

BOWEN UNIVERSITY
COLLEGE OF HEALTH SCIENCES
BACHELOR OF PHYSIOTHERAPY PROGRAMME
SECOND SEMESTER EXAMINATION – 2021/2022 SESSION
COURSE CODE/TITLE: PST 426– Research Methodology
DATE: Friday- 23rd September, 2022 **TOTAL TIME: 2 HOURS**

Matriculation Number:

GENERAL INSTRUCTION: Answer all Questions in both Parts: I and II

PART I:

SECTION A: Answer all questions in the answer script

1. Write 10 simple sentences only on research validity. Each of the sentences should have an imaginary citation (any citation of your choice). The first five and the last five citations should be in APA and Harvard styles respectively. The first, second, third, fourth and fifth APA citations should have one, two, three, four and five authors respectively. The same is also applicable to the Harvard citations. (10 marks).
2. You are to collect data from all the levels (100 to 500 levels) of physiotherapy department. All the students in the department summed up to 500. Your sample size is 300. The number of students in 100, 200, 300, 400, and 500 levels are 80, 100, 70, 130, and 120 respectively. Using proportionate stratified sampling technique, how many students will you recruit from each level? (5 marks).
3. List five common errors made in literature review. (2 ½ marks)
4. Mention 8 electronic databases you know (4 marks)
5. Define plagiarism (2 marks).
6. Mention the types of plagiarism (1 mark)
7. Mention three excuses people give while indulging in plagiarism (3 marks).
8. List three ways you can avoid plagiarism.
9. List the sampling techniques you know (5 marks).
10. List two similarities and two differences between APA and Harvard referencing styles

SECTION B: Answer true or false. Wrong answers attract penalties.

1. Vancouver is an “author and date” referencing style.
2. You can cite your own words in a write up.
3. A plagiarist can be likened to a kidnapper.
4. History is a threat to internal validity.
5. Improvement in the internal validity connotes reduction in the external validity of a research.

PART II

Instruction: Part II consists of 3 Sections. Answer all sections in the Question Paper

SECTION A

Instruction: For Questions 1 to 14, choose the best option. Fill in the gap appropriately for Question 15.

1. Which of the following comes first in the research process? (a) picking an area of research interest (b) general plan for setting up a hypothesis (c) generating a proposed research question (d) creating a research design
2. All the following types of studies have no comparison group except (a) case report (b) case series (c) case control (d) none of the above
3. Which of the following studies consist of no intervention by the researcher? (a) case report (b) case series (c) case control (d) all of the above
4. The following are true of observational studies except (a) they have different groups of participants (b) there is no intervention by the researcher (c) they show a connection between an exposure and outcome (d) none of the above
5. A researcher noticed that a child attending the physiotherapy outpatient clinic cries only when a particular Physiotherapist is around in the paediatric unit, and decides to study the possible reasons for the occurrence. This study design is (a) case report (b) case series (c) cross-sectional (d) longitudinal
6. All the following are examples of observational studies except: (a) cross-sectional (b) case series (c) case-control (d) cohort
7. A study considers 50-65 year old Nigerian men of two groups: Group 1 are men with Cystic Fibrosis; Group 2 are men without Cystic Fibrosis. The study is investigating their past history, to know if exposure smoking and exhaust gas fumes were possible risk factors for Cystic Fibrosis. The design for this study is (a) cross sectional (b) longitudinal (c) case-control (d) cohort
8. A Physiotherapist embarks on research for all the following major reasons except: (a) to gain respect in the medical field (b) to establish efficacy of new protocols (c) to confirm the authenticity of previous findings (d) to add to the Physiotherapy knowledge base
9. A study done in 2022 investigating the clinical profiles of all individuals with *Injection Neuritis* in the outpatient Physiotherapy clinic of Bowen University Teaching Hospital that looks into pattern of affectation, documentation details, discharge criteria, between 2015 to 2021 is termed a study (a) prospective (b) retrospective (c) clinical trial (d) descriptive
10. The following are reasons Physiotherapy undergraduates carry out research except: (a) to develop critical thinking skills (b) to develop creativity (c) to be able to graduate with the degree (d) none of the above
11. All the following study types consists of two or more study groups except: (a) case series (b) cohort studies (c) randomised control trials (RCTs) (d) case-control studies
12. The ethical concept of treating a participant as an independent individual, capable of making decisions for themselves is called (a) justice (b) autonomy (c) non-maleficence (d) respect
13. Telling participants in a research involving the possibility of stimulation and irritation of the skin and body hairs by a contact medium used in therapeutic ultrasonography, beforehand, is termed (a) non-maleficence (b) beneficence (c) justice (d) autonomy
14. When an individual creates a result of a research, without proper data collection or field work, it is termed (a) plagiarism (b) falsification (c) fabrication (d) misleading other researchers

15. The institutional review board that oversees research ethics of Physiotherapy undergraduate research in Bowen University, is:

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SECTION B

Instruction: For Questions 1-12, from the options labelled a to d, choose the most correct option

1. In order to pursue any research, which of the following is required first?
a) developing a research design b) formulating a research question c) deciding the data analysis procedure d) formulating a research hypothesis
2. What gives an idea of the depth of any research? a) the research title b) the research duration c) the research hypotheses d) the research aims
3. Who can successfully conduct research? a) someone who is academically inclined b) someone who possesses a graduate degree c) someone who has studied research methodology d) someone who possesses thinking and reasoning ability
4. A tool used for data collection in materials and methods section of a research write-up is called a) sample b) instrument c) survey d) questioner
5. The first step in formulating a research problem is a) getting a research title b) constructing a research hypothesis c) establishing a statement of the problem d) creating a good introduction page
6. The way or mode of gathering data is called a) method b) tool c) data collection d) plan
7. _____ is the raw material for analysis. a) variable b) problem c) data d) sample
8. The first page of a research report is the a) abstract b) title page c) table of content d) cover page
9. A good sub-hypothesis must be a) applicable b) meaningful c) testable d) measurable
10. In a research report, _____ is used to show indebtedness and appreciation.
a) references b) acknowledgement c) dedication d) certification
11. A short summary of a research report is called a) a proposal b) an abstract c) a research article d) a publication
12. “50mg daily dose of indomethacin will cause sufficient analgesia on joint pain”. In the quoted statement, “indomethacin” could be described as a) the dependent variable b) the keyword c) the independent variable d) the controlling variable

SECTION C

Instruction: Fill in the gaps with the appropriate answers in all questions in this section.

1. Arrange the following in the ascending order of writing in a research report: **Literature Review, Abstract, Discussion, Results, Methodology:**
 (2 marks)
2. In the Physiotherapy Programme, Bowen University, Nigeria, the colour(s) of the undergraduate research reports are:
 (2 marks)
3. Where can you find hypotheses in a dissertation?
 (2 marks)
4. List four components of a title page in a dissertation or thesis:
 - (i).....
 - (ii).....
 - (iii).....
 - (iv)..... (2 marks)
5. List four front materials of a dissertation report:
 - (i).....
 - (ii).....
 - (iii).....
 - (iv)..... (2 marks)
6. The importance of adequate materials and methods employed undertaking a research work cannot be overemphasized. List 6 components of this aspect of a research work:
 - (i).....
 - (ii).....
 - (iii).....
 - (iv).....
 - (v).....
 - (vi)..... (3 marks)
7. Discuss each of the following research terms:
 - i. Informed Consent:

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.....(3 marks)

ii. Randomized Controlled Trial:

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.....(3marks)

8. The theme for World Physiotherapy Day 2022 is:
..... (1 mark)

9. In the tabular form, mention 3 differences between a research proposal and a research report.

Research Proposal	Research Report

(3 marks)