ENTRANCE EXAMINATION FOR ADMISSION, MAY 2011.
M.Phil./Ph.D. (PHYSICAL EDUCATION)
COURSE CODE : 254/121

Register Number :  

Signature of the Invigilator
(with date)

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.
1. What is the distance of one standard deviation from the mean in normal curve?
(A) 34.14%  (B) 68.26%  (C) 43.59%  (D) 62.15%

2. What is 't' distribution referred to?
(A) A theoretical distribution  (B) A students' distribution
(C) Fischer's distribution  (D) W.S. Gosselt statistic

3. Degree of freedom refers to
(A) That the scores are free to move in the calculate
(B) All scores are free to except one
(C) All scores but the last one can be different
(D) None of the above

4. What is the concept of levels of confidence?
(A) The probable location of the population mean from the sample mean
(B) Location of the population mean outside the limits
(C) Location of the population mean within the limits
(D) None of the above

5. In which statistical application should be groups be equated or matched?
(A) ANOVA  (B) Two way ANOVA
(C) 't' test  (D) ANCOVA

6. In which Non-Parametric statistical test is Yates correction used?
(A) Sign test  (B) Median test
(C) Chi-Square test  (D) Kolmogrov-smirnov test

7. On what occasion is the null hypothesis rejected?
(A) When the fact is false  (B) When the fact is true
(C) Type II error  (D) None of the above

8. Name the type of statistics when a sample is used to determine the population.
(A) Predictive statistics  (B) Inferential statistics
(C) Relationship statistics  (D) Descriptive statistics

9. What does the standard deviation indicate?
(A) The spread of the middle 68.26% of the scores taken from mean
(B) The middle 50% of the scores taken from median
(C) The spread of all scores in the distribution
(D) The overall distribution

10. How a grouping error be corrected?
(A) Grouping of the scores  (B) Probable error
(C) Sheppard's correction  (D) Correction factor
GENERAL KNOWLEDGE

11. Name the countries which have participated in all the Olympics held so far
   (A) Australia, Great Britain, France, Switzerland and Greece
   (B) Australia, France, U.K., Japan and Athens
   (C) Australia, Great Britain, Japan, U.S.S.R. and U.S.
   (D) U.S.A., U.K., Australia, and Japan

12. Women were first permitted to participate in this year Olympic Games
   (A) 1900                  (B) 1912
   (C) 1908                  (D) 1916

13. Which is the body which controls Asian games?
   (A) I.O.A.                (B) I.O.C.
   (C) O.C.A.                (D) A.A.A.

14. Which venue saw the dark chapter in the Olympic Games in 1972?
   (A) Munich                (B) Seoul
   (C) Stockholm             (D) London

15. The Olympic Games' motto is "Citius, Altius, and Fortius" in Latin. Select correct meaning in English in the same sequence as given below:
   (A) Higher, Faster and Stronger
   (B) Faster, Stronger and Higher
   (C) Faster, Higher and Stronger
   (D) Stronger, Faster and Higher
16. Match List I correctly with List II and select your answer using the codes given below:

<table>
<thead>
<tr>
<th>List I (Received Dronacharya Award)</th>
<th>List II (Game / Sports)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Dr. Karan Singh</td>
<td>1. Boxing</td>
</tr>
<tr>
<td>(b) Shri. Gurubux Singh Sandhu</td>
<td>2. Athletics</td>
</tr>
<tr>
<td>(c) Shri. Gurudial Singh Bhangu</td>
<td>3. Wrestling</td>
</tr>
<tr>
<td>(d) Shri. Guru Hanuman</td>
<td>4. Hockey</td>
</tr>
</tbody>
</table>

Codes:

(A)  3  2  1  4
(B)  2  1  4  3
(C)  3  4  1  2
(D)  2  4  1  3

17. Match List I correctly with List II and select your answer using the codes given below:

<table>
<thead>
<tr>
<th>List I (World Cup Cricket Venue)</th>
<th>List II (Organized Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) India &amp; Pakistan</td>
<td>1. 2003</td>
</tr>
<tr>
<td>(b) Australia</td>
<td>2. 1987</td>
</tr>
<tr>
<td>(c) South Africa</td>
<td>3. 1996</td>
</tr>
<tr>
<td>(d) India, Sri Lanka &amp; Pakistan</td>
<td>4. 1991 – 1992</td>
</tr>
</tbody>
</table>

Codes:

(A)  4  1  2  3
(B)  2  4  1  3
(C)  3  4  1  2
(D)  4  2  1  3
18. Match List I correctly with List II and select your answer using the codes given below:

List I (Received Arjuna Award)  List II (Game / Sports)
(a) Limbaram, 1991  1. Athletics
(b) Baichung Bhutia, 1998  2. Basketball
(c) Sunitha Rani, 1999  3. Archery
(d) Ajmer Singh, 1982  4. Football

Codes:
(a) (b) (c) (d)
(A)  3   2   1   4
(B)  2   1   4   3
(C)  3   4   1   2
(D)  2   4   1   3

19. Match List I correctly with List II and select your answer using the codes given below:

List I (World Cup Football Venue)  List II (Organised Year)
(a) U.S.A.  1. 2002
(b) Italy  2. 1998
(c) France  3. 1990
(d) South Korea & Japan  4. 1994

Codes:
(a) (b) (c) (d)
(A)  4   1   2   3
(B)  4   3   2   1
(C)  3   4   1   2
(D)  4   2   1   3

20. Match List I correctly with List II and select your answer using the codes given below:

List I (Asian Games Venue)  List II (Organised Year)
(a) Beijing, China  1. 1994
(b) Hiroshima, Japan  2. 1982
(c) New Delhi, India  3. 2002
(d) Pusan, South Korea  4. 1990

Codes:
(a) (b) (c) (d)
(A)  4   1   2   3
(B)  2   1   4   3
(C)  3   4   1   2
(D)  4   2   1   3
BIO-MECHANICS

21. Which of the following is not included in the course content of Bio-Mechanics?
   (A) Physics
   (B) Anatomy
   (C) Dynamics
   (D) Neuroscience

22. The greater the momentum of an object
   (A) The higher it will go
   (B) The stronger it will spin
   (C) The lesser it will travel
   (D) The greater distance it will travel

23. Top spin on the ball causes
   (A) Higher rebound
   (B) Left rebound
   (C) Lower rebound
   (D) Right rebound

24. In which of the following activities these least change of center of gravity
   (A) Standing broad jump
   (B) Shuttle run
   (C) Crawling
   (D) Somersault

25. The first type of Lever of Fulcrum is
   (A) At right side
   (B) At left side
   (C) At centre
   (D) None of the above

26. Horizontal plane moves around
   (A) Vertical axis
   (B) Horizontal axis
   (C) Transverse axis
   (D) None of the above

27. The force which acts towards the centre of a circular motion of an object is
   (A) Centripetal force
   (B) Centrifugal force
   (C) Both
   (D) None of these
KINESIOLOGY

28. Khyposis is also known as
   (A) Round shoulder  (B) Hollow back
   (C) Lateral back     (D) Curved back

29. Forward inclination of the shoulder girdle is known as:
   (A) Round shoulder  (B) Lorclosis
   (C) Round back     (D) Scoliosis

30. During abduction the arm moves
   (A) Away from the body (B) Towards the body
   (C) Diagonal movement  (D) None of these

31. The plane passes longitudinally through the centre of the body is
   (A) Median plane     (B) Sagittal plane
   (C) Horizontal plane (D) Transverse plane

32. The area situated further away from the median line of the body is
   (A) Dorsal           (B) Median
   (C) Laternal         (D) Ventral

33. Slightly movable joints are known as
   (A) Diarthrosis      (B) Amphiarthrosis
   (C) Synoarthrosis    (D) None of these

34. Fibrous joints are also known as
   (A) Synoarthrosis    (B) Amphiarthrosis
   (C) Diarthrosis      (D) None of these

35. The movement of body segment in which the angle of the joint decrease is
   (A) Flexion          (B) Extension
   (C) Lateral flexion  (D) Dorsiflexion
36. Periodisation in which more than one meso-cycle in a training year is called
   (A) Single Periodisation  (B) Double Periodisation
   (C) Triple Periodisation  (D) Multiple Periodisation

37. The ability to overcome resistance with high speed is
   (A) Strength          (B) Maximum strength
   (C) Absolute strength (D) Explosive strength

38. Intensity can be measure in terms of
   (A) Speed               (B) Time
   (C) Both the above      (D) None of these

39. Endurance are classified as
   (A) Duration of activity (B) Nature of activity
   (C) Both                (D) None of these

40. The circuit training was first started and studied by
   (A) H. Clark and D. Clark (B) Dr. Hardayal Singh
   (C) Morgan and Adamson  (D) None of these

41. The duration of Meso-cycle is
   (A) 5 to 10 days        (B) 4 to 6 weeks
   (C) 4 to 6 months      (D) 1 to 2 years

42. Factors affecting the phase of recovery are
   (A) Natural of load    (B) Health and physical fitness
   (C) Sleep              (D) All the above

43. The temporal and dynamic co-ordination between different muscle and muscle
    groups are known as
   (A) Inter muscular co-ordination (B) Intra muscular co-ordination
   (C) Both the above                (D) None of the above

44. Pushing against wall is an example of
   (A) Iso-metric exercise        (B) Iso-tonic exercise
   (C) Eccentric exercise         (D) Ballistic exercise

45. Iso-kinetic method for the development of strength was first formulated by
   (A) J.J. Perrine               (B) Hetting and Muller
   (C) Morgan and Adamson        (D) None of these
SPORTS MEDICINE

46. Water Therapy is also known as
   (A) Electrotherapy  (B) Wax therapy
   (C) Hydrotherapy  (D) Ice therapy

47. What are the causes of muscle cramp?
   (A) Salt deficiency  (B) Any injury to muscle
   (C) Hyperventilation  (D) All of the above

48. Effleurage is always done
   (A) From distal to proximal ends  (B) Across the muscles
   (C) From proximal to distal ends  (D) Around joints

49. Cryo-therapy means
   (A) Cold-therapy  (B) Heat therapy
   (C) Infrared  (D) None

50. Diatherapy and ultra sound methods are used for the injuries in
   (A) Cryo-therapy  (B) Thermotherapy
   (C) Electrotherapy  (D) None of these

51. Cold compress is a treatment modality given for
   (A) Fracture  (B) Cramps
   (C) Sprains  (D) Bleeding wound

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

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

54. The exposure of skin to the hot sun for a prolonged time causes
   (A) Sun burn  (B) Frost bite
   (C) Cyanosis  (D) None of these

55. The movement performed by the individual with the help of weight acting against the
direction of movement may be termed as.
   (A) Resistive manipulation  (B) Assistive manipulation
   (C) Passive manipulation  (D) None of these
56. Conditioned reflex theory is association with
   (A) Thorndike  (B) Karl Jung
   (C) Sigmund Freud  (D) Pavlov

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

58. The Two Factory theory in learning is associated with
   (A) Woodworth  (B) John Dewey
   (C) Spearman  (D) Carl Jung

59. Which law of learning is called the law of use and disuse?
   (A) Law of exercise  (B) Law of readiness
   (C) Law of effect  (D) Law of intimacy

60. Awareness of the body position is called
   (A) Kinesthetic sense  (B) Auto sense
   (C) Olfactory sense  (D) None

61. Motor skill are learnt by
   (A) Imitation  (B) Practice
   (C) Observation  (D) Demonstration

62. What makes the administration and organization of physical education most efficient?
   (A) Infrastructure  (B) Highly qualified personnel
   (C) Teacher's personality  (D) Technical Knowledge and skills

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

64. Psychoanalytic theory has been originated by
   (A) Gestalt  (B) John Dewey  (C) Freud  (D) Skinner

65. For higher performance the level of arousal should be
   (A) High  (B) Optimum
   (C) Low  (D) None
MEASUREMENT AND EVALUATION

66. Dyer test is associated with
   (A) Tennis  (B) Badminton  (C) Hockey  (D) Football

67. Miller wall Volley Test is a test of
   (A) Badminton  (B) Volleyball
   (C) Squash  (D) Basketball

68. Sergeant test is a test to measure
   (A) Muscular strength  (B) Muscular Power
   (C) Explosive power  (D) None

69. Bass Stick test is used to measure
   (A) Power  (B) Balance
   (C) Strength  (D) Flexibility

70. Criteria of test depends on
   (A) Standard of the test  (B) Educational feasibility
   (C) Correlation  (D) None

71. The instrument used to measure flexibility
   (A) Stadiometer  (B) Flexometer
   (C) Goniometer  (D) Fleximeter

72. Who has devised the skill test for Hockey?
   (A) Warner  (B) Schmithel
   (C) Dyer  (D) Johnson

73. Kelley’s test is associated with
   (A) Leg  (B) Foot
   (C) Hands  (D) Chest

74. When the digestive Viscera dominates the body economy the body composition is
   (A) Mesomorphy  (B) Endomorphy
   (C) Ectomorphy  (D) None

75. Pedagraph is used to measure
   (A) Lordosis  (B) Posture
   (C) Flat foot  (D) Tennis Elbow
PHYSIOLOGY OF EXERCISE

76. The final pathway for Aerobic Metabolism
   (A) Kreb Cycle  (B) Electron Transport System
   (C) Both        (D) None of these

77. The energy required for the immediate contraction of the muscle is from
   (A) ATP        (B) CP
   (C) Glycogen   (D) None of these

78. The instrument used to assess the electrical Potential of the Heart is known as
   (A) Sphygmomanometer  (B) Electrocardiograph
   (C) Both               (D) None of these

79. The condition of O₂ deficiency in the tissues at high altitude is
   (A) Hypoxia   (B) Anoxia
   (C) Tidal Air (D) None of these

80. Among Inspiration and expiration which is an active process
   (A) Expiration       (B) Inspiration
   (C) Both             (D) None of these

81. The stimulus propagation along the nerve fiber is called
   (A) Conduction      (B) Radiation
   (C) Transmission    (D) None of these

82. The junction between the neurons are called
   (A) Synapses   (B) Neuro-Muscular Junction
   (C) Synaptic Knob (D) Axon

83. The protein present in the blood plasma are
   (A) Albumin       (B) Globulin
   (C) Fibrinogen    (D) All the above

254/121
84. The amount of air inspired or expired per breath is called
   (A) Vital Capacity  (B) Tidal Volume
   (C) Reserve Volume  (D) None of these

85. Each Heart beat lasts about
   (A) 0.8 Sec  (B) 0.7 Sec
   (C) 0.4 Sec  (D) 0.5 Sec

86. The normal blood pressure of an adult is
   (A) 120 mm/80 mm Hg  (B) 110 mm/90 mm Hg
   (C) 80 mm/110 mm Hg  (D) 90 mm/110 mm Hg

87. The average Vital Capacity of normal men are
   (A) 4.5 liters  (B) 4.6 liters
   (C) 2.3 liters  (D) 3.6 liters

88. Factors contributing to Fatigue
   (A) Lactic Acid  (B) H+
   (C) None of the above  (D) All the above

89. Hypertropy of the Muscle
   (A) Increase in thickness of muscle fibre  (B) increase in number of Muscle fiber
   (C) Both  (D) None of these

90. The Excitory chemical transmitter of the neuromuscular junction is
   (A) Acetylcholine  (B) Dopamine
   (C) Both  (D) None of these
RESEARCH METHODOLOGY

91. The knowledge of the basic principles working behind the natural phenomenon is
   (A) Fundamental Research  (B) Applied Research
   (C) Action Research       (D) All the above

92. A Hypothesis of no difference is
   (A) Null hypothesis      (B) Statistical Hypothesis
   (C) Both                (D) None of the above

93. External and Internal criticism are the part of
   (A) Experimental research (B) Action Research
   (C) Historical research  (D) None of these

94. Survey is also known as
   (A) Status study        (B) Fundamental Study
   (C) Basic study         (D) None of these

95. The handful of subjects who are the true representative of the population is
   (A) Sample       (B) Tools      (C) Data       (D) Variable

96. Open form Questionnaire contains question that call for
   (A) Free Response    (B) Check Response
   (C) Descriptive response (D) Short response

97. Synopsis is also called
   (A) Research Proposal (B) Blue Print
   (C) Thesis            (D) None of these

98. The Scope of research is indicated by
   (A) Limitation of the study (B) Nature of the study
   (C) Delimitation of the study (D) None of these

99. Steps used for locating Research problem is
   (A) Discussion with experts (B) Study of Literature
   (C) Research already completed (D) All of the above

100. Equated group is also called
     (A) Random Group Design  (B) Repeated Measures Design
         (C) Reverse Group Design (D) Parallel Design