

DAV PUBLIC SCHOOLS, ODISHA, ZONE-II
QUESTION BANK-2021-22

CLASS: XII-PHYSICAL EDUCATION (048)



Chapter -1
PLANNING IN SPORTS

MCQ:

1. How many byes should be given if 19 teams are participating in a knock-out tournament?
a)12 b)13 c)14 d)15
 2. How many methods can be used for preparing fixtures in a league tournament ?
a)2 b)4 c)3 d)5
 3. Tournaments are helpful for the development of :
a) Social qualities b) Selection of players
c) Sports skills d) All of the above
 4. How many teams will be placed in 3rd quarter if 31 teams are participating in a knock-out tournament?
(a) 6 b)7 c)8 d)None
 5. Which of the following methods is not used for preparing fixtures in league or Round Robin tournament?
a) Stair case b)Cyclic c)Combination d)Tabular
 6. In which type of tournament, a team once defeated gets eliminated from the tournament?
a) League b) Knock-out c)Round Robin d)Challenge
 7. In which tournament strong teams may have possibility to be eliminated in the preliminary round?
a) League b)Knock-out c)Round Robin d)Challenge
 8. Tabular method is used for fixtures in:
a) League b) Knock-out c)Round Robin d)Challenge
 9. Which of the following is the objective of planning ?
a)To reduce unnecessary pressure of immediacy
b)To maintain good control over the activities
c)Both
d)None
 10. Which committee prepares budget and maintains the account of income and expenditure?
a)Boarding and lodging b) Financial
c) First-Aid d) Announcement
- Q11: Which of these is not an objective of planning?
a: improving sports performance b : to increase efficiency
c : to enhance creativity d : learning specific rule of sports
- Q12- In which method bye is not given ?
a – staircase b – cyclic
c – tabular d – combination
- Q13 –Procedure of arranging team in a systematic order is.....
a – tournament b- fixture
c – seeding d – bye
- Q14- What is the formula to determine the total number of matches in single league tournament ?
a – $n+1$ b – $n + \frac{1}{2}$
c – $n - \frac{1}{2}$ d – $n(n-1)/2$
- Q15 – Tournaments are helpful for the development of

- a - social qualities
- c - sports skills

- b - selection of players
- d – all of the above

Q16 – League- cum- knockout is a part of which tournament ?

- a – knockout tournament
- c – combination tournament
- b – round robin tournament
- d – consolation tournament

Q17 – In which seeding the seeded players directly participate in quarter- final or semi final ?

- a – special seeding
- c – both a &b
- b – seeding
- d- none of these

Q18- In which type of tournament, a team once defeated gets eliminated from the tournament ?

- a. League tournament
- c. Challenge tournament
- b. Knock out tournament
- d. Round robin tournament

Q 19 –In which tournament, strong teams may have the possibility to be eliminated in the preliminary round?

- a –knock-out tournament
- c – League cum league tournament
- b – league tournament
- d – league cum knock-out tournament

Q 20- To avoid the careless mistake under pressure and to achieve the goal, which of them should be more valuable ?

- a – staffing
- c – supervision
- b – planning
- d. Budgeting

Q21- Which of the following committee sometime prepare the fixtures ?

- a – committee for officials
- c – committee on entries and programme
- b - programme committee
- d – reception committee

Q22-Which formula is used in British method to decide the winner ?

- a – total matches played/total matches won x100
- b – total matches won/total matches played x 100
- c – total points obtained/total possible points x100
- d –total possible points /total points obtained x 100

Q23- Under the seeding method, if teams are to be seeded, then first team is kept at?

- a – top of the lower half
- c –last of the lower half
- b – top of the upper half
- d –last of the upper half

Q 24 – The other name of league tournament is

- a –knock out tournament
- c – combination tournament
- b – round robin tournament
- d – challenge tournament

Q25 – In the placement of byes, fourth bye is given in which place ?

- a – 1st team of the upper half
- c – last team of the lower half
- b – 1st team of the lower half
- d – last team of the upper half

Q.26. What is bye?

- a. It's the method of drawing fixture.
- b. Point system for team games
- c. Advantage given to a team to not play in initial round.
- d. Placing of teams according to previous performance.

CASE BASED QUESTIONS:

Case1:

With the aim of promoting physical fitness and healthy lifestyle amongst students the Physical Education Teacher at XYZ School plans to organize intramural competitions at school. For conducting the event he has given this assignment to the students of class XII who have taken up Physical Education subject so that they can get first hand experience of organizing events. On the basis of given information answer the following questions:

A. The work of committees is divided into _____

- (a) Pre, during and post
- (b) Pre and post
- (c) Pre and during
- (d) During and Post

B. Match the following

- | | |
|-------------------------|--|
| (a) Technical committee | (i) To provide shifting facility |
| (b) Finance committee | (ii) To resolve dispute |
| (c) Transport committee | (iii) To deal with money and expenditure |
| (d) First aid committee | (iv) To provide medical facility |

- (a) a-ii, b-iii, c-i, d-iv
- (b) a-iii, b-ii, c-i, d-iv
- (c) a-ii, b-iii, c-iv, d-i
- (d) a-iv, b-iii, c-i, d-ii

C. Which is not the objective of Sports Tournament?

- (a) To Provide Recreation
- (b) To help in overall development
- (c) To achieve high performance
- (d) To provide opportunity.

Case 2. - Below given is the tournament fixture procedure of a CBSE volleyball national competition

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

On the basis of the above data, answer the following questions.

A – The formula for calculating number of matches in league tournament are where N is number of team is -----

- a- $N(N-1)/2$
- b- N
- c- N-1
- d- N+1

B – In league tournament the winner is decided by -----

- a- British method
- b- American method
- c- Nos of matches won
- d- Both a & b

C – which of the following is not a league fixture procedure ----

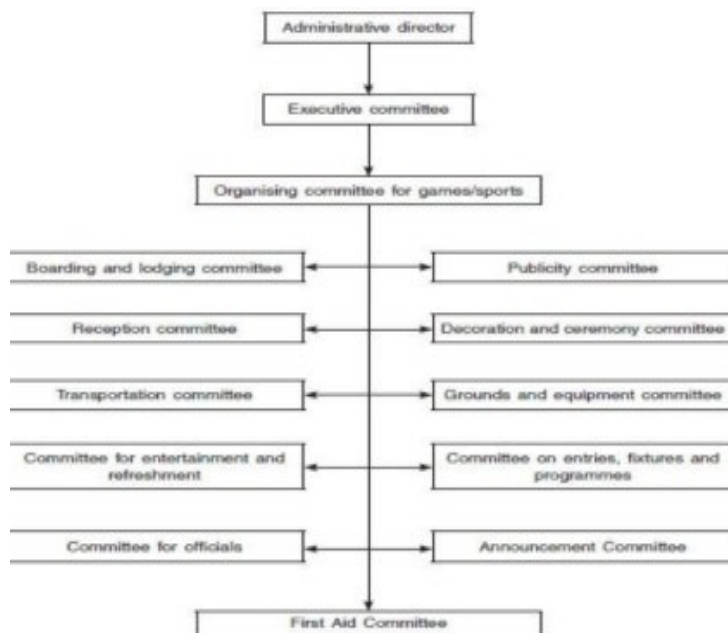
- a- Ladder method
- b- Cyclic method
- c- Tabular method
- d- None of these

D – Formula for calculating nos of round in league tournament

- a- N
- b- N-1
- c- N+1
- d- N/1

Case3:

While organizing sports events for the Annual Sports Day, Arjun and Ravi being the captain and vice captain of sports,for various committees as shown below.



A. The members of this committee are responsible for welcoming guests and spectators

- (a) Decoration committee
- (b) Reception committee
- (c) Publicity committee
- (d) Transportation committee

B. Announcement of venue, date and events is done by _____

- (a) Publicity committee
- (b) Transportation committee
- (c) Ground committee
- (d) Committee for officials

C. Organising and conducting of sports events involve _____

- (a) planning
- (b) Forming committees
- (c) both(a)&(b)
- (d) only delegation

D. Complete responsibility for success of competition is taken by _____

- (a) Announcement committee
- (b) Administrative director

(c) First aid committee (d) committee for officials

E. To prepare a proper score sheet for record is ___ responsibility.

(a) pre tournament (b) during tournament (c) Post tournament (d) all of the above

Case 4:

Your school has been given the responsibility to conduct zonal volleyball competition. As a Headboy/Head Girl of the student council you have been asked to make various teams of students to help teacher in charges for smooth conduct of the tournament.

A. To help the teams to know about the fooding and stay arrangement a group of students will be assigned with _____ committee.

- a) Transport
- b) Registration
- c) Boarding and lodging
- d) Decoration

B. Students good at art and craft and creative designing will be assigned with ___ committee.

- a) Reception
- b) Registration
- c) Decoration
- d) Entertainment

C. Few students will be assigned with _____ committee for prize distribution

- a) Ceremonial
- b) Transport
- c) Registration
- d) Budget

Case 5:

Your school has received an invitation for participation in a Badminton competition being organized by XYZ School. There is a entry fee for the competition due to which very few students have shown their willingness to participate.

A. Which type of fixture is preferred if there are less number of teams?

- a) Knockout
- b) League
- c) Round robin
- d) Both b) & c)

B. What are the advantages of using this particular fixture?

- a) More time consuming
- b) Less expenditure
- c) More opportunities
- d) Both b) and c)

C. How many types are there in this type of fixture?

- a) 4
- b) 2
- c) 3
- d) 1

Case 6.- Below given is the tournament fixture in cyclic procedure of a intramural Kabaddi competition.

IR	IIR	IIIR	IVR	VR
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

A – In which direction the teams are rotated in cyclic method ?

- a- Only clockwise direction
- b- First in clockwise then in anti clockwise direction
- c- Only anti clock wise direction
- d- None of these

B – when bye is being given under the cyclic method ?

- a- When the number is power of 2
- b- Odd number
- c- Even number
- d- None of these

C – Formula for calculating nos of round in cyclic method of a league tournament ?

- a- $N-1$
- b- N
- c- $N+1$
- d- None of these

D – In cyclic method if the team is in even number, team number 1 is fixed in

- a- Top of the right hand side
- b- Bottom of the right hand side
- c- Top of the left side
- d- None of these

Case 7. - Your school is going to organize the kho-kho tournament . 11 teams will give their entries for the above tournament. The tournament will played on knock – out basis

Answer the following questions from the above data .

A – How many byes will given in this tournament ?

- a- 4
- b- 5
- c- 8
- d- None of these

B – How many teams are kept in lower half ?

- a- 4
- b- 5
- c- 6
- d- None of these

C – To complete the tournament how many matches will played ?

- a – 15
- b- 10
- c -8
- d -12

D – Formula for calculating byes in upper half -----

- a- $NB-1/2$
- b- $NB+1/2$

- c- NB+1
- d- None of these

Case 8. With the aim of promoting physical fitness and healthy life style amongst the students the physical education teacher at XYZ school plans to organize intramural competition at the school . For conducting the event he has given this assignment to the students of class xii who have taken up the physical education subject so that they can get first had experience of organizing events. On the basis of given information answer the following questions

A – The work of committees is divided into -----

- a- Pre,during and post
- b- Pre and post
- c- Pre and during
- d- During and post

B –Match the following

- | | |
|------------------------|---|
| a- Technical committee | i- to provide shifting facility |
| b- Finance committee | ii –to resolve dispute |
| c- Transport committee | iii – to deals with money and expenditure |
| d- First aid committee | iv- to provide medical facility |
- (a) A-ii, b-iii, c-I, d-iv
 (b) a-iii, b-ii, c-I, d-iv
 (c) a-ii, b-iii, c-I, d-ii
 (d) a-iv,b-iii,c-I, d-ii

C- Which is not the objective of sports tournament ?

- a- to provide recreation
- b- to help overall development
- c- to achieve high performance
- d- to provide opportunity

Case 9. - your school has been given responsibility to conduct zonal volleyball competition. As a Head boy / Head girl of the student council you have been asked to make various team of students to help teacher incharges for smooth conduct of tournament .

A – To help the teams to know about the fooding and stay arrangement a group of students will be assigned with ----- committee .

- a- transport
- b- Registration
- c- Boarding & lodging
- d- Entertainment

B – Students good at art and craft and creative designing will be assigned with ----- committee .

- a- Reception
- b- Registration
- c- Decoration
- d- Entertainment

C- Few students will assigned with ----- committee for prize distribution .

- a- Ceremonial
- b- Transport
- c- Registration

d- Budget

Case 10. As Mr. Kiren Rijuju, Sports Minister has ordered to popularize the game of Kabaddi among school students to develop their physical ability, Mr. Gopi, Physical Education Teacher of a reputed CBSE school has decided to conduct an Inter School Kabaddi tournament in his school premises after proper drawing of fixtures. He consulted the Management and the Principal to conduct the

Tournament of Pro Kabaddi pattern but the PE teacher was not aware of pro Kabaddi Tournament. So he discussed with the National Kabaddi Referee Association.

A. Which of the following is the best method to organize this kind of tournament

- (a) Knockout (b) League (c) Ladder (d) Pyramid

B. The Knock out tournament is also known as

- (a) Combination tournament (b) Elimination tournament
(c) League tournament (d) League cum knockout tournament

C. If 17 teams are participating in this tournament, how many teams will get bye?

- (a) 15 (b) 1 (c) 13 (d) 9

Case 11. Your school has received an invitation for participation in a Badminton competition being organized by XYZ School. There is an entry fee for the competition due to which very few students have shown their willingness to participate.

A. Which type of fixture is preferred if there are less number of teams?

- (a) Knock out (b) League (c) Round robin (d) Both (A) & (C)

B. What are the advantages of using this particular fixture?

- (a) More time consuming (b) Less expenditure (c) More opportunities (d) Both (B) and (C)

C. How many types are there in this type of fixture?

- (a) 4 (b) 2 (c) 5 (d) 1

Case 12. In 2018 Mens Hockey world cup at Bhubaneswar, the central and state Govt. took no stone unturned for smooth conduct of tournament and brought name & fame to the country as a whole. Based on this case, answer the following questions.

A. What was the main objective of FIH tournament at Bhubaneswar?

- a. Propagate the sports
b. Generate revenue for the Govt.
c. Fun time for audience
d. Measure the efficiency of local govt.

B. Who among the following were technically benefitted out of the tournament?

- (a) School kids (b) Spectator (c) Organizer (d) Volunteers

C. Why this world class event was allotted to BBSR?

- (a) Rich tradition of Hockey in the state (b) Tiny & medium city with sports lovers
(c) A city with no security threat (d) Ideal climatic condition suit for Hockey

Case 13. Bhubaneswar cricket Association is going to organize inter school cricket tournament at BBSR in League cum Knock out format on pool basis where 26 teams from BBSR including two teams from Cuttack confirmed their participation.

Based on this case, answer the following questions.

A. Why does organizer prefer to conduct in League-Knock format?

- (a) Easy method to conduct the tournament (b) Minimize total number of matches
(c) Reduce the travel time for teams (d) It is not a suitable method.

B. How can two out station teams be given special status?

- (a) Awarding them seeded status (b) Arrange them in one zone
(c) Place them directly in second round (d) arrange them in different zone

C. Out of the total teams if divided into 4 zones where best 2 teams of each zone to be qualified for knock out phase, what shall be total no of matches in entire tournament?

- (a) 80 matches (b) 77 matches (c) 79 matches (d) 76 matches.

Answer:

1 A	a	1 B	a	1 C	c	2 A	a	2 B	d
2 C	a	2 D	b	3 A	b	3 B	a	3 C	c
3 D	b	3 E	b	4 A	c	4 B	c	4 C	a
5 A	d	5 B	c	5 C	c	6 A	a	6 B	b
6 C	a	6 D	a	7 A	b	7 B	b	7 C	b
7 D	a	8 A	a	8 B	a	8 C	c	9 A	c
9 B	c	9 C	a	10 A	b	10 B	b	10 C	a
11 A	b	11 B	c	11 C	a	12 A	a	12 B	c
12 C	a	13 A	b	13 B	d	13 C	c		

ASSERTION AND REASONING MCQ:

1. Given below are two statements, one is labeled as Assertion (A) and other is labeled as Reason (R):

(A): Physical education teacher should be good in theory as well as practical skills.

(R): Physical education profession provides socioeconomic status. In the context of two statements, which one of the following is correct?

- (A) Both (A) and (R) are true, and (R) is the correct explanation of (A).
(B) Both (A) and (R) are true but (R) is not the correct explanation of (A).
(C) (A) is true, but (R) is false.
(D) (A) is false, but (R) is true.

2. Given below are two statements, one is labeled as Assertion (A) and other is labeled as Reason (R).

Assertion (A): Physical Education is an elective discipline.

Reason (R): Physical Education borrows principles from other allied fields. In the context of two statements, which one of the following is correct?

- (A) Both (A) and (R) are true and (R) is the correct explanation of (A).
(B) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
(C) (A) is true, but (R) is false.
(D) (A) is false, but (R) is true.

3. Given below are two statements, one is labeled as Assertion(A) and other is labeled as Reason (R).

(A):In a 13 team knock out tournament in total 12 games were played

(R):3 teams were given bye.

In the context of two statements, which one of the following is correct?

- (A) Both (A) and (R) are true and (R) is the correct explanation of (A).
- (B) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
- (C) (A) is true, but (R) is false.
- (D) (A) is false, but (R) is true.

4. Given below are two statements, one is labeled as Assertion (A) and other is labeled as Reason(R).

Assertion (A): Planning is the foremost function in sports

Reason(R): Planning gives a view of future course of action.

In the context of two statements, which one of the following is correct?

- (A) Both (A) and (R) are true and (R) is the correct explanation of (A).
- (B) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
- (C) (A) is true, but (R) is false.
- (D) (A) is false, but (R) is true.

5. Given below are two statements, one is labeled as Assertion (A) and other is labeled as Reason(R).

(A) : Tournaments are helpful in public in sports

(R) : When a tournament of new sports is organized, spectators come to know about it..In the context of two statements, which one of the following is correct?

- (A) Both (A) and (R) are true and (R) is the correct explanation of (A).
- (B) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
- (C) (A) is true, but (R) is false.
- (D) (A) is false, but (R) is true.

Q6 – A – Various committees are formed while organizing sports events .

R - Organizing of sports events involve a lot of planning and preparation .

- a – Both A and R are true, R is the correct explanation of A.
- b – Both A and R are true, R is not the correct explanation of A
- c – A is true R is false
- d – A is false R is true

Q7 – A- Planning is the foremost activity in sports .

R – planning gives a future view .

- a – both A and R are true and R is the correct explanation of A.
- b – both A and R are true but R is not the correct explanation of A .
- c – A is correct and R is false
- d – R is correct and A is false

Q 8 - A – The committee formed must perform their duties with full responsibility along with good coordination among them .

R- A well organized tournament is one of the best method for evaluating the skills of a team .

- a - A is true but R is false
- b - R is true but A is false
- c - Both A and R are true but R is not the correct explanation of A.
- d - Both A and R are true , R is the correct explanation of A.

Q 9 –A - The sports officials have enough time for selecting players or team in league tournament.

R - The team once defeated get eliminated from the tournament.

- a – A is true , R is false
- b – R is true , A is false
- c - Both A and R are true, R is the correct explanation of A
- d – Both A and R are true but R is not the correct explanation of A .

Q10 – A- Good players can not be selected easily from a tournament .

R – Tournament is an appropriate way to select a good team of players .

- a – Both A and R are true, R is the correct explanation of A .
- b – Both A and R are true, but R is not the correct explanation of A .
- c- A is false, R is true
- d – R is false , A is true

Q.11. Assertion- A sense of competition arises when sizeable team compete among themselves.

Reasoning R- Our school bagged Runners up trophy in Inter school Hockey tournament where three teams participated.

- a. Both A &B are true and R is the correct example ofA.
- b. Both A &B are true and R is not correct example ofA.
- c. A is true but R isfalse.
- d. A is false but R istrue.

12. Assertion-Consolation tournament provide a chance to the defeated teams to play again & win subsidiaryhonors.

Reasoning- All the defeated teams of second round will have opportunity to compete among themselves.

- a. Both A &B are true and R is the correct example of A.
- b. Both A &B are true and R is not correct example of A.
- c. A is true but R is false.
- d. A is false but R is true.

13. Assertion (A): In a 13 team knockout tournament in total12 games were played

Reason (R): 3 teams were given bye.

In the context of two statements, which one of the following is correct?

- (a) Both(A)and(R) are true and (R) is the correct explanation of(A).
- (b) Both(A)and(R)are true, but(R) is not the correct explanation of(A).
- (c) (A) is true, but (R) is false.
- (d) (A)is false, but(R)is true.

Ans:

1	b	2	a	3	a	4	a	5	a
6	a	7	a	8	d	9	a	10	c
11	b	12	c	13	a				

Chapter: 2
Sports & Nutrition

MCQ

1. Which nutrient provides more than double energy provided by carbohydrates in human body ?

- a. Vitamin
- b. Minerals
- c. Fats
- d. Starch

2. Which one of the following is not the example of macro minerals?

- a. Sodium
- b. Potassium
- c. Iron
- d. Calcium

3. Which group of fats usually increases the chances of heart diseases?

- a. Saturated fats
- b. Poly unsaturated fats
- c. Mono- Unsaturated fats
- d. None of the above

4. Requirement for building new tissues for growth of a human body is ____

- a. carbohydrates
- b. fat
- c. protein
- d. vitamin

5. Our body needs __liters of water every day.

- a. 2 to 3
- b. 1 to 2
- c. 7 to 8
- d. 10 to 15

6. Name the disease caused by the deficiency of Niacin

- a. Pellagra
- b. Rickets
- c. Scurvy
- d. Pernicious anemia

7. What is another name of vitamin B2

- a. Tetinol
- b. Thiamine
- c. Niacin
- d. Riboflavin

8. Which of the following vitamin is also known as cobalmine?

- a. V -B 9

- b. V- B 12
- c. V -B 5
- d. V -B 2

9. What are the disadvantages of dieting?

- a. No change in body weight
- b. Over body weight
- c. Loss in body weight
- d. Not achieving the required goal

10. The deficiency of insulin in the body causes _____

- a. rickets
- b. diabetes
- c. asthma
- d. allergy

11. Why the body needs vitamins and minerals?

- a. They give the body energy
- b. They help carry out metabolic reactions
- c. They insulate the body organs
- d. They withdraw heat from the body

12. When balanced diet is completed?

- a. Complex Carbohydrates
- b. According to the needs of the person
- c. Animal fat rich
- d. 4 to 5 liter water

13. Which food item has carbohydrates and fats

- a. Bread and butters
- b. rice and Pulse
- c. Potato and Tomato
- d. Tomato and Almond

14. How much protein a working woman should take every day?

- a. 7 gm
- b. 46 gm
- c. 37gm
- d. 50 gm

15. Which vitamin is easily destroyed by heat and air?

- a. K
- b. C
- c. D
- d. A

16. Which of the following Macronutrient helps build and repair muscles?
- (a) Carbohydrates
 - (b) Fats
 - (c) Protein
 - (d) Water
17. Which two responses below display examples of saturated fats?
- (a) Unhealthy food options
 - (b) From Plants, fish and oil
 - (c) From lollies and fast food
 - (d) Lean meat, chicken and fish
18. Calcium helps to:
- (a) Create energy in muscle cells
 - (b) Increase bone density
 - (c) Support immune function
 - (d) Control blood pressure
19. A kilojoule is best defined as:
- (a) Measure how much weight is lost after exercise
 - (b) Measures the amount of energy in food
 - (c) Measures the amount of calories in food
 - (d) Measures how much sweat we lose during exercise
20. Carbohydrate loading is known as:
- (a) Consuming high amounts of fat before and after competition
 - (b) Consuming high amounts of protein after an event
 - (c) Consuming high amounts of protein before an event
 - (d) Consuming high carbohydrates a few days before competition
21. How many grams of carbs do athletes need to consume in order to carbohydrate load?
- (a) 7-8 grams
 - (b) 5-12 grams
 - (c) 12-15 grams
 - (d) 15-20 grams
22. How long do players have after exercise to consume carbohydrates and protein?
- (a) 10-20 min
 - (b) 20-25 min
 - (c) 30-45 min
 - (d) 60-90 min
23. DOMS stands for:
- (a) Delayed Onset of Muscle Stiffness
 - (b) Delayed Onset of Muscle Spasm
 - (c) Delayed Onset of Muscle Soreness
 - (d) Delayed Onset of Muscle Spleen
24. Which responses below state how athletes can prevent DOMS?
- (a) Progress exercise slowly and gradually
 - (b) Eat a sufficient amount of carbohydrates
 - (c) Eat a sufficient amount of protein
 - (d) Cool down with gentle stretching
25. An apple contains how many grams of carbohydrates?
- (a) 18 grams

- (b) 20 grams
- (c) 22 grams
- (d) 25 grams

26. Nutrients are divided into how many groups?

- (a) 2
- (b) 6
- (c) 4
- (d) 3

27. Energy in food comes from:

- (a) Proteins/Carbohydrates/Fats
- (b) Vitamins
- (c) Proteins
- (d) Fibre

28. Chicken, fish, meat and eggs are main source in food of:

- (a) Fats
- (b) Carbohydrates
- (c) Proteins
- (d) Fibre

29. As components of human diet, water, fibre and phytonutrients are:

- (a) Non-nutritive
- (b) Nutritive
- (c) Calorie-rich
- (d) Protein rich

30. A healthy BMI for Indians is:

- (a) Between 28 and 30
- (b) Between 25 and 28
- (c) Between 18 and 23
- (d) Less than 18

1	c	2	c	3	a	4	c	5	c
6	a	7	d	8	b	9	c	10	b
11	b	12	b	13	a	14	C	15	C
16	c	17	a & d	18	b	19	b	20	d
21	b	22	d	23	c	24	a & d	25	d
26	a	27	a	28	c	29	a	30	c

Assertion And Reason

Assertion : Given below are two statements, one labeled as Assertion(A) and the other labeled as

Reason(R).

1. Assertion(A) : Goiter is caused due to deficiency of iron.

Reason(R) : Iron is essential for the formation of thyroxin hormone.

- a. Both A and R are true and the R is a correct explanation of the A.
- b. Both A and R are true but R is not a correct explanation of the A
- c. A is true but the R is false.
- d. Both A and R are false.

2. Assertion (A) : A balanced diet depends on age, sex and the type of work that one is required to carry.

Reason(R) : A balanced diet is composed of Carbohydrates Proteins Fats, Vitamins, Minerals and water.

- a. Both A and R are true and the R is a correct explanation of the A.
- b. Both A and R are true but R is not a correct explanation of the A
- c. A is true but the R is false.
- d. Both A and R are false.

3. Assertion (A) : Scurvy is caused due to the deficiency of vitamin C.

Reason (R) : The disease sets in when the diet does not include fresh vegetables and fruits for a long time.

- a. Both A and R are true and the R is a correct explanation of the A.
- b. Both A and R are true but R is not a correct explanation of the A
- c. A is true but the R is false.
- d. Both A and R are false.

4. Assertion (A) : An obese person has BMI more than 30.

Reason (R) : BMI indicates the nutritional value.

- a. Both A and R is true and the R is a correct explanation of the A.
- b. Both A and R are true but R is not a correct explanation of the A
- c. A is true but the R is false.
- d. Both A and R are false.

5. Assertion (A) : Having milk after eating fish causes health problem.

Reason (R) : Food myths are unscientific and full of silliness .

- a. Both A and R is true and the R is a correct explanation of the A.
- b. Both A and R are true but R is not a correct explanation of the A
- c. A is false but the R is true
- d. Both A and R are false.

6. Assertion: Fatty acids should be a part of the balanced human diet.

Reason: The cells of the human body cannot synthesize any fatty acids.

- (a) Both Assertion and Reason are true and the Reason is a correct explanation of the Assertion

- (b) Both Assertion and Reason are true but Reason is not a correct explanation of the Assertion
- (c) Assertion is true but the Reason is false
- (d) Both Assertion and Reason are false

7. **Assertion:** Age Play a great role in making diet.

Reason: Child needs more protein while older people needs more vitamin and minerals.

- (a) Both Assertion and Reason are true and the Reason is a correct explanation of the Assertion
- (b) Both Assertion and Reason are true but Reason is not a correct explanation of the Assertion
- (c) Assertion is true but Reason is false
- (d) Both Assertion and Reason is false

Assertions and Reasons

1	d	2	a	3	a	4	b	5	B
6	b	7	d						

Case Based

Q.1. Vani, a student of class XI is struggling with Obesity due to which she has low self esteem and low confidence. As a result she has started dieting to control her weight. But this dieting program is self designed and lacks knowledge about nutrition.

(A). As a physical education student what do you feel will be the pitfalls of this dieting plan?

- a) Extreme weight loss
- b) Dehydration
- c) Deficiency of essential nutrients
- d) All of these.

(B). What will be your advice to Vani to control her weight?

- a) Exercising
- b) Skipping meals
- c) Balanced diet
- d) Both(a) & (c)

(C) What is the meaning of the term Pitfalls of dieting?

- a) Importance
- b) Drawbacks
- c) Need
- d) Outcome

Q.2. Rahul, a student of class XII, has recently joined a gym near his house to get a toned and muscular body. He consults his gym trainer regarding his diet and is advised to increase the intake of protein in his diet.

(A). Proteins are also known as _____

- a) Nitrogenous food
- b) Body building food
- c) Fatty food
- d) Both (a) & (b)

(B). Deficiency of protein can cause _____

- a) Rickets
- b) Kwashiorkor
- c) Scurvy
- d) Night blindness

(C) Protein helps in _____

- a) Increasing bone density
- b) Protoplasm formation
- c) Antibodies formation
- d) Both (b) & (c)

Q.3. Vipul a state level wrestler has been advised by his coach to take adequate amounts of simple carbohydrates, vitamins, minerals and proteins in his diet along with the training schedule. He has also been advised to follow the diet plan and be aware of the drawbacks of unsupervised dieting.

(A). Glucose, Fructose, Lactose are _____

- (a) Simple Carbohydrate
- (b) Complex Carbohydrate
- (c) Minerals
- (d) Fats

(B). Which amongst these is a Pitfall of dieting?

- (a) Skipping meal
- (b) Reducing energy food
- (c) Drinking lot of water
- (d) Taking food supplements

(C). Amino acids and protein are the _____ of life.

- (a) Building block
- (b) Training blocks
- (c) Fitness blocks
- (d) Both a & b

Q.4. A balanced diet refers to the intake of food constituting all the necessary nutrients. Rohit shares his knowledge of 'food and nutrition' with neighbors while visiting his grandparents in a village. Rohit notices that few people living in that village are suffering with goiter and severe anemia.

(A). Minerals are placed under ____ nutrient category on basis of required quantity.

- (a) Micro
- (b) macro
- (c) roughage
- (d) Nonnutritive

(B). Goiter is caused due to deficiency of _____.

- (a) calcium
- (b) Iodine
- (c) selenium
- (d) iron

(C). Low levels of this mineral will lead to Anemia.

- (a) Copper
- (b) Sodium
- (c) Iron
- (d) Calcium

5. Hema got admission in class IX in a reputed school. School is taking all the children on a picnic to Ramoji Film City. Hema suffered from a severe stomach ache on her journey. Immediately the class teacher consulted a Doctor who diagnosed the problem and told her that Hema had difficulty digesting a particular food. This can lead to symptoms such as intestinal gas, abdominal pain or diarrhea. It is sometimes confused with or mislabelled as a food allergy.

(A). Food intolerance can cause

- (a) Diarrhoea
- (b) Anaemia
- (c) Fatigue
- (d) Loss of Appetite

(B) Which of the following is normal BMI for men?

- (a) BMI <18.5
- (b) BMI 18.5-24.9
- (c) BMI 25-29.9
- (d) BMI 30-34.9

(C). Excess intake of Iron and Magnesium causes _____.

- (a) Stone in kidney
- (b) Rickets
- (c) Nervous problem
- (d) digestive problem

6. A balanced diet refers to the intake of food constituting all the necessary nutrients. Ram shares his knowledge of “food and nutrition” with neighbors while visiting his grandparents in a village. Ram notices that few people living in that village are suffering with goiter and severe anemia.

- A) Minerals are placed under _____ nutrient category on basis of required quantity.
- (a) Micro
 - (b) Macro
 - (c) Roughage
 - (d) Non-nutritive
- B) Goiter is caused due to deficiency of _____.
- (a) Calcium
 - (b) Iodine
 - (c) Selenium
 - (d) Iron
- C) Low levels of this mineral will lead to Anemia.
- (a) Copper
 - (b) Sodium
 - (c) Iron
 - (d) Calcium
- D) Which of the statements is true.
- (a) Vegetables and fruits are enough to stay healthy
 - (b) Exercise along with proper nutrition is required
 - (c) Red & green colored foods only to be taken
 - (d) All are above
- E) Fresh Vegetables and Fruits are rich sources of _____.
- (a) Vitamins
 - (b) Minerals
 - (c) Both (a) & (b)
 - (d) Fats

ANSWERS

MCQ

Case Based

1A	d	1B	d	1C	b
2A	d	2B	b	2C	d
3A	a	3B	a	3C	a
4A	a	4B	b	4C	c
5A	a	5B	b	5C	a
6A	d	6B	b	6C	C
6D	b	6E	c		

Chapter: 5

Children and Women in Sports

Multiple Choice Questions:-

1. Motor development consists of :-
a) Two Stages b) Three Stages c) Four Stages d) Six Stages
2. Early childhood age for motor development in children is :-
a) 0 – 1 Year b) 11 – 12 Years c) 9 – 10 Years d) 2 – 6 Years
3. Fine motor development is involved in :-
a) Sitting b) Walking c) Standing d) Catching a Ball
4. An abnormal curve of the spine at the front is called :-
a) Scoliosis b) Lordosis c) Knock knee d) Kyphosis
5. Which of the following is not a spinal curvature deformity :-
a) Scoliosis b) Kyphosis c) Lordosis d) Flatfoot
6. Which is not a factor affecting motor development :-
a) Heredity b) Proper Sleep c) Trauma d) None of These
7. Gross Motor skills involve :-
a) Small Muscles b) Large Muscles c) Bone of the Body d) Ligaments of the Body
8. The period of infancy lasts till the age of :-
a) 1 Year b) 2 Years c) 3 Years d) 4 Years
9. The cause of postural deformities is :-
a) Balanced Diet b) Extra Diet c) Wrong Posture d) None Of These
10. In which Olympic games, Saina Nehwal and M.C Mary Kom secured one bronze medal each?
a) 2008 b) 2012 c) 2016 d) 2020
11. Which one of the following sports woman is related to athletics?
a) Vinesh Phogat b) Sakshi Malik c) Anju B. George d) None of these
12. In which kind of deformity, the gap between ankles goes on increasing?
a) Bow Legs b) Knock Knee c) Flat Foot d) Scoliosis
13. Sensory motor development of a child is dependent upon -
a) Environment b) Endurance c) Nutrition d) Strength
14. In bow – legs, there is / are –
a) Wide gap between the knees b) plain foot sole
c) Knees colliding with each other d) Both legs curving inwards
15. Which Indian sportswoman won the World Championship in Boxing six times?
a) Mary Kom b) Saina Nehwal c) Sarita Devi d) Kavita Chahal

16. In which stage a child becomes efficient in movement coupling, movement precision and movement flow?
- Infancy
 - Early childhood
 - Middle childhood
 - Late childhood
17. Horse riding is the corrective measure of which type of postural deformity?
- Flat feet
 - round shoulders
 - Knock Knees
 - Lordosis
18. An example of gross motor development is _____.
- Catching
 - Running
 - Stitching
 - Throwing
19. During which stage of motor development in childhood there is no difference in physical abilities of boys and girls?
- Infancy
 - Early childhood
 - Middle childhood
 - Late childhood
20. Rope skipping is the corrective measure of which type of postural deformity?
- Flat feet
 - Round shoulders
 - Knock Knees
 - Lordosis
21. In which postural deformity the shoulders become round and seem to bend forward?
- Lordosis
 - Scoliosis
 - Round shoulders
 - Kyphosis
22. In which postural deformity there is an abnormal lateral curvature of the spine?
- Kyphosis
 - Lordosis
 - Round shoulders
 - Scoliosis
23. Which among the following is a corrective measure for round shoulders?
- Performing chakrasana and dhanurasana
 - Rope skipping
 - Walk by bending the toes inwards
 - Horse riding
24. Which of the following is not a cause of flat feet?
- Lack of vitamin D and calcium in diet.
 - Weak muscles of feet
 - Improper shoes
 - Increase in body weight
25. Development of a child's bones, muscles and his/her ability to move around indicates.
- Motor development
 - Social development
 - Emotional development
 - Skill development
26. Lack of vitamin D and calcium in diet causes which of the following postural deformity?
- Knock knees
 - Bow legs
 - Flat feet
 - Both a and b
27. Rapid motor development takes place during.

- a. Early childhood
 - b. Middle childhood
 - c. Late childhood
 - d. All stages of childhood
28. Which is not a reason for less participation of women in sports?
- a. Male dominance in sports
 - b. No media coverage
 - c. Lack of ability
 - d. Lack of personal safety
29. Which is not an example of spinal deformity?
- a. Kyphosis
 - b. Lordosis
 - c. Scoliosis
 - d. Bow legs
30. The range of middle childhood stage is-
- a. 3 to 6 years
 - b. 7 to 10 years
 - c. 11 to 12 years
 - d. 13 to 15 years
31. Identify the corrective measure for flat feet among the following
- a. Keeping a pillow between the knees while standing
 - b. Swimming breast stroke
 - c. Picking objects with toes
 - d. Practicing breathing exercises

1	b	2	d	3	d	4	b	5	d
6	c	7	b	8	b	9	c	10	a
11	c	12	b	13	c	14	a	15	a
16	c	17	c	18	b	19	d	20	a
21	c	22	d	23	a	24	a	25	a
26	d	27	a	28	c	29	d	30	b
31	c								

Assertion and Reasoning:-

1. **Assertion (A)** : Lordosis is treatable by doing the Bhujangasana and Tadasana
Reason (R) : These asanas strengthen maintaining the balance of the body. In the context of above two statements, which one of the following is correct?
- a) Both (A) and (R) are true and (R) is the correct explanation of (A)
 - b) Both (A) and (R) are true, but (R) is not the correct explanation of (A)
 - c) (A) is true, but (R) is false
 - d) (A) is false, but (R) is true
2. **Assertion (A)** : Motor development refers to the development of a child's bones, muscles and his / her ability to move around.
Reason (R) : Gross motor development involves the small muscles of body, especially during the movement of fingers and hands.
- a) Both (A) and (R) are true and (R) is the correct explanation of (A)

- b) Both (A) and (R) are true, but (R) is not the correct explanation of (A)
- c) (A) is true, but (R) is false
- d) (A) is false, but (R) is true

3. **Assertion (A)** : Knock knee is a postural deformity in which both the knees knock or touch each other in
normal standing position.

Reason (R) : There is an increase or exaggeration of a backward curve in this deformity.

- a) Both (A) and (R) are true and (R) is the correct explanation of (A)
- b) Both (A) and (R) are true, but (R) is not the correct explanation of (A)
- c) (A) is true, but (R) is false
- d) (A) is false, but (R) is true

4. **Assertion (A)** : Scoliosis is a disorder caused due to an abnormal curve of the spine or backbone in the lateral
side.

Reason (R) : Lifting heavy weight, sitting or standing in wrong posture, bone disease etc.

- a) Both (A) and (R) are true and (R) is the correct explanation of (A)
- b) Both (A) and (R) are true, but (R) is not the correct explanation of (A)
- c) (A) is true, but (R) is false
- d) (A) is false, but (R) is true

5. **Assertion (A)** : Round shoulders is the postural defect in which the shoulders are drawn forward, the head is
extended.

Reason (R) : Sitting by bending backward, using proper furniture, carrying light weights etc.

- a) Both (A) and (R) are true and (R) is the correct explanation of (A)
- b) Both (A) and (R) are true, but (R) is not the correct explanation of (A)
- c) (A) is true, but (R) is false
- d) (A) is false, but (R) is true

6. **Assertion(A)**- In middle childhood stage, hand-eye coordination develops.

Reason(B)- In middle childhood stage girls grow faster than the boys.

Options:

- a. Both A and R are true and R is the correct explanation of A.
- b. Both A and R are true and R is not the correct explanation of A.
- c. A is true but R is false.
- d. A is false but R is true.

7. **Assertion(A)**- Weak bones or muscles are the main cause of postural deformities.

Reason(R)- Lack of nitrogen and iron in the body leads to weakness of bones and muscles.

Options:

- a. Both A and R are true and R is the correct explanation of A.
- b. Both A and R are true and R is not the correct explanation of A.
- c. A is true but R is false.
- d. Both A and R are false.

8. **Assertion(A)**- Flat feet is a type of spinal deformity.

Reason(R)- A person with flat feet cannot run long distances or walk at a brisk pace and hence not fit

to serve in the army.

Options:

- a. Both A & R are True and R is the correct explanation of A
- b. Both A & R are True but R is not the correct explanation of A
- c. A is True but R is False
- d. A is False but R is True

9. Assertion(A)- Nutritious food helps in promoting motor development.

Reason(R)- Nutritious food leads to growth of muscles and hence development of motor ability.

- a. Both A & R are True and R is the correct explanation of A
- b. Both A & R are True but R is not the correct explanation of A
- c. A is True but R is False
- d. A is False but R is True

10. Assertion(A)- The positive attitude of society from ancient times has played a vital role towards increase in women participation in sports.

Reason(R)- Women hesitate to participate in sports activities as the field of sports is dominated by men.

- a. Both A & R are True and R is the correct explanation of A
- b. Both A & R are True but R is not the correct explanation of A
- c. A is True but R is False
- d. A is False but R is True

1	d	2	c	3	b	4	a	5	d
6	c	7	c	8	d	9	a	10	d

Case Base Multiple Choice Questions:-

1. Ayushi wanted to learn boxing but her brother made fun of her and ridiculed her. Her father seeing her interest, sent her to a professional coach to learn that sport properly.

Based on this case study answer the following questions:-

A. Why was Ayushi ridiculed by her brother?

- a) She wanted to learn sport
- b) She did not want to learn boxing
- c) She wanted to have fun sport
- d) She is not serious about sport

B. What values are shown by her father?

- a) Right judgement
- b) High attitude
- c) Nationality
- d) Indiscipline

C. What does this show against females?

- a) Girls awareness
- b) Interest in sports
- c) Gender discrimination
- d) Support to boys

2. Prasant, Physical Education teacher at Gurukul Public School observed that Lekha a student of Class VI has outward curve of vertebral column at thoracic region. He suggested some exercises to rectify this problem

Based on this case study answer the following questions:-

A. What is the deformity known as?

- a) Scoliosis
- b) Kyphosis
- c) Lordosis
- d) Flat foot

B. Kyphosis is commonly known as

- a) Hollow back b) Hunch back c) Sideways bending
d) Lordosis

C. Kyphosis is a deformity related to :

- a) Foot b) vertebral column c) Shoulder
d) Legs

3. Manu, a student of class XII, used to read books in the school library. One day she was studying the history of women participation in Indian sports and felt that more girls and women must be encouraged to actively participate in sports. She believed that impossible things can be achieved through participating in sports.

Based on this case study answer the following questions:-

A. In which year did women participate in Olympics?

- a) 2000 b) 1900 c) 2012 d) 1947

B. Which of the following players is associated with badminton?

- a) Sania Mirza b) Sania Nehwal c) Karanamg d) P.T
Usha

4. Posture plays a very significant role in our daily activities. Correct posture means the balancing of body in accurate and proper manner.

Based on this case study answer the following questions:-

A. Horse riding can be a remedy for

- a) Knock knee b) Flat foot c) Round shoulder d) Bow legs

B. Hold the horizontal bar can be a remedy for

- a) Bow legs b) Round shoulder c) Flat foot d) Knock knee

C. In which deformity there is no arch in the foot?

- a) Knock knee b) Round shoulder c) Flat foot d) Bow legs

5. Ranjan started checking the health status of all security guards of his huge gated community which was a part of project work assigned by his physical Education teacher. He found many of them have shown deformity in the upper part of their vertebral column.

Based on this case study answer the following questions:-

A. The term used to define this deformity is

- a) Lordosis b) Scoliosis c) Kyphosis d) Both (a) and (b)

B. This deformity is mainly caused due to

- a) Carrying heavy loads b) Weak muscles c) Lack of exercise d)
All of the above

C. The asana/s which helps in rectifying such condition(s) is / are?

- a) Chakrasana b) Dhanurasana c) Halasana d) Both (a) and (b)

6. Motor development does not take place overnight. It takes place gradually in phases as a child grows. During a particular stage motor development is very fast and then it slows down. Many factors are responsible for motor development in children.

A. Which is the appropriate definition of Motor Development.

- a. Development of bones and muscles and ability to move

- b. Development of bones to give support to the body
- c. Development of large muscles of the body only
- d. Development of small muscles of the body only

B. During which stage, motor development is fast?

- a. Infancy
- b. Early childhood
- c. Middle childhood
- d. Late childhood

C. What are the factors that affect motor development?

- a. Nutrition
- b. Postural deformities
- c. Sensory impairments
- d. All of these

D. Name two types of motor development.

- a. Gross
- b. Fine
- c. Intermediate
- d. Both a & b

E. Which among the following is an example of fine motor development?

- a. Stitching
- b. Jumping
- c. Running
- d. Walking

7. Motor development during childhood only happens when the child is biologically and mentally ready for it. Motor development is a progression from the head to toe. Children also refine their control over gross motor skills. At this age, they learn how to synchronize the movement of various parts of their body parts needed for participating in games and sports.

A. Gross motor development is the development of-

- a. Large muscles
- b. Small muscles
- c. Large bones
- d. Small bones

B. Motor development are of _____ types.

- a. One
- b. Two
- c. Three
- d. Four

C. Early childhood is the stage of –

- a. Slow motor development
- b. Mild motor development
- c. Rapid motor development
- d. No motor development

D. Rate of motor development is affected by –

- a. Percentage of fast and slow twitch muscles
- b. Nutritious food
- c. Physical activities
- d. All of these

E. Motor development is the development of a child's –

- a. Bones and muscles
- b. Internal organs
- c. Brain
- d. Only bones

8. If a person stands erect with his feet close together, then there should be a gap between the knees in a normal posture. When there is no gap and the knees touch or overlap, the deformity is called knock knees.
- A. Identify the causes of knock knees –
- Improper size of shoes
 - Deficiency of vitamin D
 - Unnecessary haste to make the child stand in infancy
 - Both b & c
- B. People with knock knees are fit for which sports –
- Archery
 - Long jump
 - Sprints
 - Hurdles
- C. _____ is a condition opposite to knock knees.
- Flat feet
 - Bow legs
 - Hollow back
 - Round shoulders
- D. Identify the corrective measure for knock-knees.
- Keep a pillow between the knees and stand straight
 - Swimming breast stroke
 - Practice breathing exercises
 - Picking marbles with toes
- E. Practice of which asana can rectify knock knees?
- Padmasana
 - Vajrasana
 - Chakrasana
 - Dhanurasana
9. Lordosis is the inward curvature of spine. It is an increased forward curve in the lumber region. It creates problem in standing and walking. The long spinal muscles of the lower part of the spine become tight and tense. The abdominal muscles are stretched and the stomach bulges out.
- A. Lordosis is also called –
- Round back
 - Hollow back
 - Round shoulders
 - None of these
- B. Which among the following causes lordosis?
- Imbalanced diet
 - Improper development of muscles
 - Obesity and diseases affecting spinal muscles
 - All of these
- C. Lordosis is a _____ deformity.
- Spinal
 - Limb
 - Shoulder
 - Joint
- D. _____ can prevent lordosis in early childhood stage.
- Taking balanced diet
 - Carrying heavy weight
 - Intake of excess food
 - Standing for long hours
- E. Identify the remedy for lordosis.
- Toe touching exercise

- b. Bending head backward in standing position
- c. Walking on heels
- d. Tying the knees together with cloth

10. The centuries old belief that women should restrain themselves to domestic sphere and perform domestic activities still affects the participation of Indian women in sports. It is a matter of regret or pity that men and women are considered differently, especially in the field of sports. It is usually observed that women are not provided equal opportunities in comparison to their male counterparts. In fact, men are still given preference over women in the field of sports.

A. Identify the first Indian women to win a bronze medal in weightlifting in Sydney Olympic Games in 2000.

- a. P T Usha
- b. Karnam Malleshwari
- c. Saina Nehwal
- d. Jwala Gutta

B. Less participation of women in sports is due to –

- a. Lack of female coaches
- b. Absence of media coverage
- c. Support from family
- d. Both a & b

C. What should be the environment of educational institutions in favour of women?

- a. Adequate sports facilities for girls
- b. Availability of women coaches
- c. Complete support from teachers
- d. All of the above

D. Women sports are not popular on television or in newspaper due to –

- a. Absence of media coverage
- b. Women don't perform well in sports
- c. Very few spectators follow them
- d. Both a & c

E. Which among the following is not a traditional outlook of society?

- a. Women are good at only domestic work
- b. Women are physically weak
- c. Women should be educated
- d. Women become masculine if they participate in sports

1A	a	1B	a	1C	c	2A	b	2B	b
2C	b	3A	b	3B	b	4A	a	4B	b
4C	c	5A	d	5B	d	5C	d	6A	a
6B	b	6C	d	6D	d	6E	a	7A	a
7B	b	7C	c	7D	d	7E	a	8A	d
8B	a	8C	b	8D	a	8E	a	9A	b
9B	d	9C	a	9D	a	9E	a	10A	b
10B	d	10C	d	10D	d	10E	c		

Chapter 6

Test and Measurement in Sports

MCQ TYPE

- Q1. The Back Scratch Test for upper body flexibility is executed in a position of _____ .
(a) Sitting on the bed (b) Jogging (c) Standing (d) Both (a) and (b)
- Q2. Which test of the following is used for cardiovascular fitness?
(a) Harvard Step Test (b) Rikli & Jones Test (c) Sit and Reach Test (d) None of these
- Q3. In the Motor Fitness Test, the 600 meters run/ walk measures _____
(a) Speed & Agility (b) Power (c) Endurance (d) All of the above
- Q4. In the 4x10 meter shuttle run, the total distance run by the athlete is _____
(a) 40 meters (b) 10 meters (c) 20 meters (d) None of these
- Q5. In the Harvard Step Test, how many times the pulse rates are counted for 30 seconds each after the exercise is completed?
(a) 1, 2 and 3 minutes (b) 1, 3 and 5 minutes (c) 1, 1.5 and 2 minutes (d) none of the above
- Q6. 50 Metre dash aims to measure an athlete's _____ .
(a) Endurance (b) Speed (c) Power (d) Abdominal Strength
- Q7. Which of the following abilities of the athlete is tested by the Modified Push-ups Test?
(a) Speed & Agility (b) Upper Body Strength & Endurance (c) Strength & Flexibility (d) Power
- Q8. Name the test used to measure Shoulder Strength for senior citizens?
(a) Chair Stand Test (b) Back Scratch Test (c) Chair Sit and Reach Test (d) Arm Curl Test
- Q9. Sit and Reach Test is conducted to measure _____
(a) Flexibility (b) Speed (c) Motor fitness (d) Endurance
- Q10. In which year Harvard Step Test was developed?
(a) In 1923 (b) In 1933 (c) In 1943 (d) In 1953
- Q11. Who developed Fullerton Functional Test for senior citizens ?
(a) Brouha and others (b) Johnson and Johnson (c) Rikli and Johnson (d) Rikli and Jones
- Q12. Which of the following items / tests cannot be included in Motor Fitness Test ?
(a) 600 m run/walk (b) Motivational test (c) Sit and Reach (d) Partial Curl Up
- Q13. You are asked to measure the functional fitness of a senior citizen, which test will you use:
(a) Six Minute Walk Test (b) Eight foot up & go Test (c) Chair sit & Reach test (d) Arm Curl Test
- Q14. Rockport One Mile Test is used to measure _____
(a) Agility (b) Speed (c) Strength (d) Endurance
- Q15. Which one of the following tests was developed by Wells and Dillon?
(a) Standing Broad Jump (b) Medicine Ball Put (c) Chair Stand Test (d) None of these
16. How many chances are given for Zig Zag Run Test ?
a. 2 b. 3 c. 4 d. None of these
17. What is the weight of medicine ball in barrow motor ability test ?
a. 4 LBS b. 5 LBS c. 6 LBS d. 9 LBS
18. In Harvard Step Test for short duration measurement heart rate is counted for
a. 1.5 minutes b. 2-2.25 minutes c. 2-5 minutes d. None of these
19. How many blocks are kept in 4X10 m shuttle run ?
a. 2 b. 4 c. 6 d. 8
20. Distance of Rockport walk test (in miles)
a. 1 b. 2 c. 3 d. 4
21. Which parameter is not required in the calculation of Rockport one mile test ?

- a. Weight b. Heart Rate c. Age d. None of these
22. Which one of the following tests was developed by Wells and Dillon.
 a. Standing Broad Jump b. Medicine Ball Put c. Zig-Zag Run d. None of these
23. In which year Rikli and Jones developed Senior Citizen Fitness Test ?
 a. 2011 b. 2001 c. 2002 d. 2010
24. Rikli Jones test is done for
 a. Children b. Adults c. Senior Citizen d. None of these
25. 50 m Standing start measures
 a. Speed b. Strength c. Endurance d. Flexibility
26. Barrow fitness test has
 a. 1 item b. 2 items c. 3 items d. 4 items
27. Change name of agility is
 a. Power b. Strength c. Coordination Ability d. All the above
28. Pushups measure the muscular strength of
 a. Arms b. Upper body c. Core d. All the above
29. Which year Harvard step test into existence ?
 a. 1943 b. 1944 c. 1945 d. 1960
30. Who developed the Barrow Motor Ability Test ?
 a. Dr. Harold M. Barrow b. Rikli and Jones c. Dr. Harold Robinson Barrow d. None of these

1	c	2	a	3	c	4	a	5	a
6	b	7	b	8	d	9	a	10	c
11	d	12	b	13	a	14	d	15	d
16	b	17	c	18	a	19	a	20	a
21	d	22	d	23	b	24	c	25	a
26	c	27	c	28	d	29	a	30	a

ASSERTION AND REASON TYPE

- Q1. **Assertion (A)** : Pushups help in building muscular strength .
Reason (R) : Push Ups are isokinetic muscular movements that provide strength to the Joints.
 In context of above two statements, which one of the following is correct?
 Codes:
 (a) Both A and R are true and R is the correct explanation of A.
 (b) Both A and R are true and R is not the correct explanation of A.
 (c) **A is true , but R is false .**
 (d) A is false , but R is true .
- Q2. **Assertion (A)** : Tests are used to collect information about a specific skill , strength and endurance etc.
Reason (R) : Motor Fitness Test is used to measure the capability of an athlete to take part effectively in his/her particular sport .
 In context of above two statements , which one of the following is correct .
 Codes :
 (a) **Both A and R are true and R is the correct explanation of A .**

- (b) Both A and R are true and R is not the correct explanation of A .
- (c) A is true , but R is false .
- (d) A is false , but R is true .

Q3. Assertion (A) : Partial Curl up gives strength and endurance to abdominal muscles .
Reason (R) : Strong abdominal muscles are not significant for maintaining good posture .
In context of above two statements , which one of the following is correct .

Codes :

- (a) Both A and R are true and R is the correct explanation of A .
- (b) Both A and R are true and R is not the correct explanation of A .
- (c) **A is true , but R is false .**
- (d) A is false , but R is true.

Q4. Assertion (A) : Fullerton Functional Test has proved beneficial for Senior Citizens .
Reason (R) : The early identification of old age persons is possible to assess functional Fitness by Rikli and Jones Test.

In context of above two statements, which one of the following is correct?

Codes:

- (a) **Both A and R are true and R is the correct explanation of A .**
- (b) Both A and R are true and R is not the correct explanation of A .
- (c) A is true , but R is false .
- (d) A is false , but R is true.

Q5. Assertion (A) : Cardiovascular Fitness Test is used to measure aerobic fitness by checking the recovery rate .
Reason (R) : Rockport One Mile Test is used to measure speed and strength of sedentary individuals.

In context of above two statements, which one of the following is correct?

Codes :

- (a) Both A and R are true and R is the correct explanation of A .
- (b) Both A and R are true and R is not the correct explanation of A .
- (c) **A is true , but R is false .**
- (d) A is false, but R is true.

Q.6. Assertion (A) : The Purpose of 50 m standing start is to determine or measure speed.

Reason (B) : Speed is the ability to move from one place to another in the shortest possible time.

In context of above two statements, which one of the following is correct?

- (a) Both A and B are true and B is the correct explanation of A.
- (b) Both A and B are true and B is not the correct explanation of A.
- (c) A is true , but B is false .
- (d) A is false , but B is true .

Q.7. Assertion (A) : Measurement refers to the process of administrating a test to obtain a quantitative data.

Reason (B) : Measure aids the evaluation process in which various tools and techniques are used in the collection of data.

In context of above two statements , which one of the following is correct .

- (a) Both A and B are true and B is the correct explanation of A .
- (b) Both A and B are true and B is not the correct explanation of A .

(c) A is true , but B is false .

(d) A is false , but B is true .

Q.8. Assertion (A) : After proper warming up, ask the subject to take position for any test.

Reason (B) : We should not warm up our whole body before any workout.

In context of above two statements , which one of the following is correct .

Codes :

(a) Both A and B are true and B is the correct explanation of A .

(b) Both A and B are true and B is not the correct explanation of A .

(c) A is true , but B is false .

(d) A is false , but B is true.

Q. 9. Assertion (A) :Harvard step test is a cardiovascular fitness test.

Reason (B) : The purpose of Rockport one mile *test* is to walk as fast as possible for 1 *mile*.

In context of above two statements, which one of the following is correct?

Codes:

(a) Both A and B are true and B is the correct explanation of A .

(b) Both A and B are true and B is not the correct explanation of A .

(c) A is true , but B is false .

(d) A is false , but B is true.

Q10. Assertion (A) : 600 m Run/Walk Test is used to measure endurance.

Reason (B) : Modified Push Ups (Girls) Test is used to measure Upper body strength and endurance.

In context of above two statements, which one of the following is correct?

Codes :

(a) Both A and B are true and B is the correct explanation of A .

(b) Both A and B are true and B is not the correct explanation of A .

(c) A is true , but B is false .

(d) A is false, but B is true.

1	c	2	a	3	c	4	a	5	c
6	a	7	a	8	c	9	b	10	b

CASE BASED TYPE

- Q1.** Amar saw his grandmother bending forward to find her medicine that had slipped out of her hand . She was unable to bend enough to look for the tablet but Amar swiftly bent under the table , located the tablet and gave her a glass of water to have the medicine .
Basing upon the above paragraph , answer the following .
- (a) Which of the the following tests would you conduct to assess grandmother's fitness ?
(i) Harvard Step Test (ii) Rikli & Jones Test (iii) Motor Fitness Test (iv) Rockport One Mile Test
- (b) Chair Stand Test is done to measure _____ .
(i) Lower body strength (ii) Upper body strength (iii) Lower body flexibility (iv) Upper body flexibility
- (c) Pick the odd one out :
(i) Arm Curl Test (ii) Chair Stand Test (iii) Six Minute Walk Test (iv) Partial Curl up
- Q2.** Sonia wants to undertake a series of physical activities to check her fitness but is unable to do Pushups even with the support of her knees. She was advised by her sports teacher to prepare herself by properly warming up before attempting any exercise and understand that this was one the eight tests she needs to undertake.
Basing upon the above paragraph , answer the following .
- (a) Sonia is undertaking _____ Test .
(i) Motor Fitness Test (ii) Harvard Step Test (iii) Sit and Reach Test (iv) None of the above
- (b) How many Test batteries/ items are there in all in the Motor Fitness Test ?
(i) 6 (ii) 7 (iii) 8 (iv) 9
- (c) To assess the endurance which item can be used ?
(i) Sit and Reach (ii) Partial Curl Up (iii) 600 m run/ walk (iv) Standing Broad Jump
- Q3.** A group of senior citizens approaches an Physical Training Instructor to evaluate their fitness. He explains them that he would like them to undergo a series of simple tests advised for senior citizens . To keep the senior citizens fit and active , to know their agility , strength , flexibility and functional fitness these tests highly necessary .
Basing upon the above paragraph , answer the following .
- (a) Which test of the following is advised to evaluate the fitness of senior citizens ?
(i) Motor Fitness Test (ii) Kraus Weber Test (iii) Rikli & Jones Test (iv) Youth Fitness Test
- (b) How many tests are in the Senior Citizens Fitness Test ?
(i) Five (ii) Six (iii) Seven (iv) Eight
- (c) _____ test is used to measure the functional fitness of senior citizens .
(i) Back Scratch Test (ii) 8 Foot Up and Go Test (iii) Arm Curl Test (iv) Six Minute Walk Test
- Q4.** Akash is a student of class VII in XYZ Public School . While doing some physical activities , he feels tired . So , he went to his Sports Teacher and sought his assistance . His Sports Teacher conducted an Aerobic Fitness Test and suggested some exercises to improve his condition as well as performance .
Basing upon the above paragraph , answer the following .
- (a) What is the other name of Aerobic Fitness Test ?
(i) Sit and Reach Test (ii) Youth Fitness Test
(iii) Cardiovascular Fitness Test (iv) Basketball Ability Test
- (b) By whom ,the Aerobic Fitness Test was developed ?
(i) Wells and Dillon (ii) Brouha and Others (iii) Harold M Barrow (iv) None of these
- (c) Performing this test can make one able to know the efficiency of _____ .
(i) Different limbs (ii) Bones (iii) Ligaments (iv) Heart and Lungs
- Q5.** In Physical Education and Sports Programme , it is significant for individuals to set objectives . Also it is essential to determine whether or not the objectives have been achieved . So to improve the physical fitness , it is needed to participate in a fitness programme .
Basing upon the above paragraph , answer the following .
- (a) How fitness of an individual is evaluated ?
(i) By appearance (ii) By Test and Measurement (iii) By guessing (iv) None of these
- (b) Meaning of ' Test ' refers to –
(i) Collecting money (ii) Collecting equipments (iii) Collecting garbage (iv) Collecting data

(c) In the field of sports , measurements are related to obtain _____ data .
(i) Physical (ii) Mental (iii) Social (iv) All of these

Q.6. Motor fitness involves speed, agility, power, coordination and strength. Motor ability test was developed by Dr. Harold M Barrow in 1953. In this test, battery of three items such as standing broad jump, zig-zag run and medicine ball are used to measure the general motor ability of an individual.

(a) Who developed motor fitness test ?

(i) Dr. Harold M Barrow (ii) Johnson and Johnson (iii) Brouha (iv) Rikli and Jones

(b) Motor ability Test is done to measure _____ .

(i) agility (ii) strength (iii) speed (iv) all of these

(c) In which year motor fitness test was developed ?

(i) 1951 (ii) 1952 (iii) 1953 (iv) 1954

Q.7.Mr. Lakshman, aged 65 years worked as a civil engineer in a construction company.

He had to walk and climb a lot as part of his job. After retirement, he settled with his son spending time with his grandchildren. Now a days he is experiencing difficulty in doing certain chores which involves physical movement.

Basing upon the above paragraph , answer the following .



a Which of the following tests would you recommend to check Mr. Lakshman's fitness?

(i) Harvard step test (ii) Rikli & Jones test (iii) AAHPER test (iv) Rock port test

b. How many series of tests are there in the prescribed fitness test for Mr. Lakshman?

(i) 8 (ii) 6 (iii) 5 (iv) 4

c. Chair sit & reach test is done to check _____

(i) Agility (ii) Speed (iii) Flexibility (iv) Strength

Q.8.



- a The test shown in the picture is conducted to check _____ fitness.
 (i) Muscular (ii) Skeletal (iii) Cardiovascular (iv) Respiratory
- b The height of the bench used in the picture is _____ inches for women.
 (i) 20 (ii) 16 (iii) 18 (iv) 22
- c The test shown in the picture was developed by
 (i) Coubertin (ii) Brouha (iii) Sheldon (iv) James

Q.9. Rajesh went to an old age home on the occasion of his birthday. At that time all the inmates in the home were assembled in one place. When he enquired, they replied that they have a physical fitness test.

- a Give any one standard physical fitness test for senior citizen
 (i) Push ups (ii) Standing Broad jump (iii) Zig zag run (iv) None of these
- b Chair stand test is used for measuring the
 (i) Lower body strength (ii) Upper body test (iii) Aerobic fitness (iv) Anaerobic fitness
- c The weight of dumbbells in Arm Curl test for men is
 (i) 5 pounds (ii) 4 pounds (iii) 8 pounds (iv) 10 pounds

Q.10. Sports Minister, Mr. Kiren Rijju has launched many sports schemes in India.

Among these, one of the best schemes is Khelo India. Mr. Kannan, father of Kartik approached the PE teacher and enquired about the fitness levels of the students. PE teacher replied that Khelo India consisted of physical fitness tests for school children and they were analysing students' fitness through these tests.

- a To measure Lower body flexibility fitness, which one of the following is best?
 (i) Harvard Step Test (ii) Sit and reach test (iii) Barrow fitness test (iv) General fitness test
- b Rikli Jones test is conducted on
 (i) Children (ii) Adults (iii) Adolescent (iv) Senior Citizens
- c Which method should he follow to improve the jump?
 (i) Flexibility (ii) Explosive power (iii) Push-ups (iv) Shuttle run

1a	2	1b	1	1c	4	2a	1	2b	3
2c	3	3a	3	3b	2	3c	4	4a	3
4b	2	4c	4	5a	2	5b	4	5c	1
6a	1	6b	4	6c	3	7a	2	7b	2
7c	3	8a	3	8b	2	8c	2	9a	4
9b	1	9c	3	10a	2	10b	4	10c	2

Chapter: 8

Bio Mechanics & Sports

MULTIPLE CHOICE QUESTIONS

- Q.1.** Where does the word biomechanics originated?
- a) Latin
 - b) English
 - c) Greek
 - d) French
- Q.2.** What is the meaning of Bio and mechanics?
- a) Bio means Life and Mechanics means Movement
 - b) Bio means Environments and Mechanics means Motion
 - c) Bio means Structure and Mechanics means Speed
 - d) Bio means Structure and Mechanics means Motion
- Q.3.** Which is not the Importance of Biomechanics.
- a) Improvement of Technique
 - b) To understand the structure of Movement & effect of forces on the Movement
 - c) To understand Physiology of human body
 - d) Improvement of sports Equipment
- Q.4.** Biomechanics helps in one of the following ?
- a) In improving technique
 - b) In improving designs of sports equipment
 - c) In improving teaching and learning
 - d) All the above
- Q.5.** The field where the study of forces is in focus is known as ?
- a) Dynamics
 - b) Kinetics
 - c) Statics
 - d) Kinematics
- Q.6.** The term flexion refers to
- a) Bending
 - b) Turning
 - c) Twisting
 - d) Straightening
- Q.7.** Bringing closer to the references axis is called
- a) Flexion
 - b) Extension
 - c) Abduction
 - d) Adduction
- Q.8.** What type of movement when elbow is increasing the angel between the ulna and humerus bone ?
- a) Flexion
 - b) Extension
 - c) Abduction
 - d) Adduction
- Q.9.** What type of movement when the shoulder raises the arms out to the sides of the body
- a) Flexion
 - b) Extension
 - c) Abduction
 - d) Adduction
- Q.10.** What is the meaning of INERTIA?
- a) Idleness or Laziness
 - b) Strong
 - c) Movement

d) Motion

Q.11. What does Newton's second Law means?

- a) Force = Mass \times Acceleration
- b) Force = Distance \times Mass
- c) Force = Acceleration \times Distance
- d) Force = Mass \times Motion

Q.12. _____ involves the sequential combination of flexion, adduction, extension and abduction at a joint.

- a) Internal Rotation
- b) External Rotation
- c) Circumduction
- d) None of these

Q.13. _____ Refers to the resistance created by two objects sliding against each other.

- a) Rolling Friction
- b) Sliding Friction
- c) Static Friction
- d) Fluid Friction

Q.14. _____ Is the friction between two surfaces that are in relative motion with respect to each other.

- a) Static friction
- b) Rolling friction
- c) Dynamic friction
- d) Fluid friction

Q.15. This type of movement takes place when the angle decreases between the two bones attached to a joint. It is _____ .

- a) Adduction
- b) Abduction
- c) Extension
- d) Flexion

Q.16. _____ is the science of studying of mechanical laws related to the movements of living organisms.

- a. Biomechanics
- b. Physiology
- c. Physics
- d. None of these

Q.17. "Science concerned with internal and external forces acting on the human body and the effects produced by the forces".

- a. James G Hay
- b. Newton
- c. Bartlett
- d. None of these

Q.18. Bending of elbow when our hand is going toward our chest is

- a. Flexion
- b. extension
- c. abduction
- d. adduction

Q.19. In swimming a swimmer gets propelled faster in the forward direction if she pushes the water faster in the backward direction there is an application of which law of motion given by Newton?

- a. First law
- b. Second law
- c. Third law
- d. none of these

Q.20. Which of these types of friction is stronger than the others given below?

- a. Rolling friction
- b. sliding friction
- c. static friction
- d. all are equal strong

Q.21. Which one of the following is an example of the law of inertia?

- a. Starting in rowing
- b. starting on Roman Rings
- c. raising an opponent in wrestling
- d. all the above

Q.22. During abduction the arm moves -

- a. Towards the body
- b. always from the body
- c. in front of the chess
- d. none of the above

Q.23. On 'set' command the sprinter is in

- a. Stable equilibrium
- b. unstable equilibrium
- c. neutral equilibrium
- d. none of the above

Q.24. Newton's second law of motion is also known as

- a. Law of inertia
- b. law of action reaction
- c. law of momentum
- d. law of gravitation

Q.25. The anatomical term 'lateral' means -

- a. towards the back
- b. towards the head
- c. always from the mid line of the body
- d. towards the feet

Q.26. Which of the following can be the main objective of a throwing moment?

- a. Distance
- b. flight time
- c. accuracy
- d. any of the above

Q.27. Biomechanics is associated with

- a. Mechanics and anatomy
- b. mechanics and physics
- c. mechanics and chemistry
- d. mechanics and history

Q.28. Extension is the term

- a. Bending around the joint
- b. extending around the joint
- c. rotating around the joint
- d. none of the above

Q.29. The force created by two solid surfaces is called

- a. Speed
- b. Friction
- c. slippery surface
- d. none of these

Q.30. Spikes used in sporting shoes to take advantage of

- a. Weight
- b. inertia
- c. friction
- d. stability

1	c	2	a	3	c	4	d	5	b
6	a	7	b	8	b	9	c	10	a
11	a	12	c	13	b	14	c	15	d
16	a	17	a	18	a	19	c	20	c
21	d	22	b	23	b	24	c	25	c
26	d	27	b	28	c	29	a	30	c

CASE BASE MULTIPLE CHOICE QUESTIONS

Q.1. In Equestrian sport, when the horse comes to rest, then the rider bends forward to avoid falling. Based on this, answer the following question.

- (A) Rider's bending forward can be related to which law of Newton?
 - (a) First
 - (b) Third
 - (c) Second
 - (c) None of these
- (B) What does the second law of motion state?
 - (a) Body at rest will remain at rest
 - (b) For every action, there is opposite reaction
 - (c) Less friction is needed for better performance
 - (d) Acceleration depends upon force applied and mass of an object
- (C) A basketball taking a parabolic path is an example of
 - (a) Third law of motion
 - (b) Sliding friction
 - (c) First law of motion
 - (d) Flexion

Q.2. In biomechanics class, Gopi, the teacher, brings the students to the physics lab of his school. The students get confused. After the completion of the class, they realize the fact.

- (A) Why does the teacher bring the students to physics lab for biomechanics class?
 - (a) It deals with physics principle
 - (b) Sliding friction
 - (c) Rolling friction
 - (d) Static friction
- (B) Biomechanics is associated with
 - (a) Mechanic
 - (b) Physics
 - (c) Mechanic and Physics
 - (d) Mechanic and Anatomy
- (C) Friction can be increased by which of the following?
 - (a) Smooth surface
 - (b) Dry surface
 - (c) Decrease the weight
 - (d) All of these

Q.3. During the physical education class Newton's Laws of motion were discussed and their practical application in sports events was explained to students. These laws are most relevant in sports as most of the actions in sports are related to these laws. On the basis of this information answer the following questions.

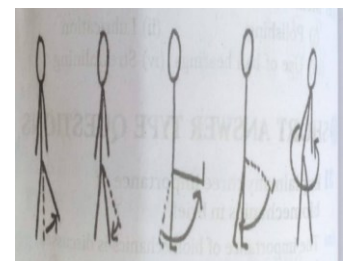
- (A) Newton's First Law of Motion is also known as
- (a) Law of inertia
 - (b) Law of momentum
 - (c) Law of reaction
 - (d) Law of acceleration
- (B) What is the relationship between mass and force?
- (a) Directly proportional
 - (b) No relationship
 - (c) Inversely proportional
 - (d) Both (a) and (c)
- (C) Newton's second law is also known as
- (a) The law of reaction
 - (b) The law of inertia
 - (c) The law of acceleration
 - (d) None of the above

Q.4. The teacher as well as coaches always make their best efforts to improve the performance of their students in various competitive games and sports. They can help to improve the performance of students if they have adequate knowledge of biomechanics.

- (A) The more force one exerts on the downward bounce, the higher the ball bounces into the air. Which law is this statement being referred to?
- (a) Newton's 1st law
 - (b) Newton's 2nd law
 - (c) Newton's 3rd law
 - (d) Law of gravitation
- (B) Among the above given pictures, Newton's 3rd law is depicted in
- (a) First
 - (b) Second
 - (c) Both (a) and (b)
 - (d) None of these
- (C) The acceleration of an object depends directly upon the net force acting upon the object and inversely upon the object's
- (a) Weight
 - (b) Mass
 - (c) Height
 - (d) Density



Q.5. Sohan, a new student in the school was very much interested in taking part in the school sports events. He was taught the latest rules and regulations of football game. In due course, he learnt biomechanical aspects of the game including various movements.



- (A) The type of movement in which the angle between joint decreases is called
 (a) Flexion
 (b) Extension
 (c) Gliding
 (d) Sliding
- (B) Straightening parts of a joint so that the angle increases
 (a) Flexion
 (b) Extension
 (c) Abduction
 (d) Adduction
- (C) Moving a part away from mid line is
 (a) Flexion
 (b) Extension
 (c) Abduction
 (d) Adduction

Q.6. During the physical education class Newton's laws of motion were discussed and their practical application in sports events was explained to the students. These laws are most relevant in sports as most of the actions in sports are related to these laws.

Based on the given case study answer the following questions.

- A. Newton's first law of motion is also known as?
 a. Law of inertia
 b. law of momentum
 c. law of reaction
 d. law of acceleration
- B. What is the relationship between mass and force?
 a. Directly proportional
 b. No relationship
 c. Inversely proportional
 d. both a and c
- C. Swimming can be explained by which of the following laws of motion.
 a. Laws of acceleration
 b. Laws of reaction
 c. laws of inertia
 d. None of these
- D. If a Person Throws a ball with double force. Which of the following statement holds true.
 a. Acceleration is doubled whereas mass remains same.
 b. Both acceleration and mass will be doubled.
 c. Acceleration remains unaffected whereas man is doubled.
 d. Both acceleration and mass remains unaffected.
- E. Newton's second law is also known as
 a. The law of reaction
 b. The law of inertia
 c. the law of acceleration
 d. None of these

1A	a	1B	d	1C	c	2A	a	2B	d
2C	b	3A	a	3B	a	3C	c	4A	c
4B	c	4C	b	5A	a	5B	b	5C	c
6A	a	6B	a	6C	c	6D	a	6E	c

ASSERTION & REASONING

- Q.1. Assertion (A)** Biomechanics aims to achieve performance enhancement in sports.
Reason (R) Qualitative analysis helps in technique improvement and injury prevention. In context of above two statements, which one of the following is correct?
Codes
(a) Both A and R are true and R is the correct explanation of A
(b) Both A and R are true, but R is not the correct explanation of A
(c) A is true, but R is false
(d) A is false, but R is true
- Q.2. Assertion (A)** Biomechanics is the study of forces and their effect on living system.
Reason (R) In swimming, 3rd law of motion (law of reaction) is utilized.
Codes
(a) Both A and R are true and R is the correct explanation of A
(b) Both A and R are true, but R is not the correct explanation of A
(c) A is true, but R is false
(d) A is false, but R is true
- Q.3. Assertion (A)** Sports biomechanics help to improve performance.
Reason (R) Competitions provide opportunity to the individual to prove his physical and psychic ability.
Codes
(a) Both A and R are true and R is the correct explanation of A
(b) A is true but R is false.
(c) Both A and R are false.
(d) A is false but R is true
- Q.4. Assertion (A)** Flexion and Extension is a type of Movements.
Reason (R) All Movements done in Plane and Axis.
Codes
(a) Both A and R are true and R is the correct explanation of A
(b) A is true but R is false.
(c) Both A and R are false.
(d) A is false, but R is true
- Q. 5.** Given below are two statements , one is labeled as Assertion (A) and other is labeled as Reason(R)
- Assertion (A)** - selection of a sport is the first phase for identification of talent.
Reason (R) - Talent identification has three phases.
In the context of above two statements, which one of the following is correct?
a. Both (A) and (R) are true and (R) is the correct explanation of (A)
b. Both (A) and (R) are true but (R) is not the correct explanation of (A)
c. (A) is true, but (R) is false.
d. (A) is false, but (R) is true
- Q.6. Assertion (A)** - Biomechanics aims to achieve performance enhancement in sports.
Reason (R) - Qualitative analysis helps in technique improvement and injury prevention.
a. Both A and R are true and R is the correct explanation of A
b. Both A and R are true but R is not the correct explanation of A
c. A is true but R is false.
d. A is false but R is true.
- Q.7. Assertion (A)** -Biomechanics is the study of forces and their effects on living system.
Reason (R) - In swimming, 3rd law of motion (law of reaction) is utilized.

- a. Both A and R are true at you and are is the correct explanation of A
- b. Both A and R are true but R is not the correct explanation of A
- c. A is true but R is false.
- d. A is false but R is true.

Q.8. Assertion (A)-Weight lifters use lime on palms before holding the bar, in jerk and snatch.

Reason (R) - Application of lime increases Friction and improves the grip.

- a. Both A and R are true and R is the correct explanation of A
- b. both A and R are true, but R is not the correct expansion of A
- c. A is true, but R is false
- d. A is false but R is true

Q. 9. Assertion (A) - Dribbling in basketball is based on law of acceleration.

Reason (R) - When a basketball strikes on the floor with a force (action), then the ball comes up with an equal force from the (reaction).

- a. Both A and R are true and R is the correct explanation of A
- b. Both A and R are true, but R is not the correct explanation of A
- c. A is true, but R is false
- d. A is false, but R is true.

1	a	2	b	3	b	4	a	5	b
6	a	7	b	8	a	9	d		