

UNIVERSITY OF ESWATINI

DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND PLANNING

FINAL EXAMINATION, MAY/JUNE 2020

**MSc. ENVIRONMENTAL RESOURCES MANAGEMENT - LAND AND WATER
RESOURCES MANAGEMENT**

TITLE OF PAPER: GEP RESEARCH TECHNIQUES

COURSE CODE: GEP608

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS:

- 1. ANSWER TWO (2) QUESTIONS**
- 2. ANSWER ONE (1) QUESTION FROM EACH SECTION**
- 3. IF YOU ANSWER QUESTION 4, DETACH YOUR CODED INTERVIEW TRANSCRIPT (ATTACHMENT B) FROM THIS EXAMINATION QUESTION PAPER AND SUBMIT IT TOGETHER WITH YOUR ANSWER BOOKLET.**
- 4. WHERE APPROPRIATE, ILLUSTRATE YOUR ANSWER WITH DIAGRAMS AND EXAMPLES.**

MARKS ALLOCATION: EACH QUESTION CARRIES 50 MARKS.

THIS QUESTION PAPER SHOULD NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR

GEP608: GEP RESEARCH TECHNIQUES – MAY/JUNE, 2020

SECTION A: ANSWER ONE QUESTION FROM THIS SECTION

QUESTION 1

- a) 'All geographers researching about climate change start with the assumption that climate change is an objective reality.' Critically discuss the validity of this statement. (25 marks)
- b) Identify and explain any three types of research classified according to purpose. (15 marks)
- c) Define what research design entails in both qualitative and quantitative research. (5 marks)
- d) Illustrating with a diagram, outline the reasons why it is advisable for a researcher to produce and follow a time plan. (5 marks)
- (50 Marks)**

QUESTION 2

The recent global outbreak of the Coronavirus (COVID-19) has caused much panic with major impacts on all sectors of the economy. The lack of verified facts, misinformation and rumours floating on social media are to be blamed for this panic. The Ministry of Tourism & Environmental Affairs engages you as an independent researcher to conduct a mixed-methods study to investigate the impacts of COVID-19 on the tourism industry in both rural and urban areas of Eswatini. The Ministry requires you to present your research proposal (inception report) to the steering committee within fourteen working days of receiving the terms of reference.

- a) Define what a research proposal entails and outline the basic components you will have in your research proposal. (10 marks)
- b) Illustrating with a diagram, explain how you will structure your literature review. (10 marks)
- c) Identify and describe three target populations and how you will sample them. (15 marks)
- d) Describe how you will collect and analyse data from any two target populations in (c) above. (10 marks)
- e) Explain possible ethical issues that might arise from this research. (5 marks)
- (50 Marks)**

SECTION B: ANSWER ONE QUESTION FROM THIS SECTION

QUESTION 3

- a) The Matsapha Town Council (MTC) tasked you to conduct a quantitative study to measure the amount of food high-income households at Tubungu throw away as waste on a daily basis over a period of three months from February to April. By using the table of random numbers in Attachment A, you decided to draw a simple random sample of 10% ($n = 15$) from a sampling frame of 150 high-income households at Tubungu you got from the MTC.

- i) State the reasons why sampling is necessary in the context of this study. (5 marks)
 - ii) How many random digits make up each random number that you will use in the sampling? (3 marks)
 - iii) If you start at row 7, column 8 of the table of random numbers, what is the first sample household? (2 marks)
 - iv) Write down the random numbers of all the 15 households you will sample. (Show all the random numbers including those that are not on the sampling frame). (20 marks)
- b) You were able to measure the following amounts of food each of the 15 sampled households has thrown away during the month of February:
- 5kg, 9kg, 11kg, 9kg, 7kg, 6kg, 3kg, 2kg, 9kg, 8kg, 7kg, 9kg, 5kg, 16kg and 10kg
- Calculate the following descriptive statistics for the amount of food that was thrown away:
- i) Arithmetic mean (3 marks)
 - ii) Variance (5 marks)
 - iii) Standard deviation (2 marks)
- c) Identify and distinguish between any two different types of reliability. (10 marks)
(50 Marks)

QUESTION 4

- a) Attachment B is a transcript of a mixed-gender focus group discussion with 6 middle-aged people aged 45-59 years to explore their views on and observations of the everyday living conditions of elderly people aged 60 years and above living alone in one rural settlement.
- i) Explain the possible criteria the researcher used in recruiting the participants for this focus group discussion. (5 marks)
 - ii) Discuss the advantages and disadvantages of using focus group discussions to collect this type of qualitative data. (10 marks)
 - iii) Read this interview transcript and analyze it by allocating as many codes as possible. (10 marks)
 - iv) Using a concept map, categorize the codes in (iii) into themes and subthemes. (10 marks)
- b) Explain the concept of validity as applied in qualitative research. (5 marks)
- c) Identify and explain any two types of observation used in qualitative research. (10 marks)
(50 Marks)

ATTACHMENT A: TABLE OF RANDOM NUMBERS

1	708151	976409	400067	216834	684347	484817	104740	789880
2	773125	187567	911618	157018	708914	067263	814814	010041
3	893490	987548	516861	861141	431562	210791	000458	951994
4	528031	831996	352458	407483	152470	409528	995758	164434
5	377819	574786	985870	707083	298807	901425	528245	140355
6	937010	815485	372295	632466	038148	828242	238807	757866
7	168615	872005	936857	771630	016694	020997	326090	346995
8	305368	378307	781549	806909	222571	409864	315928	380902
9	775384	507096	017182	518876	974090	059389	956023	792383
10	252907	817408	220710	415357	033021	828730	235298	915189
11	834407	727226	016877	985229	842952	656728	528703	050508
12	338878	611255	785485	577319	892514	472091	866482	658345
13	734062	523545	493393	904386	203558	728568	328776	173894
14	686941	545091	651509	171941	944731	565050	565294	449049
15	239631	756523	396832	832270	169347	590838	439619	818628
16	610218	835749	699545	963164	679067	295663	798944	791955
17	118381	280648	694906	272042	011902	084902	368450	369182
18	236335	256661	140446	724723	555681	939848	770959	982757
19	764519	069552	997864	799280	786157	702536	671346	063692
20	132328	262978	140141	365062	630390	986358	046175	233131
21	824152	341105	183538	186590	955077	710776	578204	118686
22	929746	116398	444624	052431	179693	261849	175787	795862
23	820368	682211	022340	529069	014893	277169	617695	854335
24	949461	010376	005005	339885	325816	056001	322336	089572
25	778283	173956	802301	368969	120151	594623	242439	819178
26	826899	194891	602405	290139	661672	246254	884610	824122
27	849849	516587	953978	820795	708426	006409	453749	915372
28	136937	101627	473067	600757	875942	422987	122745	125187
29	939085	154424	675466	696341	125584	131260	426862	523576
30	018891	468917	933348	729087	377880	014374	783288	659597
31	326823	401044	557543	629688	250679	988220	135746	627918
32	801569	466659	004547	017090	922575	411634	724052	760125
33	295999	564043	208533	202185	121006	121708	978393	941130
34	628101	821528	038240	816736	235755	093753	539140	550584
35	756432	070193	879299	067385	557024	726646	401318	029328

ATTACHMENT B: TRANSCRIPT OF A FOCUS GROUP DISCUSSION

Source: Permission to use this transcript was granted by the owner of this intellectual property.

Instructions

1. **FILL IN YOUR DETAILS BEFORE CODING THIS INTERVIEW TRANSCRIPT.**
2. **DETACH YOUR CODED INTERVIEW TRANSCRIPT FROM THE QUESTION PAPER AND SUBMIT IT TOGETHER WITH YOUR ANSWER BOOKLET.**

COURSE CODE: GEP608

COURSE NAME: GEP RESEARCH TECHNIQUES

STUDENT ID NUMBER: _____ **SEAT NUMBER:** _____

VENUE: _____ **DATE:** _____

1 *Researcher (R): What are the attributes of an old person?*

2 **Participant (P1):** There are older people who are still active but some are very
3 old and unable to do much for themselves. Elderly people who live alone need
4 assistance from the Social and Community Development office (S&CD)
5 especially with water. Most of them are unable to walk long distance to fetch
6 water. Us we are still active and able to connect water in our homes but for
7 older people they are unable to do so. Others need shelter because of their
8 declining physical status they are unable to renovate their dilapidated houses.

9 *R: Any other comments? There was no response. Is it common in this*
10 *community that elderly people live alone?*

11 **P2:** I am not sure. I do not know a lot of people who live alone.

12 **P3:** There are a lot of people who live alone in this village.

13 *R: What do you think might be the reasons for living alone?*

14 **P4:** Living alone is challenge, for example my neighbour who is an elderly
15 person, those houses you saw last time when you visited us, the ones that were
16 surrounding her yard, there were for her children, and all of them passed away.
17 She is left alone as you saw. She has no child left they all died.

18 *R: From your observation, what are some of the needs of the elderly people*
19 *who are living alone?*

20 **P3:** Elderly people need to eat healthy food but some do not have enough food
21 to eat at all. Nowadays, everything is money, for them to get things they have to
22 buy, for example food, firewood, water and other things they need daily. Sadly
23 most do not have source of income to be able to meet all their needs. The main
24 reason for people to live alone is because they have lost their loved ones. For
25 example my neighbour, all her children passed away.

26 **P6:** Many elderly people I see around need company. Because they spend most
27 of their time alone and this makes them worry a lot about their situation. This is

28 not healthy. I also live alone but I am not that much old. I experience loneliness
29 especially when I am in my home as I have no one to talk to. My wife died in
30 2010, since then I have been living alone but I have grownup children. They
31 live in towns and hardly visit me. It seems they do not care. Elderly people
32 living alone experience the same thing and theirs is worse because of age.

33 **P3:** There are a lot of challenges that elderly people who are alone encounter
34 which sometimes makes them wish they were dead and joined their parents.
35 Most elderly people, especially those who are living alone, spend sleepless
36 night worrying about their circumstances. They struggle to put food on the table
37 and most of them do not even have chickens to survive on.

38 **P2:** To comment on the needs of elderly people, one may say they have a
39 variety of needs. The most common one which affect majority of them is the
40 need for assistance. This is important because as their health deteriorates due to
41 ageing and poor health, they lose the ability to function properly.

42 **P1:** As you have heard from the comments made elderly people living alone
43 have different needs and challenges.

44 **R:** *From your observation, what is positive about living alone?*

45 **P4:** There is nothing good about living alone especially to the elderly people.
46 There are a lot of challenges involved. You struggle to make ends meet. My
47 neighbour who is an elderly person living alone, decided to contact the S&CD.
48 The S&CD officer came to her house to make an assessment. She was told that
49 she do not qualify because of the big modern house in her home. Her child who
50 built this house long passed away. One is left to wonder if you have a big house
51 does that mean you eat it, does it provide you with food?

52 **P6:** Most of the modern houses you see around in this village, the children who
53 built them have passed away. Elderly people who live alone have been left in
54 these big houses with nothing to eat. If the child who has been supporting you
55 died, and you are left with nothing what can you do? Nothing. My neighbour
56 has nothing but only a big scary house which brings her nightmares.

57 **R:** *Do you mean that having a big house denies an individual the*
58 *opportunities to be registered assisted by the social worker?*

59 **P4:** Yes that's true. These people overlook the fact that the person who built it
60 for you is no more and you have no one left to support you financially.

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