

MASTER OF PHYSICAL EDUCATION EXAMINATION, 2019

(2nd Year, 3rd Semester)

SCIENTIFIC PRINCIPLES OF SPORTS TRAINING**PAPER - PG/MPCC - 301**

Time : Three hours

Full Marks : 70

Group – A : Answer *any three* questions

1. Elucidate the meaning and Definition of sports training. Explain the aims and characteristics of sports training. 5+10 =15
2. What is training load ? What are the various types of training load ? Describe the various components of training load. Explain the relationship between load and recovery. 2+3+5+5=15
3. What is endurance ? What are the various types of endurance ? Explain the various methods for developing endurance. 2+4+9=15
4. What is periodization ? Write down the objectives of periodization. Describe the different phases of periodization and their aim and contents. 3+3+9=15
5. What is doping ? Explain the types of doping and their bad effects. 3+4+8=15

Group – B : Answer *any two* questions

6. Write short notes : 7½ × 2=15
 - a) Principles of overload.
 - b) Strength and its development.
 - c) Development of flexibility.
 - d) Micro, Meso and Macro cycle.

Group – C : Answer *any ten* questions

7. Choose the correct option from the following : 1 × 10 = 10
 - i) The duration of the meso cycle of training is
 - a) One day
 - b) One week
 - c) 2 to 3 weeks
 - d) 4 to 6 weeks
 - ii) Sprinting speed is best developed through
 - a) Fartlek
 - b) Continuous running
 - c) Weight training
 - d) Differential races
 - iii) Development of maximum strength should start at the age of
 - a) 8 to 10 years
 - b) 11 to 13 years
 - c) 14 to 15 years
 - d) 16 to 18 years

- iv) The time elapsed between the moment of application of a stimulus and the moment of first response is
- a) Reaction time
 - b) Movement time
 - c) Response time
 - d) None of these
- v) Football players use anabolic steroid in order to increase their
- a) Lean body mass and strength
 - b) Ability to concentrate
 - c) Power to kick the ball
 - d) Speed and tackling ability
- vi) Select the correct sequence of overload symptoms :
- a) Performance, Clinical, Psychic, Physiological
 - b) Physiological, Performance, Clinical, Psychic
 - c) Psychic, Physiological, Performance, Clinical
 - d) Clinical, Psychic, Physiological, Performance
- vii) Which principle of sports training refers to general motor skills and fitness development ?
- a) Principle of periodization
 - b) Principle of individuality
 - c) Principle of specificity
 - d) Principle of overload
- viii) In endurance training in order to receive adaptation results, the heart rate must be kept above
- a) 140 beats per minute
 - b) 150 beats per minute
 - c) 160 beats per minute
 - d) 180 beats per minute
- ix) Strength gain is the fastest
- a) Isokinetic weight training
 - b) Isometric weight training
 - c) Isotonic weight training
 - d) Fartlek training
- x) Interval training was invented by
- a) Dr. Earnest Van Aaken
 - b) Edward Emu
 - c) Raindell and Greschler
 - d) Morgan and Adamson
- xi) Wind sprints, acceleration runs are the variations of
- a) Repetition method
 - b) Interval method
 - c) Continuous method
 - d) None of these
- xii) Which of the following principle is used in Plyometric training ?
- a) Isokinetic contraction
 - b) Eccentric contraction
 - c) Isometric contraction
 - d) Isotonic contraction