

**2021**

**SCIENTIFIC PRINCIPLES OF SPORTS TRAINING**

**Paper: MPCC- 301**

**Full marks: 70**

*The figures in the margin indicate full marks.*

*Candidates are required to give their answer in their own words  
as far as practicable.*

**Answer all the questions**

1. What do you mean by Sports Training and Sports Coaching? Describe the principles of Sports Training. 5+10

***Or,***

Write down the aim and objectives of Sports Training. Briefly explain about the philosophy of Sports Coaching. 7+8

2. Define Training Load. What are the different components of Training Load? Explain the cause-and-effect relationship between Load and Adaptation. 3+6+6

***Or,***

Describe the various causes of Overload. What are the measures to be taken for tackling Overload? What do you understand by Super Compensation? 5+5+5

3. What is Strength? Write down the factors effecting Strength. Discuss the methods of developing Strength. 2+5+8

***Or,***

Define Endurance. What are the different forms of Endurance? Describe the various training methods that can develop Endurance of an athlete. 2+5+8

4. Short notes on following (*any two*) : 7.5x2
- a) Periodisation and its phases
  - b) Tactics
  - c) Training cycle
  - d) Various Coordinative Abilities

***Please Turn Over***

(2)

5. Answer the MCQs from below by choosing the correct option and writing the answer on your script (*any ten*): 10x1

- a) Sports training aims at improvement of :
  - (i) Performance
  - (ii) Physical fitness
  - (iii) Technical skill
  - (iv) Tactical development
  
- b) Adaptation process is set when load is:
  - (i) Minimum
  - (ii) Average
  - (iii) Optimum
  - (iv) Overload
  
- c) The degree of load is called:
  - (i) Internal load
  - (ii) External load
  - (iii) Both (a) and (b)
  - (iv) None of the foregoing
  
- d) Isometric contraction is also known as :
  - (i) Dynamic contraction
  - (ii) Static contraction
  - (iii) Eccentric contraction
  - (iv) Concentric contraction
  
- e) Fartlek training method is used for developing :
  - (i) Strength
  - (ii) Speed
  - (iii) Endurance
  - (iv) Power
  
- f) Training load is determined by which of the following :
  - (i) Pulse rate
  - (ii) Blood lactate
  - (iii) Intensity of load
  - (iv) All of the above
  
- g) Increase of muscle mass due to weight training is called :
  - (i) Muscular hypertrophy
  - (ii) Muscular atrophy
  - (iii) Muscular hypotrophy
  - (iv) Haematoma

*Please Turn Over*

(3)

- h) To improve the cardio-respiratory endurance, you need to emphasis on :
    - (i) Repetition
    - (ii) Intensity
    - (iii)Duration
    - (iv)Density
  
  - i) Stretch the leg with the help of partner is related to :
    - (i) Active flexibility
    - (ii) Passive flexibility
    - (iii)Static flexibility
    - (iv)Dynamic flexibility
  
  - j) Through maximal effort method we can develop:
    - (i) Power
    - (ii) Maximum Strength
    - (iii)Explosive Strength
    - (iv)Strength endurance
  
  - k) There is no muscle contraction during:
    - (i) Isometric exercise
    - (ii) Isotonic workouts
    - (iii) Isokinetic exercise
    - (iv) None of these
  
  - l) Which one of the following is the most appropriate method of training to improve flexibility:
    - (i) Slow stretching method
    - (ii) Yoga
    - (iii)Ballistic method
    - (iv)Post isometric stretch.
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