

# MIZORAM PUBLIC SERVICE COMMISSION

## TECHNICAL COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO THE POST OF COACH GRADE - I UNDER SPORTS & YOUTH SERVICES DEPARTMENT, GOVERNMENT OF MIZORAM. APRIL, 2019

### TECHNICAL PAPER - I

Time Allowed : 2 hours

Full Marks : 150

*Attempt all questions.*

*All questions carry equal marks of 2 each.*

1. A system of classification of body type into ectomorph, endomorph, or mesomorph to describe the body build of an individual named "somatotypes" was developed by
- (a) W.H. Sheldon (b) W.Mc Ardle  
(c) Pierre de Coubertin (d) Dr. Ken Cooper

2. Match List-I with List-II and select the correct option using the codes given below:

**List – I**

1. Marathon runners  
2. Shot putter  
3. Football player  
4. Volleyball player

**List – II**

- A. Endomorph body type  
B. Ectomorph body type  
C. mesomorph or Ectomorph body type  
D. mesomorph body type

**Code :**

|     |   |   |   |   |
|-----|---|---|---|---|
| 1   | 2 | 3 | 4 |   |
| (a) | A | B | C | D |
| (b) | D | A | B | C |
| (c) | B | A | D | C |
| (d) | B | A | C | D |

3. Which one of the following is not an example of a reason for participating in physical activities?
- (a) To wear fashionable sports gear  
(b) To follow a sedentary lifestyle  
(c) To realize that physical activities make you healthy  
(d) To follow your parents' involvement in physical activities
4. Which one of the following is a component of fitness?
- (a) Cardiovascular endurance (b) A cool down  
(c) A fundamental motor skill (d) Health screening
5. Lack of self-esteem is often a reason for non-participation in physical activities. Which one of the following shows a lack of self-esteem?
- (a) Having low fitness levels  
(b) Being unable to get to the leisure facilities  
(c) Feeling that you are not very good at sport  
(d) Being unable to pay the swimming pool entrance fee

6. A State of complete physical, mental, and social wellbeing, and not merely the absence of disease or infirmity is...
  - (a) Fitness defined by AAHPER
  - (b) Aim of physical education given by Charles A. Bucher
  - (c) Definition of health by WHO
  - (d) None of these
7. What are hypokinetic diseases?
  - (a) Diseases brought on at least in part by insufficient movement and exercise
  - (b) Diseases caused by over doing exercises
  - (c) Diseases genetically inherited
  - (d) None of these
8. To improve mental health of the people in a community...
  - (a) We must create more parks and protect open spaces
  - (b) Keep alcohol use to a minimum and avoid other drugs
  - (c) Encourage participation in physical fitness activities
  - (d) All of these
9. Which one of the following pairs shows two good examples of characteristics of a balanced, healthy lifestyle?
  - (a) Nonsmoking and non-active
  - (b) Nutritional diet and regular water drinking
  - (c) Non-alcohol and low protein diet
  - (d) Physically active and smoking only a limited number of cigarettes
10. Which one of the following is not a good indicator of health and well-being?
  - (a) Participating regularly in physical activities
  - (b) High level of income
  - (c) Satisfaction with life
  - (d) Feeling positive about life
11. Which one of the following best indicates a balanced diet?
  - (a) A balance between what is eaten and energy expended
  - (b) A balance of different types of protein
  - (c) A balance between what is eaten and what is drunk
  - (d) A balance between fruit and vegetables
12. Which one of the following is an example of a food high in carbohydrates?
  - (a) Fish
  - (b) Bananas
  - (c) Meat
  - (d) Eggs
13. Minerals are essential components of a balanced diet. Which one of the following is not a mineral that is essential for our body?
  - (a) Mercury
  - (b) Iron
  - (c) Calcium
  - (d) Potassium
14. Select the correct statement.
  - (a) Athlete must consume more carbohydrate rich food during training.
  - (b) Athlete must consume more protein rich food during training.
  - (c) A major component of food during competition shall be fat.
  - (d) Consuming ORS prior before competition improve player's stamina.
15. Which one of the following is not a correct diet arrangement for performance?
  - (a) Carbohydrate loading before competition.
  - (b) Consuming glucose after competition.
  - (c) Eating protein rich food prior to competition
  - (d) Drinking water before competition.

16. Why is a cool down important after exercise?
- (a) To raise resting Heart Rate (b) To improve speed  
(c) To make muscular contractions stronger (d) To speed up the removal of lactic acid
17. Which one of the following training would be the best method of exercise to improve your stamina?
- (a) yoga (b) Pilates  
(c) sprinting (d) aerobics
18. Which one of the following is a suitable method for measuring your cardiovascular endurance?
- (a) The sit and reach test (b) The Cooper 12 minute run test  
(c) The 30 minute sprint test (d) The body mass index test
19. Which one of the following is the most appropriate method of training to improve your Strength?
- (a) Weight training (b) Fartlek Training  
(c) Yoga (d) Aerobics
20. Interval training is mostly used
- (a) To increase flexibility (b) To reduce reaction time  
(c) to improve fundamental skills (d) Improve muscular endurance
21. One of the best tests to measure aerobic endurance is
- (a) Beep test (b) 1 RM test  
(c) Sit and reach test (d) 60 M Run Test
22. Which one of the following is a suitable test for strength?
- (a) Tug of war (b) Sit and reach  
(c) Stork stand test (d) Grip dynamometer
23. Which one of the following is a function of proteins as part of a balanced diet?
- (a) Helps to repair tissues in the body (b) Helps to rehydrate the body  
(c) Helps to supply fiber to the body (d) Helps to break down carbohydrates
24. Co-ordination is important for a skilled performer. Which one of the following types of exercise would be best to improve your co-ordination?
- (a) Dance exercise (b) Long distance running  
(c) Weight training (d) Sit-ups
25. Choose the correct statement on the following;
- (a) Training can improve reaction time of athlete.  
(b) Reaction time is inborn quality and training has little effect only.  
(c) A person who has fast reaction with arm also has fast reaction with legs.  
(d) There is a significant relationship between reaction time and movement time.
26. World class sprinters are characterized by
- (a) High percentage of fast twitch muscle fibers in their legs.  
(b) High percentage of slow twitch muscle fibers in their legs.  
(c) Equal percentage of fast twitch and slow twitch muscle fibers in their legs.  
(d) None of these.
27. The immediate source of energy at the skeletal muscle is
- (a) Protein (b) lactic acid  
(c) ADP (d) ATP
28. Why is warming up before exercise important?
- (a) It improves flexibility (b) It improves heart rate  
(c) It decreases the removal of lactic acid (d) It slows adrenaline release

29. Which one of the following fitness components is yoga likely to develop?  
(a) Agility (b) Speed  
(c) Flexibility (d) Cardiovascular endurance
30. Which one of the following is a key concept of Physical Education?  
(a) Fundamental skills of the chosen game (b) Pathways  
(c) Peer pressure (d) Creativity
31. Increase in muscle mass due to heavy weight training is called–  
(a) Muscular Hypotrophy (b) Muscular Hypertrophy  
(c) Muscular Atrophy (d) Hematoma
32. Harvard step test is a test for measuring–  
(a) Leg strength (b) Cardio vascular endurance  
(c) Agility (d) Speed of movement
33. Requirement for building new tissues for growth of a human body is  
(a) Carbohydrates (b) Fat  
(c) Protein (d) Vitamin
34. Insulin is secreted by  
(a) Liver (b) Pituitary  
(c) Pancreas (d) Thyroid
35. In 'set' position of a crouch start, the hip line and shoulder line are maintained in the following way:  
(a) Shoulder line is higher than the hip line. (b) Shoulder line and hip line are at same level.  
(c) Hip line is lower than shoulder line. (d) Hip line is higher than shoulder line.
36. The Olympic motto Citius, Altius, Fortius was coined by  
(a) Thomas Bach (b) Juan Antonio Samaranch  
(c) I.O.C. (d) Father Henry Didion
37. Match List-I with List-II and select the correct option using the codes given below:

**List – I**

- A. Hypoxia  
B. Hypokinetic  
C. Insomnia  
D. Achilles tendonitis

**List – II**

1. Lack of physical activity  
2. Excessive jumping  
3. Lack of oxygen  
4. Overwork

**Code :**

|     | A | B | C | D |
|-----|---|---|---|---|
| (a) | 2 | 3 | 1 | 4 |
| (b) | 3 | 1 | 4 | 2 |
| (c) | 4 | 3 | 2 | 1 |
| (d) | 3 | 2 | 1 | 4 |

38. In fitness training the training load is gradually increased to push the athlete to higher levels of strength. This is called  
(a) The Balance Principle (b) The Recovery Principle  
(c) The Specificity Principle (d) Overload Principle
39. The normal stable resting state of the body is called  
(a) homeostasis (b) recovery  
(c) equilibrium (d) Stable

40. A normal resting heart rate for adults ranges from 60 to 100 beats per minute. Generally a well-trained athlete has a lower resting heart rate.
- (a) A lower heart rate at rest implies better cardiovascular fitness.
  - (b) A lower heart rate at rest implies poor cardiovascular fitness.
  - (c) A well-trained athlete might have resting heart rate closer to 100 beats per minute.
  - (d) None of these.
41. Fast twitch muscle fibers use anaerobic metabolism to create fuel, they are better at generating
- (a) speed
  - (b) endurance
  - (c) flexibility
  - (d) coordination
42. \_\_\_\_\_ has a high tolerance against fatigue.
- (a) Fast twitch muscle fibers
  - (b) Slow twitch muscle fibers
  - (c) Both (a) & (b)
  - (d) None of these
43. One of the best weight training for Upper body is
- (a) Chin up
  - (b) Overhead press
  - (c) Bench press
  - (d) All of these
44. One of the best weight training for abdominal muscles is .
- (a) Chin up
  - (b) Sit up
  - (c) Bench press
  - (d) All of these
45. Strengthening Exercises for Lower Extremity Exercises may be
- (a) Bridging
  - (b) Step ups
  - (c) Side lying Leg Lifts
  - (d) All of these
46. While free-weights are often considered the best form of training for building muscle, beginners may benefit from multi-gym machines because;
- (a) Machines are easier to use
  - (b) develop more balance and coordination
  - (c) No risk of injury
  - (d) One machine can be used for every major body part
47. Everyone responds differently to training. This is based on factors like genetic ability, predominance of muscle fiber types, age, and mental state. This is called;
- (a) Principle of Adaptation
  - (b) Principle of Specificity
  - (c) Principle of Individuality
  - (d) Principle of Active participation
48. Match List-I with List-II and select the correct option using the codes given below:

**List – I**

- A. Yoga training
- B. Aerobic training
- C. Altitude training
- D. Plyometric training

**List – II**

- 1. Explosive strength
- 2. Haemoglobin count
- 3. Increase in left ventricular wall thickness
- 4. Flexibility

|               |          |          |          |          |
|---------------|----------|----------|----------|----------|
| <b>Code :</b> | <b>A</b> | <b>B</b> | <b>C</b> | <b>D</b> |
| (a)           | 4        | 3        | 2        | 1        |
| (b)           | 1        | 4        | 1        | 2        |
| (c)           | 2        | 1        | 4        | 3        |
| (d)           | 3        | 4        | 2        | 1        |

49. Sphygmomanometer is used to measure—

- (a) Blood Haemoglobin
- (b) Blood Cholesterol
- (c) Blood Pressure
- (d) Blood Volume

50. Calorie is a measurement unit of

- (a) Liquids
- (b) Heat
- (c) Solids
- (d) Cold

51. Which of the following city will host 2020 Summer Olympics?

- (a) Rome
- (b) Tokyo
- (c) Istanbul
- (d) Barcelona

52. Haemoglobin is found in

- (a) Red Blood Corpuscles (RBC)
- (b) White Blood Corpuscles (WBC)
- (c) Platelets
- (d) Bone marrow

53. Which of the following Vitamins is available from Sun rays?

- (a) Vitamin A
- (b) Vitamin B
- (c) Vitamin C
- (d) Vitamin D

54. Match List – I with List – II and select the correct option using the codes given below:

**List – I**

- A. Basketball
- B. Kabbaddi
- C. Volleyball
- D. Wrestling

**List – II**

- 1. Sudden death
- 2. Libero
- 3. Dead ball
- 4. Lona

**Code :**

|     | A | B | C | D |
|-----|---|---|---|---|
| (a) | 3 | 4 | 2 | 1 |
| (b) | 3 | 4 | 1 | 2 |
| (c) | 2 | 4 | 1 | 3 |
| (d) | 1 | 4 | 3 | 2 |

55. Match List – I with List – II and select the correct option using the codes given below:

**List – I**

- A. Fosbury flop
- B. Glide technique
- C. Hitch Kick
- D. Snatch Baton Pass

**List – II**

- 1. Relay Race
- 2. Long Jump
- 3. Shot Put
- 4. High Jump

**Code :**

|     | A | B | C | D |
|-----|---|---|---|---|
| (a) | 4 | 3 | 2 | 1 |
| (b) | 4 | 2 | 1 | 3 |
| (c) | 3 | 2 | 4 | 1 |
| (d) | 3 | 2 | 1 | 4 |

56. N.I.S. was established in

- (a) 1957
- (b) 1960
- (c) 1962
- (d) 1964

57. Incomplete recovery is vital in

- (a) Continuous method of training
- (b) Interval training
- (c) Fartlek
- (d) Cross country

- 58.** Which exercise of the following increase agility?
- (a) Altitude training (b) Interval training  
(c) Fartlek (d) speed ladder drills
- 59.** The cardiovascular ability to sustain low intensity movement over a long period of time is
- (a) endurance (b) stamina  
(c) agility (d) speed
- 60.** There are several trainings that will increase your stamina and one of the best is
- (a) Altitude training (b) Interval training  
(c) 1 RM training (d) Plyometric training
- 61.** Select incorrect statement.
- (a) Jogging helps to keep high blood pressure at bay.  
(b) Jogging is one of the oldest and most popular forms of aerobic exercise.  
(c) Jogging increases speed and agility  
(d) Jogging Helps you Lose Weight and Reduces Body Fat Levels.
- 62.** Select incorrect statement.
- (a) You will burn roughly around 150 calories for every mile that you go jogging.  
(b) Jogging increases the supply of oxygen to all parts of the body, helping prevent some cancers.  
(c) Jogging also strengthens the immune system remarkably well.  
(d) Jogging helps to increase release of insulin by the body.
- 63.** Select incorrect statement.  
Running on sand is a dynamic exercise which
- (a) Stabilizes muscles and so reduce the risk of injury.  
(b) provides extra resistance to one's muscles and help to run faster.  
(c) Can be performed with barefoot.  
(d) shall be started without warm up exercises.
- 64.** Select incorrect statement.  
A dynamic exercise
- (a) involves the full range of motion (ROM).  
(b) may need to be restricted for exercisers with orthopedic injuries.  
(c) is beneficial to persons with joint disorders.  
(d) Includes concentric-eccentric motions.
- 65.** Choose the incorrect statement.  
Fartlek
- (a) is continuous training with interval training.  
(b) training should be at intensity at 60% to 80% of one's HRmax.  
(c) is associated with running, but can include almost any kind of exercise.  
(d) places stress on the anaerobic systems only.
- 66.** Which one of the following is an example of a performance enhancing drug?
- (a) Steroid (b) Alcohol  
(c) Carbohydrate (d) Paracetamol
- 67.** Which one of the following might be included in a good exercise program to significantly improve flexibility?
- (a) Plyometric (b) Interval training  
(c) Body pump (d) Yoga

68. Which one of the following is a health screening test?  
(a) Sit and reach test (b) 30m sprint test  
(c) Blood pressure test (d) Cooper's 12 minute run test
69. Why is a cool down important after exercise?  
(a) To raise resting Heart Rate (b) To improve speed  
(c) To make muscular contractions stronger (d) To speed up the removal of lactic acid
70. Which one of the following would you not take into account when assessing someone for readiness to exercise?  
(a) Family history of illness (b) Age of participant  
(c) History of sports success (d) Fitness level of participant
71. Which one of the following is an example of the role of a referee in a physical activity?  
(a) Applying rules fairly  
(b) Recording performance statistics  
(c) Ensuring that all players have a good level of fitness  
(d) Supervising the warm up
72. Arrange the following sequence for management of pain.  
I. Compression II. Ice  
III. Rest IV. Elevation  
(a) II, III, IV, I (b) III, II, I, IV  
(c) I, III, II, IV (d) IV, I, II, III
73. Select incorrect statement.  
Benefits of weight training include...  
(a) Increased strength, muscle endurance. (b) Increased flexibility and reaction time.  
(c) Improved cardiovascular health. (d) decreased body fat, blood pressure.
74. For best results in Nautilus exercises the following principles will be followed  
(Choose 2 correct answers)  
I. Train no more than three times a week.  
II. Do not vary the workouts.  
III. For each exercise do more than 25 repetitions  
IV. After your last exercise, cool down by walking around the workout area 4 to 5 minutes.  
(a) I and II (b) III and IV  
(c) I and IV (d) II and III
75. Advantages of circuit training are:  
(Choose 2 correct answers)  
I. develops strength and endurance.  
II. exercises require no equipment.  
III. can be adjusted to suit age, fitness and health of the athlete.  
IV. less space required to set up the circuit exercises.  
(a) I and II (b) III and IV  
(c) I and III (d) II and III