

**PARUL UNIVERSITY**  
**PARUL INSTITUTE OF APPLIED SCIENCES**  
**MID SEMESTER INTERNAL EXAMINATION**  
**B.Sc.– Semester – 4**  
**Course: NUTRITION AND DIETETICS**

**Paper Code:11109256**

**Date:5/3/2020**

**Title of the paper: Introduction to Research Methods**

**Time:2:00pm**

**Maximum Marks: 40**

**Instructions:**

1. All questions are compulsory and options are given in first and second question only.
2. Numbers to the right of question indicate the marks of respective questions.

<b>Q. 1</b>	Attempt any one question of the following. (i) Define Research Design, its need, functions/goals and features of a good Research Design. (ii) Define hypothesis, features and functions of a good hypothesis and types of hypothesis.	<b>(08)</b>
<b>Q. 2</b>	Attempt any three questions of the following. (i) Explain Solomon Four Group Design (ii) Difference between Qualitative and Quantitative type of research studies (iii) Write at least 2 advantages and 2 disadvantages of true experimental design. (iv) Write at least 2 advantages and 2 disadvantages of quasi experimental design. (v) Enlist all Quasi Experimental designs without control group. Also write the formula of each.	<b>(12)</b>
<b>Q. 3</b>	Do as directed. Attempt all five questions. (i) Research studies with objective to gain familiarity with a phenomenon or to achieve new insight into it are termed as _____ (ii) Research studies with objective to determine the frequency with which something occurs or with which it is associated with something else are known as _____ (iii) Research studies with objective to portray accurately the characteristics of a particular individual, situation, group is known as _____ (iv) Define Reliability (v) Define Validity	<b>(05)</b>
<b>Q. 4</b>	Write the correct option in your answer sheet for following 15 multiple choice questions.	<b>(15)</b>

MCQ 1	Research on which of the following can raise ethical concern.			
	(A)	human trial of a new drug	(B)	sensitive topic like religion
	(C)	blood sample collection	(D)	<b>All of the above</b>
MCQ 2	Hypothesis testing studies are done to determine the _____ relationship between variables.			
	(A)	Casual	(B)	Formal
	(C)	<b>Causal</b>	(D)	Personal
MCQ 3	Control variables are _____ variables which are potential confounders that are required to be controlled or neutralized.			
	(A)	<b>Independent</b>	(B)	Confounding
	(C)	Dependent	(D)	Intermediate
MCQ 4	Variables expressed in integer values are known as _____			

	(A)	Independent	(B)	Non continuous
	(C)	Dependent	(D)	Continuous
MCQ 5	_____ is the formula of Untreated Control group with Dependent pretest and post test samples			
	(A)	Intervention group O1aXO2b Control group O1b O2b	(B)	Intervention group O1aO2bX O3b Control group O1b O2b
	(C)	Intervention group XO1 Control group O2	(D)	Intervention group O1aXO2b Control group O1b O2b O3b
MCQ 6	_____ is an example of variable that can be controlled.			
	(A)	Gender	(B)	Height
	(C)	Lifestyle	(D)	Age
MCQ 7	_____ scale have an absolute or true zero of measurement.			
	(A)	Nominal Scale	(B)	Interval Scale
	(C)	Ordinal Scale	(D)	Ratio Scale
MCQ 8	_____ scale simply assigns numbers, symbols to events to label them.			
	(A)	Nominal Scale	(B)	Interval Scale
	(C)	Ordinal Scale	(D)	Ratio Scale
MCQ 9	In FINER criteria of research question 'E' represents			
	(A)	ethnic aspect	(B)	ethical aspect
	(C)	education aspect	(D)	evaluation aspect
MCQ 10	_____ of the following is the simplest and probably the weakest quasi experimental design.			
	(A)	Pretest posttest design	(B)	Control group pretest posttest design
	(C)	Posttest only design	(D)	Interrupted time series design
MCQ 11	CENSUS survey is conducted once in every _____			
	(A)	Century	(B)	Year
	(C)	Decade	(D)	Month
MCQ 12	Skin problems are not caused by use of makeup products. State the type of hypothesis.			
	(A)	Bidirectional hypothesis	(B)	Null hypothesis
	(C)	Alternate hypothesis	(D)	Negative hypothesis
MCQ 13	Drug A is better than Drug B. State the type of hypothesis.			
	(A)	Alternate hypothesis	(B)	Positive hypothesis
	(C)	Null hypothesis	(D)	None of the above
MCQ 14	If a given data is represented as 2-4, 5-7, 8-10, 11-13 then it is said to be expressed according to _____ of measurement.			
	(A)	Nominal scale	(B)	Ordinal scale
	(C)	Interval scale	(D)	True scale
MCQ 15	Ranking is done in _____ of measurement			
	(A)	Interval scale	(B)	Ratio scale
	(C)	Ordinal scale	(D)	Nominal scale