UNIT-7

Physiology And Injuries In Sports

1- Mark Questions (Objective/Subjective)

1. Endurance depends upon
   a. maximal oxygen uptake. b. white muscles fibre c. body weight d. joint articulation
2. Cardiac output is the ability to
   a. breathing with a maximum volume of air. b. To pump out blood in one minute
   c. stroke volume d. Decrease in blood pressure.
3. The cardiorespiratory system improves the
   a. Heart size b. Lung volume. c. New capillaries d. All of these.
4. Ageing process increases the
   a. Muscles size b. Heart efficiency c. Blood pressure d. Reaction time
5. The prime objective of first aid is to
   a. Take the victim to hospital b.to provide water to the victim
   c. Immediate care & step to save a life. D.to call to police
6. Contusion is-
   a. cut over the skin.
   b. Damage of soft tissues.
   c. Damage over muscles.
   d. tearing of the skin.
7. Sprain injury usually occurs over
   a. skin. b. joint. c. Muscles. d. Bone.
8. Neuromuscular responses improve the……ability of individual
   a. Strength b. Flexibility. c. Speed. d. coordination
9. Endurance can be improved by
   a. Maximum oxygen uptake b. cardiac output c. red muscles fibre. d. All of these
10. Ligament injury is a…… injury
    a. strain b. sprain c. dislocation d. fracture
11. Which of the following is not a soft tissue injury?
    a. Contusion b. Laceration c. finger dislocation. d. Incision
12. The science which deals with the functioning of the body is called
    A. Physiology. b. Psychology. c. Biomechanics d. kinesiology
13. The effect of exercise over muscles is
    a. Muscles size decreases b.no effect on muscles.
    c. muscles size increases. d. muscles binding improve.
14. The other name of hairline fracture is
    a. stress fracture b. Transverse fracture c. greenstick fracture. d. oblique fracture
15. …… does not determine physical fitness?
    a. Strength& speed b. inflexibility c. stamina d. Endurance

16. During exercise the.
a. blood pressure increases. b. weight increases.
c. pulse slow down. d. respiration slows down

17. Regular exercise over some time leads to
a. decreased heart rate b. slower heart rate. c. less blood volume d. less stroke volume

18. … is an injury to the tendons, muscles.
a. sprain, b. laceration c. contusion d. strain.

19.. Increase in muscle mass due to heavyweight training is called–
(A) Muscular Hypotrophy(B) Muscular Hypertrophy(C) Muscular Atrophy(D) Haematoma

20. Which of the following systems of the body is the focal point in movement?
(A) Circulatory system (B) Nervous system (C) Respiratory system (D) Muscular system

21. Overuse of tendons in physical activity can cause problems. Which one of the following problems are associated with tendon overuse?
a. Inflammation b. Arthritis C. Hypertrophy D. Bruises

22. How many physiological factors determined. Physical fitness?
(a) Two (b) Four (c) Five (d) Three

23. Flexibility is not determined by which physiological factors?
(a) Muscle strength (b) Age, gender (c) Injury (d) Aerobic capacity

24. Intake of oxygen and give out carbon dioxide through alveoli is called?
(a) Circulation (b) Vital capacity (c) Respiration (d) Aerobic capacity

25. Exercise not leads to
(a) Increase in size of muscles (b) Better reaction time
(c) Increased muscle speed (d) Minute volume Decreases

26. You should use Ice on a soft tissue injury after.
(a) 5 minutes (b) 10 minutes (c) 20 minutes (d) 15 minutes

27. Aerobic capacity depends upon oxygen intake, oxygen transport and_____.

28. _____ is the amount of oxygen which can be intake by the long from the atmosphere.

29. _____ is the amount of oxygen which can be observed and consumed by the working muscle from the blood.

30. There are two types of muscles fibre, that is rate fibre and _____.

31. _____ acid is usually accumulated in the muscles during intense physical activity.

32. Metabolic rate_____ with the advancement of a and consequently there is an increase in body fat.

33. The strength of the muscles largely depends upon the size of the muscle. (T/F)

34. White muscle fibre can produce more force in comparison to Red muscle fibre. (T/F)

35. Red muscle fibres are not capable of contracting for a longer duration. (T/F)

36. The aerobic capacity depends upon the muscle glycogen and sugar level in the blood. (T/F)

37. Vital air capacity in the form of tidal volume, inspiratory and reserve volume. (T/F)

38. Reaction time can be improved if exercises are performed regularly. (T/F)
39. In a commented fracture the end of the fractured bone enters into another bone. (T/F)
40. Which type of muscle fibres is capable of contracting for a longer duration?
41. What is another name of fast-twitch fibres?
42. Which are the injuries of ligaments?
43. In which type of fracture a bone is broken into three or more pieces?
44. In which type of fracture a broken bone damages the internal organs?
45. Who is usually affected by greenstick fracture?

3-Mark Questions

46. In which contraction, White muscle fibre is better adapted to perform?
47. Which functional efficiency of a muscle depends?
48. Which is the following included in soft tissue injuries?
49. Mention all soft tissues injuries.
50. Mention all objectives of first aid.
51. Which type of injury usually occurs in boxing?
52. In which fracture, if a bone is broken and damages in the internal organs?
53. The aerobic capacity difference in which object?
55. Write all the factors determined by flexibility?
56. Mention all the soft tissue injuries.
57. What is the strain?
58. What do you mean by oxygen intake and oxygen uptake?
59. Does the joint structure determine flexibility? explain in brief.
60. Briefly explain about ageing.
61. Discuss the effect of ageing on the size and strength of muscles.
62. Elaborate on the effect of ageing on bone density.

5-Mark Questions

63. Explain any three physiological factors determining strength.
64. Discuss any three physiological factors determining speed.
65. Elaborate on any three physiological factors determining endurance.
66. Discuss any three physiological factors determining flexibility.
67. Discuss any three effects of exercise on the cardio-respiratory system.
68. What are the various factors affecting physiological fitness? Explain.
69. Explain in detail about the effects of regular exercise on the cardiorespiratory system.
70. Explain the physiological factors determining speed.
71. What do you mean by first aid? discuss the aim and objectives of first aid in detail.
72. What are bone injuries? discuss the types, causes and prevention of fracture.

73. What do you mean by joint injuries? the type and preventive measures of joint injury.