice Questions

1. Which formula is used to find out the number of matches in a double league tournament?

- (a) $N \times N$ (b) $N(N - 1)$
(c) $(N - 1)$ (d) $N \times N \times N$

Ans. (b) $N(N - 1)$

2. What is the formula to find the number of matches in a knockout tournament?

- (a) N (b) $N(N - 1)$
(c) $(N - 1)$ (d) $(N + 1)$

Ans. (c) $(N - 1)$

3. Which of the following is not a major game?

- (a) Hockey (b) Football
(c) Badminton (d) Karate

Ans. (d) Karate

4. It is a process/procedure of shuffling the position of good teams so that they don't meet each other in an early stage of the competition and spectator interest is kept alive till finals. What is the name of this process?

- (a) Intramural (b) Seeding
(c) Fixture (d) Extramural

Ans. (b) Seeding

5. Which sports competition is organised within the school itself?

- (a) Extramural (b) Intramural
(c) Inter-state (d) None of these

Ans. (b) Intramural

6. Which of these is not one of the methods used for fixtures in League or Round Robin tournaments?

- (a) Cyclic method (b) Spiral method
(c) Staircase method (d) Tabular method

Ans. (b) Spiral method

B. Very Short Answer Type Questions

1. What do you understand by planning in sports?

(CBSE 2016, 2019)

Ans. Planning is a course of action in order to reach a definite goal.

2. What do you mean by tournament?

Ans. A tournament is a type of contest in which several players participate and defeat opponents in various rounds to get to the final match and win it.

3. Round Robin tournament is of two types. Name them and give one major difference between them. **(CBSE 2017)**

Ans. Single league tournament and double league tournament. In single league tournament, each team/player plays against every other participant once. In double league tournament, each team/ player plays against every other participant twice.

4. What do you mean by fixture? **(CBSE 2018)**

Ans. (i) The organised method in which teams participate in any tournament is a fixture.

(ii) Fixture means arranging tournament with details of venue, date and time.

(iii) Fixture is a procedure to set a sequence of matches for participating team. (any one)

5. Fixtures are the schedule, fixed for the matches. What is a bye? **(CBSE 2017)**

Ans. A bye is a dummy team that participates in the second round to even out the number. The number of byes in a fixture is the difference between the number of participants and the next highest number which is the power of 2.

6. What do you mean by combination tournament?

Ans. When the scope of the tournament is huge, neither knockouts nor leagues are feasible. For example, in tournaments organised on a zonal basis, the number of participating players/teams will be high. Furthermore, it would be impractical for every team/player to visit their opponents in different locations. In such cases, combination tournaments are chosen for more efficient organisation.

7. How is a knockout cum league different from a league cum knockout?

Ans. Knockout cum league begins with the division of all competitors into four zones. In the first stage, the participants in each zone will play on a knockout basis to decide a winner, and the winners of each zone will then advance further to play-off against each other on the same basis. But in a league cum knockout, the four zones first determine their own winners on a league basis, with each participant playing against

every other player/team. The four zonal winners then compete on knockout basis to determine the final winning team/player.

8. Suggest any two disadvantages of league tournament. **(CBSE 2019)**

Ans. (i) The most glaring disadvantage of leagues is the huge amount of time involved in determining the winner, since every team/player has to play against the others in each stage of the tournament. Leagues can run into weeks.

(ii) Since each player/team is given multiple chances, it also implies that the weaker performers will continue playing till their quota is exhausted, thereby lengthening the duration of the tournament.

9. What is the difference between single league tournament and double league tournament?

Ans. In single league tournament, each team/player plays against every other participant once. In double league tournament, each team/player plays against every other participant twice.

10. What is seeding? **(CBSE 2011, 2012)**

Ans. Seeding is a tactic used in sports events in which specific teams are sorted into a bracket in such a way that the strongest teams meet later in the tournament.

11. Write the formula for giving a bye. **(CBSE 2016)**

Ans. The number of byes in a fixture is the difference between the number of participants and the next highest number which is the power of 2. If there are two very strong teams, one will be placed on the top of the upper half and the other at the bottom of the lower half. If there are four strong teams, then the third will be placed on the top of the lower half, and the fourth at the bottom of the upper half. This usually works if the number of teams to be seeded are the power of 2. Save for seeded teams, the rest are divided by drawing lots.

12. What is a consolation tournament?

Ans. Consolation tournaments are held to give second chance to defeated players in knockout tournaments.

13. Enlist two objectives of intramurals. **(CBSE 2015)**

Ans. Establishing Physical Education and accommodating greater number of participants are the two objectives of intramurals.

14. What is an extramural competition?

Ans. An extramural activity is the activity that takes place outside the walls of the school.

15. Give two objectives of extramural activities.

(CBSE 2019)

Ans. Giving students experience in competitive sports, and developing sportsmanship and fraternity are the two objectives of extramural activities.

16. What does the school intend by stating that, “only such students shall participate in the basketball intramurals who have not represented the school in basketball in the past and minimum 10 substitutions shall be compulsory”? (CBSE 2015)

Ans. Each and every student should get a chance to play and participate in the game.

17. What is a health run?

Ans. Health runs are a variety of marathons organised to spread awareness of and improve the physical health of the members of a community.

C. Short Answer Type-I Questions (3 marks)

1. Write any three objectives of planning.

Ans. (i) The purpose of planning is to execute any program in a streamlined manner so that it runs smoothly from start to finish.

(ii) To efficiently supervise all activities during a sports tournament.

(iii) To avoid any type of mistakes during a tournament.

2. List down the important committees during a tournament. (CBSE 2011)

Ans. Committee for Publicity, Boarding and Lodging Committee, Transport Committee, Grounds and Equipment Committee, Refreshment and Entertainment Committee, Reception Committee, Decoration and Ceremony Committee, Committees on Entries and Programmes, etc. are various important committees during a tournament.

3. What is the task of the decoration and ceremony committees?

Ans. Decoration and Ceremony Committees work in tandem with the refreshment and entertainment committee and the reception committee to make the ceremonies vibrant and well coordinated. They decorate the viewing areas and stages so that the venue looks attractive. This committee is also charged with arranging for certificates, medals and trophies.

4. Your school is organising ‘Run for Unity’. Explain the responsibilities of accreditation, technical and finance committee. (CBSE 2016)

Ans. i. **Accreditation committee:** This committee registers all the participants with an

operational role. The production, distribution and validation of passes is the duty of this committee.

ii. **Technical committee:** Technical committee looks after the technical aspects of the tournament. It ensures that the field is safe for play for all participants. It ensures the quality of equipment.

iii. **Finance committee:** This committee prepares the budget of the tournament and maintains every expenditure related to tournament.

5. Give two reasons why tournaments are important.

Ans. The purpose of a tournament is to establish the one team or player who has outperformed the rest. Tournaments introduce the youth to stress that is different from the one they face in the classroom; on the field, their alertness of mind, physical strength, coordination between the mind and the body, and natural and acquired reflexes are all put to test in front of spectators.

6. What are the three types of tournaments?

Ans. Three types of tournaments are knockout; league or round Robin and combination.

7. What is the difference between round robin and knockout?

Ans. In knockout tournaments, the defeated team or player is eliminated with no scope of participating further.

As for the winner, they continue competing against other opponents until they eventually lose or win the tournament.

League or round Robin tournament, as opposed to knockouts, allows each team or player to compete against every other participant in the tournament. This can be either of two variations: single league tournament, in which each team/player plays against every other participant once or double league tournament, in which each team/player plays against every other participant twice.

8. What types of statistics are used while drawing fixtures for knockouts?

Ans. For knockouts, the total number of matches to be played in a single tournament is determined by the following formula:

$$(N - 1)$$

where N is the number of teams/individual players.

So, if in a tournament there are 8 participants, then the total number of matches played will be 7. In the first phase, there will be 4 matches (1 against 1); in the second, the four winners

will advance further to decide the two finalists, so there will be 2 matches. Counting the final match, there are 7 in total, as derived from the formula. Lots are drawn to decide the pairs of competitors.

9. How many byes will be allotted in a knockout in which 15 teams are participating?

Ans. Number of Bye = $(16 - 15) = 1$ (refer to pages 17–18 of textbook)

10. Draw a fixture of 11 football teams participating in a tournament on the basis of a knockout.

(CBSE 2016)

Ans. Refer to page 18 of the textbook.

11. How many rounds will be there in a knockout of (a) 10 teams and (b) 13 teams?

Ans. (a) When the number of participating teams or players (N) is the power of two (i.e. 2, 4, 8, 16, 32, and so on), then number of rounds will be the number of 2's making up N. For instance, when

N = 10, number of rounds will be $2 \times 2 \times 2 \times 2 = \text{three } 4\text{s} = 4,$

(b) N = 13, number of rounds will be $2 \times 2 \times 2 \times 2 = \text{four } 2\text{s} = 4.$

When N is not the power of 2, the number of rounds will be based on the next highest power of 2.

12. Draw a knockout fixture of 24 teams.

(CBSE SP 2016)

Ans. Refer to page 18 of the textbook. Follow the same method to draw a fixture of 24 teams.

13. Differentiate between the cyclic method and staircase method.

Ans. Cyclic method: Cyclic method has different applications for even and odd numbers of teams. In the former case, the 1st team is placed at the top of the right hand side. The remaining team numbers are put in ascending order consecutively and then upward on the left side. In the latter, the bye is fixed on the top of the right side, and then followed by the rest of the procedure. Teams are rotated from right to left.

If N (number of teams) is even, the number of rounds will be $(N - 1).$

Staircase method: In this type, fixtures are arranged in such a way that it resembles a ladder or a staircase. There is no need to give byes to any team as there is no issue of odd or even number of teams.

14. Write briefly about the objectives of intramurals.

(CBSE 2016)

Ans. Objectives of intramurals:

- Establishing physical education
- Accommodating greater number of participants.
- Promoting positive values in students.
- Providing healthy recreation.
- Introducing new games.
- Development of sportsmanship.
- Development of organisational skills.
- Development of personality
- Scouting of talent.

15. Write three differences between intramurals and extramurals. **(CBSE 2017)**

Ans. i. Intramurals help mould the physical, mental, emotional, moral and social development of the students.
ii. They channel the energy of the student and provide a healthy outlet.
iii. They make students more agile and fit.

while

- i. Extramurals bring much needed exposure to schools and students that might not be able to showcase their own talents due to lack of opportunities.
- ii. Extramurals boost the popularity of physical education by building the interest of students, their parents and the school authorities.
- iii. Extramurals are a healthy excuse for participating in a fun recreational indulgence like sports, which students might not be otherwise able to in their schools and homes.

D. Short Answer Type-II Questions (5 marks)

1. Describe the objectives of planning in detail.

Ans. Objectives of Planning are described below:

- i. **To avoid last minute hassles:** The purpose of planning is to execute any program in a streamlined manner so that it runs smoothly from start to finish. An event like a sporting tournament involves a large number of people. Apart from the organising committee and the players, there will be sports officials, audiences, guests, media persons, etc.
- ii. **To efficiently supervise all activities:** A sports tournament consists of multiple

activities – opening and closing ceremonies, entertainment programmes, matches, interviews, boarding and lodging of guests, maintenance of grounds and equipment, etc. A good planning committee takes notes of these components, delegates subcommittees to handle each of them, and supervises them efficiently.

- iii. **To coordinate successfully:** There needs to be sound coordination between each committee involved in organising the sporting event. The boarding and lodging committee must be in touch with the transport committee so that the invitees and participants can travel from their place of stay to the venue of the sports without hiccups.
- iv. **To avoid mistakes:** Though mistakes are bound to happen once or twice, the objective of good planning is to ensure that there are as few of them as possible. A poorly planned event will leave everyone from the guests to the organisers unsatisfied.
- v. **To make room for innovation:** The process of planning itself creates a space for bringing up ideas to make the events more interesting. This is, however, possible only when the planning committee communicates openly with its members and seeks their cooperation and suggestions.
- vi. **To get the best performance out of the participants:** If the entire event is properly planned and efficiently executed, it leaves the players free to focus on their performance. They do not have to worry about irregularities like poor equipment, matches not beginning on time, lack of officials, etc. as the planning committee is taking care of these elements. They can concentrate on their competition and give their supporters an exciting match.

2. Describe how various planning committees function in sports events.

Ans. Various planning committees function in the following manner in a sports event.

- i. **Committee for publicity:** The committee for publicity completes this preparation before the games. During the games they maintain the interest level for the games with proper advertisement. They also coordinate with the media for coverage during and after the games.
- ii. **Boarding and lodging committee:** This committee takes care of accommodation

and meals for the players, officials, and other members involved in the event. Before the games, they confirm the bookings. Once the tournament has started, they keep track of all boarding and lodgings, switches between departures and new arrivals, etc.

- iii. **Transport committee:** The transport committee handles transportation facilities for the players, officials, etc. They arrange for buses and other vehicles to take the players and officials to the venue of the games from the places where they are staying.
- iv. **Grounds and equipment committee:** This committee has the responsibility of ensuring that the grounds, fields, courts, etc. are in top condition. They also check the equipment and other gears to be used in the games to ensure that no mishap occurs and that plenty of equipment is available for all the players.
- v. **Refreshment and entertainment committee:** They supply drinks and refreshments to the guests, players, officials and other invitees. The entertainment programmes, such as opening song, closing dance, etc. are also arranged by this committee in advance.
- vi. **Reception committee:** The reception committee welcomes the guests, players, officials, audiences, etc. during the opening and closing ceremonies.
- vii. **Decoration and ceremony committee:** They decorate the viewing areas and stages so that the venue looks attractive. This committee is also charged with arranging for certificates, medals and trophies.
- viii. **Committees on entries and programmes:** The committee on entries and programmes are tasked with sending out entry forms to various institutions early so that the latter can send in their applications on time. The committee then allots slots to the competitors, prepares fixtures if required, build a clear-cut schedule of the programmes and prints it so that it may be distributed to all involved parties.
- ix. **Committee for officials:** There are many officials involved in a sporting event: judges, referees, umpires, recorders, starters, time keepers, lap scorers, clerks of the course, announcers, commentators, etc. The committee for officials selects and manages them for smooth functioning of the sports event.

x. **Announcement committee:** The announcement committee is responsible for making announcements during the opening and closing ceremonies, games, important information like when an event is going to take place or changes in schedules, names of officials and players, running commentaries, etc.

xi. **First aid committee:** One of the most important committees in a sports event, the first aid committee works under the supervision of a medical expert. It provides first aid to injured players and ensures that they receive advanced medical attention if the need arises. The first aid team makes all necessary arrangements before the commencement of the sports event.

3. What is a knockout tournament? Explain different types of knockout tournaments. Draw a fixture of 21 teams on a knockout basis.

(CBSE 2012, 2015)

Ans. In boxing, a match is finished when an opponent is knocked down and unable to rise and return to the game within a certain time limit. This is called knockout. The concept of knockout tournaments is somewhat similar. In this type of tournament, the defeated team or player is eliminated with no scope of participating further. As for the winner, they continue competing against other opponents until they eventually lose or win the tournament.

Single knockout tournament, consolation tournament and double knockout tournament are different types of knockout tournament.

See page 19 of the textbook for a fixture of 21 teams on a knockout basis.

4. What is a league or round robin? Draw a fixture for 6 teams using round robin method.

(CBSE 2012)

Ans. League or Round Robin tournament, as opposed to knockouts, allows each team or player to compete against every other participant in the tournament. This can be either of two variations: single league tournament, in which each team/player plays against every other participant once or double league tournament, in which each team/player plays against every other participant twice.

Example . Draw a fixture of 6 teams on a league basis according to the cyclic method.

Solution. Total number of teams
= 6 (Given)

Total number of matches

$$= \frac{N(N-1)}{2} = \frac{6(6-1)}{2}$$

$$= \frac{6 \times 5}{2} = \frac{30}{2} = 15 \text{ matches}$$

Number of rounds

$$= N - 1 = 6 - 1 = 5 \text{ rounds}$$

Fixtures

I R		II R		III R		IV R		V R	
6	①	5	①	4	①	3	①	2	①
5	2	4	6	3	5	2	4	6	3
4	← 3	3	← 2	2	← 6	6	← 5	5	← 4

5. Draw a fixture of 12 teams on a league basis according to the staircase method. How will you decide a winner in league tournament?

(CBSE 2019)

Ans. Fixture of 12 Team on the basis of staircase method

1-2
1-3 2-3
1-4 2-4 3-4
1-5 2-5 3-5 4-5
1-6 2-6 3-6 4-6 5-6
1-7 2-7 3-7 4-7 5-7 6-7
1-8 2-8 3-8 4-8 5-8 6-8 7-8
1-9 2-9 3-9 4-9 5-9 6-9 7-9 8-9
1-10 2-10 3-10 4-10 5-10 6-10 7-10 8-10 9-10
1-11 2-11 3-11 4-11 5-11 6-11 7-11 8-11 9-11 10-11
1-12 2-12 3-12 4-12 5-12 6-12 7-12 8-12 9-12 10-12 11-12

$$\text{No. of Rounds} = N - 1 = 12 - 1 = 11$$

$$\text{No. of matches} = \frac{N(N-1)}{2} = \frac{12(12-1)}{2}$$

$$= \frac{12 \times 11}{2} = \frac{132}{2} = 66$$

The following way is used to decide a winner:

- The team that wins the match gets = 2 points.
- The team that loses the match gets = 0 point.
- If match draws then each team gets = 1 point.

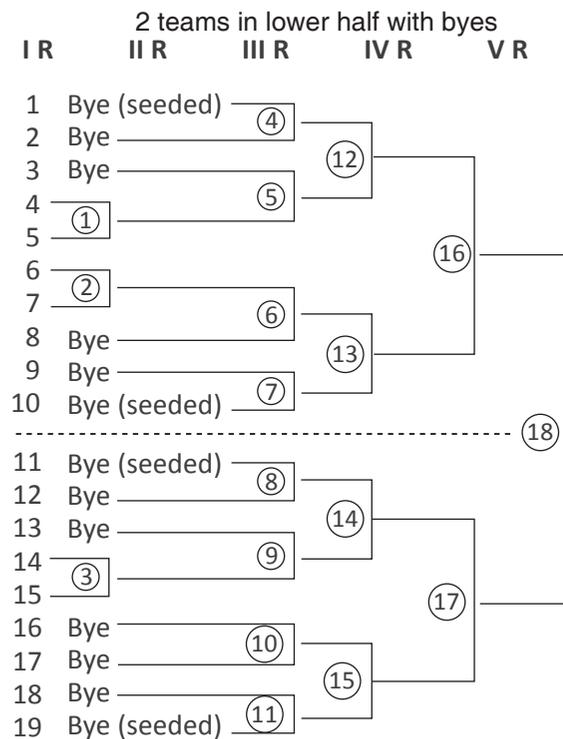
After the tournament, all the teams are awarded the score as per their performance and the team which scores maximum is declared winner.

If the points of two teams are equal, then a match is held again between both teams.

6. Mention all calculations and steps involved to draw a knockout fixture of 19 teams, where 4 teams are to be seeded. (CBSE 2018)

Ans. Total no. of teams = 19 (N = 19)
 No. of matches = (N - 1) = 19 - 1 = 18
 No. of teams in upper half = $\frac{(N + 1)}{2} = 10$
 No. of teams in lower half = $\frac{(N - 1)}{2} = 9$
 Total no. of byes (NB) = next power of 2 - N = 32 - 19 = 13
 No. of byes in upper half = $\frac{NB - 1}{2} = 6$
 No. of byes in lower half = $\frac{NB + 1}{2} = 7$

Seeding – 2 teams in upper half with byes



7. What do you mean by intramural? What are its significance and objectives?

Ans. Intramural competitions are organised within the school itself, with the participants being the students of the school. No outsiders are allowed to compete in such events.

Significance of intramurals are as follows:

- i. Intramurals help mould the physical, mental, emotional, moral and social development of the students.
- ii. They channel the energy of the student and provide a healthy outlet.

- iii. They make students more agile and fit.
- iv. Intramurals are also useful at bringing out hidden talents.
- v. Intramurals contribute to personality growth of the students and make them leaders who are not afraid to face challenges.

8. Draw a league fixture of 16 teams.

Ans. Number of teams = 16

Number of matches = N - 1 = 16 - 1 = 15

Number of teams in upper half = N/2 = 16/2 = 8

Number of teams in lower half = N/2 = 16/2 = 8

Number of byes = Next nearest power of 2 - Number of teams
 = 16 - 16 = 0

Number of rounds = 4

For fixture, refer to page 18 of the textbook.

9. Being sports captain of the school, prepare five important committees with their responsibilities to conduct one day Run for Health Race.

(CBSE 2015)

Ans. i. Committee for publicity: The committee for publicity completes this preparation before the games. During the games they maintain the interest level for the games with proper advertisement. They also coordinate with the media for coverage during and after the games.

ii. Boarding and lodging committee: The boarding and lodging committee takes care of accommodation and meals for the players, officials, and other members involved in the event. Before the games, they confirm the bookings. Once the tournament has started, they keep track of all boarding and lodgings, switches between departures and new arrivals, etc. They ensure that the guests are taken care of wherever they are staying. After the event is over, they are in charge of settling the bills and other fees incurred by the guests during their stay.

iii. Transport committee: The transport committee handles transportation facilities for the players, officials, etc. They arrange for buses and other vehicles to take the players and officials to the venue of the games from the places where they are

staying. Though preparations for logistics begin before the games start, it is during the tournament that the transport committee is at its busiest.

- iv. **Grounds and equipment committee:** This committee has the responsibility of ensuring that the grounds, fields, courts, etc. are in top condition. They also check the equipment and other gears to be used in the games to ensure that no mishap occurs and that plenty of equipment is available for all the players. Their responsibilities start before the games. During the games, they have to maintain the grounds and equipment, and once the competition is over, they ensure that everything is in place and damaged equipment and areas reported for replacements or repairs.
- v. **Refreshment and entertainment committee:** They are different from the boarding and lodging committee. They supply drinks and refreshments to the guests, players, officials and other invitees. The entertainment programmes, such as opening song, closing dance, etc. are also arranged by this committee in advance.

10. Describe five specific sports programmes in detail.

Ans. Five specific sports programmes are as follows:

- i. **Sports day:** A sports day is a special day dedicated to sports. It is usually observed in schools and is an annual feature.
- ii. **Health run:** Health runs are a variety of marathons organised to spread awareness of and improve the physical health of the members of a community. They are planned and executed by the health department, sports department, or social organisations focusing on health.
- iii. **Run for fun:** Run for fun has the same purpose as health runs to increase the spirit of physical fitness in the public.
- iv. **Run for specific causes:** Unlike run for fun, run for specific causes are organised in honour of a cause – spreading awareness of AIDS, cancer, disabilities, etc. are examples of such causes.
- v. **Run for unity:** Run for unity are held to bring people from different communities, castes and creeds together under a

single event to promote peace, harmony and unity.

E. Value-Based Questions

Planning is a process of setting objective and deciding how to accomplish them. It is the most important task of all administration. Like, there is a new school in our town. The school has a huge campus, so the school authorities have decided to introduce some sports that includes taekwondo, martial arts, archery, boxing, swimming, etc. The school has made it mandatory for each student. So that every student can participate in intramural competitions organised by the school. The idea of introducing such sports is appreciated by the parents of the students. Such sports help students to expand their knowledge and capabilities. These sports help to build confidence and provide healthy recreation.

Answer the following questions based on the above passage:

1. What do you understand by planning?
2. What are the objectives of the intramurals?
3. What are the values shown by the parents of the students in the school?

Ans.

1. Planning is the process of arranging expected activities so that a certain goal or target can be achieved.
2.
 - i. **Establishing physical education:** By introducing intramurals at this stage, the students are taught to associate exercise with fun. Sports become an exciting part of their lives in which they can excel.
 - ii. **Accommodating greater number of participants:** Intramurals close gap between good players and average players in a school. The competition is for the school students only. Participation is thus amplified in terms of number. A single student can even compete in more than one event if she/he so wishes.
 - iii. **Promoting positive values in students:** Sports have a positive effect on students. They are about cooperation, leadership, grit, mental alertness and determination. Regular organisation of intramurals instils these values in the students since their involvement in sports increases.
3. Coordination, positive attitude, decision-making, etc.