Carefully read the description of the experiment below. Be prepared to answer the questions that follow the design description as a class quiz.

In a Likert scale the subjects are asked to express agreement with a question on a scale of 1 to 5 or 1 to 7. The answers for a 5 point Likert scale would be: 1. Strongly disagree 2.Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree.

The study investigated the relationship between academic procrastination and academic performance of university students in a Nigerian university. Subjects consisted of 185 final-year education students (Male = 98, Female = 87) of Obafemi Awolowo University, Ile-Ife, Nigeria. One research instrument, the Procrastination Scale (PS), developed and validated by Lay (1986), was used to collect data for the study. Subjects for the study were selected from a class of students offering a compulsory education course in the College of Education. The students, who were asked to volunteer their class time to complete the research instrument, were not necessarily randomly selected.

The Procrastination Scale (PS, Lay 1986) is a 20-item self-report instrument of the Likert type consisting of items intended to find out the extent to which subjects procrastinate on issues that cover various aspects of life. The original author of the instrument had found it to possess high internal consistency and convincing construct validity. A high score on the scale indicates a high level of procrastination while a low score is indicative of a low level of procrastination. The scores were used to categorize students into one of 3 levels (high, moderate or low procrastinators). Data on subjects' academic performance using their Cumulative Grade Point Average (CCPA) were collected from their respective departments and used as the variable of interest to evaluate academic performance.

Table 2: Influence of Level of Academic Procrastination on Academic Performance

Source of Variance	Sum of Squares	df	Mean Square	F	P
Between Groups	29.14	2	14.57	36.06	6.4263E-14
Within Groups	73.54	182	0.40		
Total	102.68	184	14.97		

Table 3: Multiple Comparisons of CGPA of Students with Different Levels of Procrastination

Levels of Procrastination	N	CGPA mean	SD	Letter
Low Procrastinator	48	3.25	0.47	a
Moderate Procrastinator	72	2.42	0.71	b
High Procrastinator	65	2.29	0.65	b

Answer choices:	**(A) subject (= student)**	**(B) CGPA**	**(C) procrastination level**
	(D) departments	**(E) gender**	**(F) Likert scale**

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Name _____ **Quiz Number** _____ **Date** _____ / _____ / _2012_

Circle the appropriate letter for each question.

1) What is the experimental unit for this experiment?   A   B   C   D   E   F

2) What is the sampling unit for this experiment?   A   B   C   D   E   F

3) What is the dependent variable for this experiment?   A   B   C   D   E   F

4) What is the treatment variable for this experiment?   A   B   C   D   E   F

5) If the design is RBD, what are the blocks?   A   B   C   D   E   F   NA

6) Does it seem more likely that the treatments are fixed or random?   (A) fixed   (B) random

7) What is the treatment arrangement for this experiment?   (A) single factor   (B) factorial   (C) nested

8) What is the experimental design?   (A) CRD   (B) RBD   (C) LSD   (D) Split-plot   (E) Repeated Measures

9) The treatment degrees of freedom are _____ .

10) The degrees of freedom for the error used for testing treatments are _____ .