

M.Phil. DEGREE EXAMINATION, DECEMBER 2010

Physical Education

**RESEARCH METHODOLOGY AND ADVANCED
STATISTICS IN PHYSICAL EDUCATION**

(CBCS–2008 onwards)

Time : 3 Hours

Maximum : 75 Marks

Answer **all** questions.

(5 × 15 = 75)

1. (a) Explain the purpose of survey of related literature.

(Or)

- (b) Define Research and explain the qualities of a good research.

2. (a) Define Case Study and explain the steps and collection of data in a Case Study.

(Or)

- (b) Explain a philosophical research with a specific title.
3. (a) Explain the various parts of a Research Report.

(Or)

- (b) Explain the uses of computers for research in physical education.

4. (a) Explain the concept of analysis of variance and analysis of covariance and their uses.

(Or)

- (b) Calculate one way ANOVA for three independent samples.

Group 1	Group 2	Group 3
10	20	30
40	50	60
70	80	90
80	70	60
50	40	30
20	10	20

5. (a) Write the meaning of correlation and calculate correlation for the given data :

X	-	10	40	60	70	30	20	50
Y	-	10	20	30	40	50	60	70

(Or)

- (b) Describe the meaning of multiple correlation and calculate multiple correlation coefficient from the given zero order correlation.

$$r_{12} = .6$$

$$r_{13} = .8$$

$$r_{23} = .9$$

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M.Phil. DEGREE EXAMINATION, DECEMBER 2010**Physical Education****SPORTS TRAINING METHODS****(CBCS–2008 onwards)****Time : 3 Hours****Maximum : 75 Marks****(5 × 15 = 75)****Answer *all* questions.**

1. (a) Write in detail about General, Specific and Competitive exercise programs relating it to specific sports event.

(Or)

- (b) Define Strength. Explain types of strength and construct strength training program for one week to develop maximum strength for Competitive period.

2. (a) Define Speed. Describe the factors influencing speed.

(Or)

- (b) Define Endurance. Explain the factors to be considered for endurance training.

3. (a) Explain the terms 'units', 'micro cycle' and 'macro cycle' with suitable examples.

(Or)

- (b) Explain the meaning and purpose of having preparatory, competitive and transitional periods in the training program.

4. (a) Write in detail about drug abuse in athletics.

(Or)

- (b) Describe the effect of aerobic endurance training on Cardio-respiratory parameters.

5. (a) Write short notes on tools used and method of assessing :

- (i) Percentage of body fat
- (ii) Vital capacity.
- (iii) Max. VO_2 .

(Or)

(b) Write in detail any one standard methods used to assess the given variables :

(i) Endurance.

(ii) Agility.

(iii) Leg strength.

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