COURSE CODE : 254/121

Time : 2 Hours

Max : 400 Marks

Instructions to Candidates:

1. Write your Register Number within the box provided on the top of this page and fill in the page 1 of the answer sheet using pen.

2. Do not write your name anywhere in this booklet or answer sheet. Violation of this entails disqualification.

3. Read each question carefully and shade the relevant answer (A) or (B) or (C) or (D) in the relevant box of the ANSWER SHEET using HB pencil.

4. Avoid blind guessing. A wrong answer will fetch you −1 mark and the correct answer will fetch 4 marks.

5. Do not write anything in the question paper. Use the white sheets attached at the end for rough works.

6. Do not open the question paper until the start signal is given.

7. Do not attempt to answer after stop signal is given. Any such attempt will disqualify your candidature.

8. On stop signal, keep the question paper and the answer sheet on your table and wait for the invigilator to collect them.

9. Use of Calculators, Tables, etc. are prohibited.
RESEARCH METHODOLOGY

1. Research is defined as
   (A) the quest for the unknown and for the known
   (B) an association with the well being of man's total organization
   (C) a method of studying problems
   (D) the scientific method of analysis

2. A good researcher requires characteristics such as
   (A) Decision making and creative work
   (B) Systematic, logic, empirical and replicable
   (C) Patient, unhurried and requires courage.
   (D) Scientific attitude and interdisciplinary approach.

3. Assertion and Reason: Select the answer form the codes given below.
   Assertion 'A': A problem is a unit of perception.
   Reason 'R': Lack of knowledge in the association factors
   Code
   (A) 'A' is the correct answer and 'R' is the not the correct explanation of 'A'.
   (B) 'A' is the correct answer and 'R' is the correct explanation of 'A'.
   (C) Both 'A' and 'R' are false.
   (D) 'A' is false and 'R' is true.

4. Related literature is necessary
   (A) to study published articles.
   (B) to evaluate reports.
   (C) to prevent unwarranted duplications.
   (D) to summarized knowledge on subject areas.

5. Identify the direct library sources.
   (A) Encyclopedia
   (B) Indexes
   (C) Books and government publications
   (D) Bibliographies

6. Major sources of literature refers to
   (A) Bibliographies and Indexes
   (B) Critical literature, Allied literature and Justification
   (C) Abstract and Research Quarterly
   (D) Periodicals
7. Identify the correct order of appearance in the foot note in thesis or dissertations.
   (A) Initial of Author’s Name, Name of Author, Title of the Book (Place of Publication: Name of the Publisher, year): Page number(s).
   (B) Author’s first name, Title of the Book, (Name of Publisher, Place: Year). Page number(s).
   (C) Author last name first. Title of the Book (Publisher name, Year). Page number(s).
   (D) Author’s surname followed by the first name and then initial. Title of the Book (Place: Publisher name, Year): Page number(s).

8. Research is broadly classified into
   (A) Fundamental Research, Pure Research and field Research
   (B) Basic Research, Action Research and Applied Research
   (C) Applied Research, Action Research and Field Research
   (D) None

9. Identify the type of Research concerned in solving the problem immediately.
   (A) Analytical Research.          (B) Action Research
   (C) True Research                (D) Descriptive Research

10. Identify the Research which aims is the discovery of basic truth and law.
    (A) Basic Research               (B) Field Research
     (C) Applied Research            (D) Action Research

11. Delimitation refers to
    (A) the scope of the study
    (B) the restriction imposed on subjects, age, variables and population
    (C) the formulation of the title
    (D) the type of sample employed

12. Assertion and Reasons: Select the answers from the code given below:
    Assertion ‘A’: Limitation reflects the drawback of the study.
    Reasons ‘R’: Certain criteria where the scholar is not able to control.
    Code
    (A) ‘A’ is the correct and ‘R’ is the correct explanation of ‘R’.
    (B) ‘A’ is the correct and ‘R’ is the false.
    (C) ‘A’ is the correct and ‘R’ is not the correct explanation of A’.
    (D) Both ‘A’ and ‘R’ are false.
13. Select the answers fun the code given below:
   Assertion 'A': Statistics are aggregate of facts.
   Reason 'R': Single and isolated figures are not statistics.
   (A) 'A' is not correct and 'R' is not the correct explanation of 'A'.
   (B) 'A' is correct and 'R' is the correct explanation of 'A'.
   (C) 'A' is false and 'R' is correct.
   (D) 'A' is correct and 'R' is false.

14. Identify the correct order applied in statistics.
   (A) Collection of Data, Presentation, Analysis and Interpretation.
   (B) Analysis, Interpretation, Presentation and Collection of Data.
   (C) Presentation, Collection of Data, Analysis and Interpretation.
   (D) Interpretation, Analysis, Presentation and Collection of Data.

15. The main concept of Statistics is
   (A) to prepare reports
   (B) to conduct research
   (C) to determine the scientific worth of test
   (D) to collect data

16. Identify the single score from the following.
   (A) 7.6      (B) 19.31     (C) 24.49      (D) 13.69

17. Data that can be graded according to its magnitude is
   (A) Quantitative data
   (B) Attribute
   (C) Variable
   (D) Qualitative data

18. Identify the nominal scale from the given examples.
   (A) High jump performance
   (B) Body types
   (C) Grades for body builders
   (D) Performance of players

19. A science of average is
   (A) Quantitative data
   (B) Single score
   (C) Statistics
   (D) Central measures of Tendency
20. A non gradient classification according to characteristics is called as
   (A) Variable (B) Discrete variable
   (C) Continuous variable (D) Attribute

21. When individual’s is classified according is characteristics it is called as
   (A) Interval scale (B) Nominal scale
   (C) Ordinal scale (D) Ratio scale

22. Select the answer from the codes given below.
   Assertion ‘A’: Sample is the sub set of the population.
   Reason ‘R’: It is a true representative of the population.
   Code
   (A) ‘A’ is correct but ‘R’ is not the correct explanation of ‘A’.
   (B) ‘A’ is correct and ‘R’ is the correct explanation of ‘A’.
   (C) ‘A’ and ‘R’ is not correct.
   (D) ‘A’ is not correct and ‘R’ is correct.

23. Select the answer from the codes given below:
   Assertion ‘A’: The observations are independent in non-parametric.
   Reason ‘R’: The Variables in non parametric are discrete.
   Code
   (A) ‘A’ is the correct but ‘R’ is not the correct explanation of ‘A’.
   (B) ‘A’ is correct and ‘R’ is also correct.
   (C) ‘A’ is not correct and ‘R’ is correct.
   (D) ‘A’ and ‘R’ is not correct.

24. Studies that are based on large cross sectional samples is
   (A) Descriptive Research (B) Status Study
   (C) Analytical Research (D) True Research

25. Pearson – Product Moment correlation technique is used when
   (A) both variables are ordinal
   (B) both variables are merit
   (C) one variable is metric and other ordinal
   (D) two variables are dichotomous
26. Fartlek training method improves
   (A) Speed  (B) Endurance
   (C) Strength (D) Flexibility

27. For Endurance dominating sports, the diet should be rich in
   (A) Fat  (B) Vitamin
   (C) Protein (D) Carbohydrates

28. Explosive power is measured through
   (A) Sit-ups  (B) Vertical jump
   (C) Shuttle run (D) 1 mile running

29. Ability to react quickly and effectively to a signal is called
   (A) Movement ability  (B) Coupling ability
   (C) Reaction ability (D) None of these

30. Repetition method helps to improve
   (A) Strength endurance  (B) Agility
   (C) Speed ability (D) None of these

31. Isokinetic Training invented by
   (A) Kamalesh M.C.  (B) J.J. Perrine
   (C) Hettinger (D) None of these

32. Ballistic training to improve
   (A) Speed  (B) Endurance (C) Mobility (D) Strength

33. Double periodisation has
   (A) One Transitional period  (B) Three Transitional period
   (C) Two Transitional period (D) None of these
34. The Training cycle which have a normal duration of 3-4 weeks is
   (A) Macro cycle                   (B) Micro cycle
   (C) Meso cycle                   (D) None of these

35. The ability to overcome the resistance with high speed is
   (A) Maximum strength             (B) Absolute strength
   (C) General strength             (D) None of these

36. In sub maximum resistance work load the percentage of the maximum possible intensity should be
   (A) 80 to 90                    (B) 90 to 100           (C) 30 to 50       (D) 50 to 80

37. The concept of top form was first propounded by
   (A) Hardyal Singh                (B) H. Clarck and D. Clarck
   (C) L.P. Matwe Dev               (D) D. Scholich

38. Extensive interval Training improves
   (A) Basic endurance              (B) General endurance
   (C) Strength endurance           (D) All of these

39. During transitional period the intensity and volume is kept
   (A) low                         (B) high                  (C) both          (D) none of these

40. Which kind of weight training is best suitable for athletes?
   (A) Isotonic                    (B) Isometric             (C) Isokinetic   (D) Eccentric

SPORTS MEDICINE

41. The causes of muscle cramp are
   (A) Salt deficiency            (B) Water imbalance
   (C) Injury to muscle           (D) All the above

42. Immediate injuries are treated by
   (A) Infra aid                  (B) Short wave diathermy
   (C) Ultra sound                (D) Ultra violet
43. The cannon injury in basket ball is
   (A) Medial meniscus injury  (B) Medical ligament of ankle
   (C) Lateral ligament of the knee  (D) None of the above

44. Due to injury blood is collected and forms a tumor the swelling is called.
   (A) Haematoma  (B) Blood clotting
   (C) Blood accumulates  (D) All the above

45. The traumatic joint twist that result is stretching an totally tearing stabilizing
   (A) Muscle pull  (B) Strains  (C) Sprains  (D) Fracture

46. The exposure of skin to the hot sun for a prolonged time cause
   (A) Sunburns  (B) Frost bite
   (C) Cyanosis  (D) None of these

47. Cryotherapy is also known as
   (A) Ice therapy  (B) Hydrotherapy
   (C) Electrotherapy  (D) None of the above

48. Effleurage is always done
   (A) across the muscle
   (B) from the distal to proximal ends
   (C) from proximal to distal ends
   (D) around joints

49. Contrast bath is recommended for
   (A) Reducing a dislocated joint  (B) Reducing swelling
   (C) Treatment of wound  (D) None of the above

50. Which of the following is called a pressure manipulation?
   (A) Stroking  (B) Clapping
   (C) Pounding  (D) Kneading
EXERCISE PHYSIOLOGY

51. The cardiac output of an individual is
   (A) 6 liters  (B) 5-6 liters  (C) 4-5 liters  (D) 6.5 liters

52. The amount of air that inspired and expired during quiet respiration
   (A) tidal air  (B) tidal volume  (C) hypoxia  (D) none of these

53. The volume of air that pass into and out of the lungs by the most forcible respiration
   (A) vital capacity  (B) lung capacity  (C) both  (D) none of these

54. The condition of complete absence of oxygen is known as
   (A) hypoxia  (B) axoxia  (C) tidal air  (D) none of these

55. The normal rate of respiration is
   (A) 20 times/min  (B) 15 times a minute
   (C) 17 times/min  (D) None of the above

56. Lactic acid is a bye product of
   (A) Aerobic glycolysis  (B) Anaerobic glycolysis
   (C) Both  (D) None of the above

57. The red muscle fiber has
   (A) high aerobic capacity  (B) high anaerobic capacity
   (C) both  (D) none of these

58. Aerobic exercises are of
   (A) short duration  (B) long duration
   (C) both  (D) none of these

59. The final path way for aerobic metabolism
   (A) Krebs cycle  (B) Electronic transport system
   (C) Both  (D) None of these
60. Balanced diet should contain
   (A) Protein                      (B) Carbohydrates
   (C) Vitamins                    (D) All the above

61. Anabolic steroid are categorized as
   (A) Doping agent                (B) Anti doping agent
   (C) Performance reducing agent  (D) None of these

62. Metabolism is concerned with
   (A) Respiratory                 (B) Nervous system
   (C) Digestive system            (D) Circulatory system

63. Sliding filament theory was proposed by
   (A) Huxley                      (B) Hudson
   (C) Sanderson                   (D) Denahue

64. Muscles are connected to bones by means of
   (A) Cords                       (B) Ligaments
   (C) Tendons                     (D) Fascia

65. The condition where there is lack of adequate blood blow to active muscle is called
   (A) Ischemia                     (B) Spasm
   (C) Torn tissue                 (D) Haemorragae

66. Arthrology means
   (A) Study of cells              (B) Study of muscles
   (C) Study of bones              (D) Study of human body

67. Cladius Galen is a
   (A) Scientist found hydrostatic principles of floating bodies
   (B) Medical rehabilitation scientist
   (C) Famous Scientist introduced the term of Agonist and Antagonist muscles
   (D) First physician in history had a substantial knowledge of human motions
68. Frontal plane is
   (A) it divide the body into right and left parts
   (B) it divide the body into anterior and posterior part
   (C) it divide the body into superior and interior
   (D) all the above

69. Law of momentum is known as
   (A) Law of inertia          (B) Law of Acceleration
   (C) Law of reaction         (D) None of the above

70. Dorsal Flexion means
   (A) moving the top surface of the foot towards the posterior surface
   (B) it is the reverse of lateral flexion
   (C) moving the top surface of the foot towards the anterior surface
   (D) all the above

71. Newton is the Unit of
   (A) Momentum                (B) Acceleration due to gravity
   (C) Force                   (D) Velocity

72. Which of the following has Fundamental Quantity?
   (A) Velocity                (B) Force
   (C) Volume                  (D) Time

73. The unit of energy is
   (A) Kilowatts               (B) Kg/s²
   (C) J/s                     (D) Watt day

74. Unit of Time in mks system is
   (A) Hour                    (B) Kilometer
   (C) Minute                  (D) Second

75. The unit of work is
   (A) fundamental
   (B) neither fundamental nor derived
   (C) derived
   (D) both fundamental and derived
76. Which of the following pairs have identical dimensions?
   (A) Work and Kinetic energy
   (B) Moment of a force and Angular momentum
   (C) Momentum and force
   (D) Pressure and surface tension

77. Rectus femoris muscle is a
   (A) Unipennate
   (B) Bipennate
   (C) Multipennate
   (D) None of the above

78. Saddle Joint comes under
   (A) Non axial movement
   (B) Uni axial movement
   (C) Bi axial movement
   (D) Tri axial movement

79. Amphiarthrodial Joint is known as
   (A) Fibrous joint
   (B) Cartilaginous joint
   (C) Synovial joint
   (D) Both (A) and (B) joint

80. Postural muscles is known as
   (A) gravitational force muscles
   (B) anti gravitational force muscles
   (C) thigh muscles
   (D) all the above

MEASUREMENT AND EVALUATION

81. Height of the bench in Harvard step test for college men is
   (A) 18”
   (B) 22”
   (C) 20”
   (D) 23”

82. How many test items in Oregon motor fitness test for upper elementary school?
   (A) 4
   (B) 3
   (C) 5
   (D) 7

83. How many test items for college men in Indiana motor fitness test?
   (A) 5
   (B) 6
   (C) 4
   (D) 3
84. Harward step test is used for
   (A) Strength of the leg  (B) Explosive power
   (C) Endurance          (D) Agility

85. How many test items are included in AAHPERD youth fitness test?
   (A) 8   (B) 9   (C) 7   (D) 10

86. The flat back is also known as
   (A) Lumbar Lordosis     (B) Lumber Kyposis
   (C) Lordosis            (D) Lordo Kyposis

87. Goniometer is used for
   (A) Speed    (B) Flexibility  (C) Agility    (D) Endurance

88. Cable tension test is used to measure
   (A) Agility    (B) Flexibility  (C) Strength   (D) Endurance

89. How many skin fold are taken for measurement of fat in human body?
   (A) Two   (B) Three   (C) Four     (D) Six

90. When the digestive viscera dominates the body economy the body composition is
    (A) Mesomorphy  (B) Endomorphy
    (C) Ectomorphy (D) None of the above

SPORTS PSYCHOLOGY

91. Psychology deals with
    (A) functions of the body  (B) activities of the body
    (C) construction of the body (D) behavior of man.

92. The period of growth and Development from 11-14 years of age is known as
    (A) Adolescence  (B) Childhood  (C) Puberty  (D) Youth
93. Motor skills are learnt best by
   (A) Imitation  (B) Practice
   (C) Observation  (D) Memorization

94. The age in the years, months and days is known as
   (A) Anatomical age  (B) Chronological age
   (C) Psychological age  (D) Calendar age

95. The name of Pavlov is associated with
   (A) Trial and error learning  (B) Conditioned reflex learning
   (C) Learning by doing  (D) All the above

96. The 16 P.F. Questionnaire was constructed by
   (A) Allport  (B) Cattel  (C) Eysnecker  (D) Guilford

97. The exponents of the Surplus Energy theory are
   (A) Spearman and Woodsworth  (B) Thorndike and Pavlov
   (C) Schiller and Spencer  (D) Carl Grooves and Darwin

98. Walford, Barlett, Goody and Smith have contributed to the promotion of
   (A) Surplus Energy theory  (B) Theory of Formal Discipline
   (C) Identical Element Theory  (D) Cybernetic Theory of Learning

99. Each instinct according to William Mcdougall is said to have its corresponding
   (A) Reflex  (B) Drive  (C) Tendency  (D) Emotion

100. Cognitive Learning is also called
     (A) Mental Learning  (B) Affective Learning
     (C) Motor Learning  (D) All the above