



Annual Examination-2022
Chumey Higher Secondary School
Bumthang; Bhutan



Subject: Geography

Full Marks: 100

Class: XI INDEX _____

Time: 3 Hours

READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. There are **seven** questions in this paper. **Section A** is compulsory. Attempt only **five** questions from **Section B**.
2. There are **fourteen** pages in this question paper.
3. Answers to **all** the questions must be written neatly in the space provided.
4. Do not write during the first **FIFTEEN MINUTES**. This time is to be spent on reading the questions.
5. You will have **three** hours to answer all the questions.

SECTION A (50 MARKS) ANSWER ALL THE QUESTIONS

Question 1

(15 Marks)

For each question, there are four alternatives: A, B, C, and D. Choose the correct alternative and CIRCLE it. Do not CIRCLE more than ONE alternative. If there are more than ONE choice CIRCLED, NO score will be awarded. (1x15=15)

- i. The theory that describes rapid expansion from a single point of nearly infinite energy density is
A. Big Bang Theory. C. Electromagnetic Theory.
B. Solar Nebula Theory. D. Gaseous Mass Theory.
- ii. Pema has recently bought a plot of land from his neighbor and wanted to create a data for his newly bought land with the help of QGIS. What feature type should Pema use to create the data for his land?
A. Point data. C. Polygon data.
B. Line data. D. Vector.
- iii. Dorji is planning to create a population map of Bhutan for his project. What are some of the data Dorji needs to create a population map of Bhutan?
I. Bhutan boundary. III. Dzongkhag boundary.
II. Population data.
A. I and II C. II and III
B. I and III D. I, II and III
- iv. Predict what would happen if the map doesn't have scale.
A. It will be difficult to know the direction.
B. It will be difficult to measure distance or area.
C. It will be hard to know the purpose of the map.
D. It is difficult to interpret the symbols used in the map.

- v. Dorji is trying to find a world map that exactly shows the size of the continent and asks you for help. Which projection would you suggest Dorji?
- Mercator's projection.
 - Cylinder equal area projection.
 - Azimuthal equidistant projection.
 - Lambert conformal conic projection.
- vi. "We are among the most vulnerable nations. Extreme weather and erratic shift in temperatures have begun affecting the agriculture sector already on which more than half our people depend. We have experienced some devastating floods and more will come as glaciers begin to melt at a faster rate" (Kuensel, December 6th, 2019). With reference to the above statement, choose the alternatives to combat climate change.
- Be a vegetarian.
 - Walk to school.
 - Create awareness on climate change.
 - Plant trees.
- I, II and III
 - I, II and IV
 - I, III and IV
 - I, II, III and IV
- vii. Select the alternative that defines soil texture.
- Discrete layers that make up a soil profile.
 - Proportion of the weight of a soil relative to its volume.
 - Ease with which an individual ped can be crushed by the fingers.
 - Proportion of the soil "separates" that make up the mineral component of soil.
- viii. A type of volcano that erupts frequently.
- Active volcano.
 - Dormant volcano.
 - Extinct volcano.
 - Shield volcano.
- ix. "The mega polyhouse, built at a cost of more than Nu three million, has yet to be completed. Mobile-controlled irrigation, side ventilation, drainage system, drip irrigation, rain harvesting, and mulching plastics are some agricultural initiatives Hochu wants to use on his farm to produce food.....(Kuensel, 28th January, 2022)".
- What conclusion can you draw from the above statement?
- Hochu is a subsistence farmer.
 - Hochu is involved in large scale cultivation.
 - Hochu is practicing Climate Smart Agriculture.
 - Hochu is involved in Smart Agricultural practices.
- I, II and IV
 - I, III and IV
 - II, III and IV
 - I, II, III and IV
- x. It is estimated that the demand for energy in Bhutan will grow by over 400% by 2030. What should our government do to prepare for the huge energy demand? Choose the best alternative.
- Invest in thermal energy.
 - Import energy from India.
 - Increase the price for energy.
 - Invest in smaller hydropower projects.

- xi. Following are the examples of alternative sources of energy. Choose the source that is not feasible in Bhutan to produce large amount of energy.
- A. Solar energy. C. Bio energy.
B. Wind energy. D. Geothermal energy.
- xii. “.....UN said the figure meant 1 billion people had been added to the global population in just 12 years.....” (CNN, 15th November, 2022). What conclusion can you draw from the above statement?
- A. World population is expected to decrease.
B. World population has increased in the last 12 years.
C. World population is increasing at an exponential rate.
D. World population is increasing but through a logistic growth pattern.
- xiii. Demographic Transition Theory explains
- A. Societies progress from a pre-modern regime of high fertility and high mortality to a post-modern regime of low fertility and low mortality.
B. Societies progress from a pre-modern regime of low fertility and high mortality to a post-modern regime of high fertility and high mortality.
C. Societies progress from a pre-modern regime of low fertility and high mortality to a post-modern regime of low fertility and low mortality.
D. Societies progress from a pre-modern regime of low fertility and low mortality to a post-modern regime of low fertility and low mortality.
- xiv. Urbanization is best defined as:
- A. People moving from rural to urban areas.
B. People moving from urban areas to rural areas.
C. The increase in the proportion of people living in urban areas.
D. The growth in the population of urban areas as a result of several factors.
- xv. All of the following are reasons for urbanization EXCEPT:
- A. Rent is more affordable in urban areas.
B. There are more jobs available in urban areas.
C. Urban areas have better healthcare and educational facilities.
D. There are more opportunities for entertainment in urban areas.

Question 1B

(5 Marks)

Fill in the blanks by writing the suitable word (s). (1x5=5)

- i. _____ is the acquisition of information about an object or phenomenon without making physical contact with the object.
- ii. The theory put forward by Chauncy Harris and Edward Ullman is called _____.
- iii. Scale stated in words _____.
- iv. Wind belts shift with the shift in _____ belts.
- v. Place where the earthquake is first felt on the earth surface _____.

Question 1C**(5 Marks)**

Match each item under Column A with the items in Column B. Rewrite the correct pairs. (1x5=5)

Column A		Column B	
i	Big Bang Theory	A	Roughly spherical
ii	Mercator's projection	B	Resources for future use
iii	Granular	C	Does not preserves the area
iv	Sustainable development	D	Carbon dioxide
v	Global warming	E	Preserves the area
		F	Origin of universe
		G	Formation of solar system
		H	Roughly cube-shaped

Column A	Column B
I	
II	
III	
IV	
V	

Question 1D**(5 Marks)****State true or false.****(1x5=5)**

- i. GIS, GPS and Digital Globe are an example of Geospatial Technology._____
- ii. 1 cm on the map is equal to 2 km on the ground is equal to RF 1:200,000._____
- iii. The North Temperate Zone lies between 23⁰S to 66⁰N._____
- iv. Ferric iron compounds are responsible for brown, yellow and red colour soil.____
- v. Accessibility is one of the most important factors that affect tourism._____

Question 1E**(10 Marks)***Answer all the questions.*

- i. Mention two uses of Geographic Information System (GIS). (2)

- ii. The map distance between Chumey and Chamkhar is 10 cm. Calculate the actual distance between Chumey and Chamkhar if the statement scale given is 1cm=2km. (2)

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- iii. Explain the causes of global warming. (2)

- iv. What would result if the soil is acidic in nature? (2)

- v. What do you think about Bhutanese agriculture? Share your views. (2)

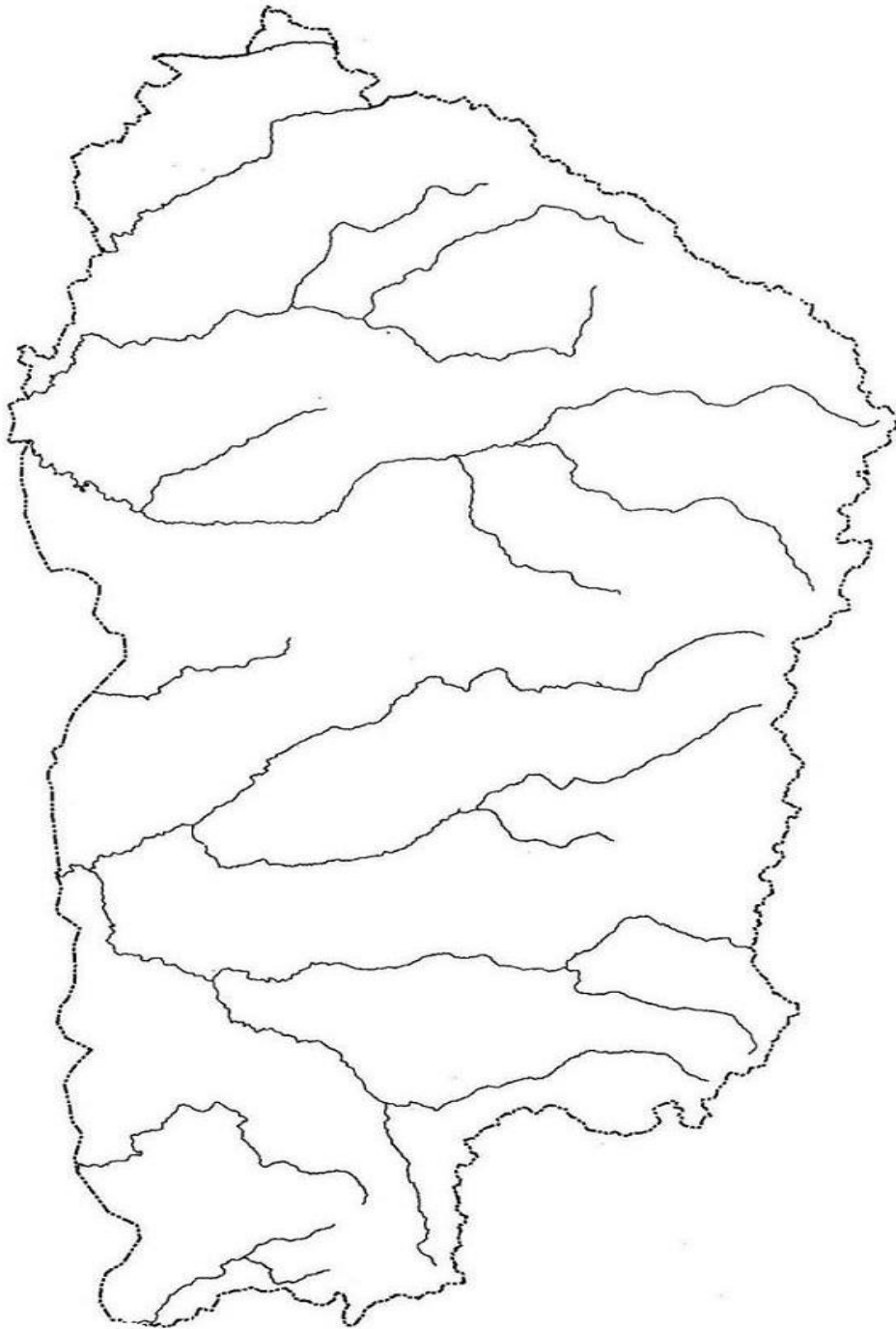
Question 1F

(10 Marks)

On the outline map of Bhutan provided:

($\frac{1}{2} \times 20 = 10$)

- i. Mark with triangle and name Gangkar Puensum, Jichu Drake, Jowo Durshing and Jomolhari.
- ii. Mark with (.) and name Jomotshangkha, Bumthang, Punakha and Phobjikha.
- iii. Name river Kuri Chhu, Mangde Chhu, Nyera Ama Chhu and Wang Chhu.
- iv. Mark with (X) and name Yotongla, Chelela, Pelela and Thrimshingla.
- v. Shade (///) and name the Dzongkhag with highest population density and lowest population density.
- vi. Mark (C) where coal is mined and (G) where gypsum is mined.



SECTION B (50 MARKS) ANSWER ONLY 5 QUESTIONS

Question 2

(10 Marks)

- i. Big Bang Theory is the widely accepted theory on the origin of the universe. Do you agree with this theory? Support your stand. (2)

- ii. Have you ever used a map? Mention for what purpose you have used it. (3)

- iii. Do you think Geospatial technologies are important? Mention three reasons. (3)

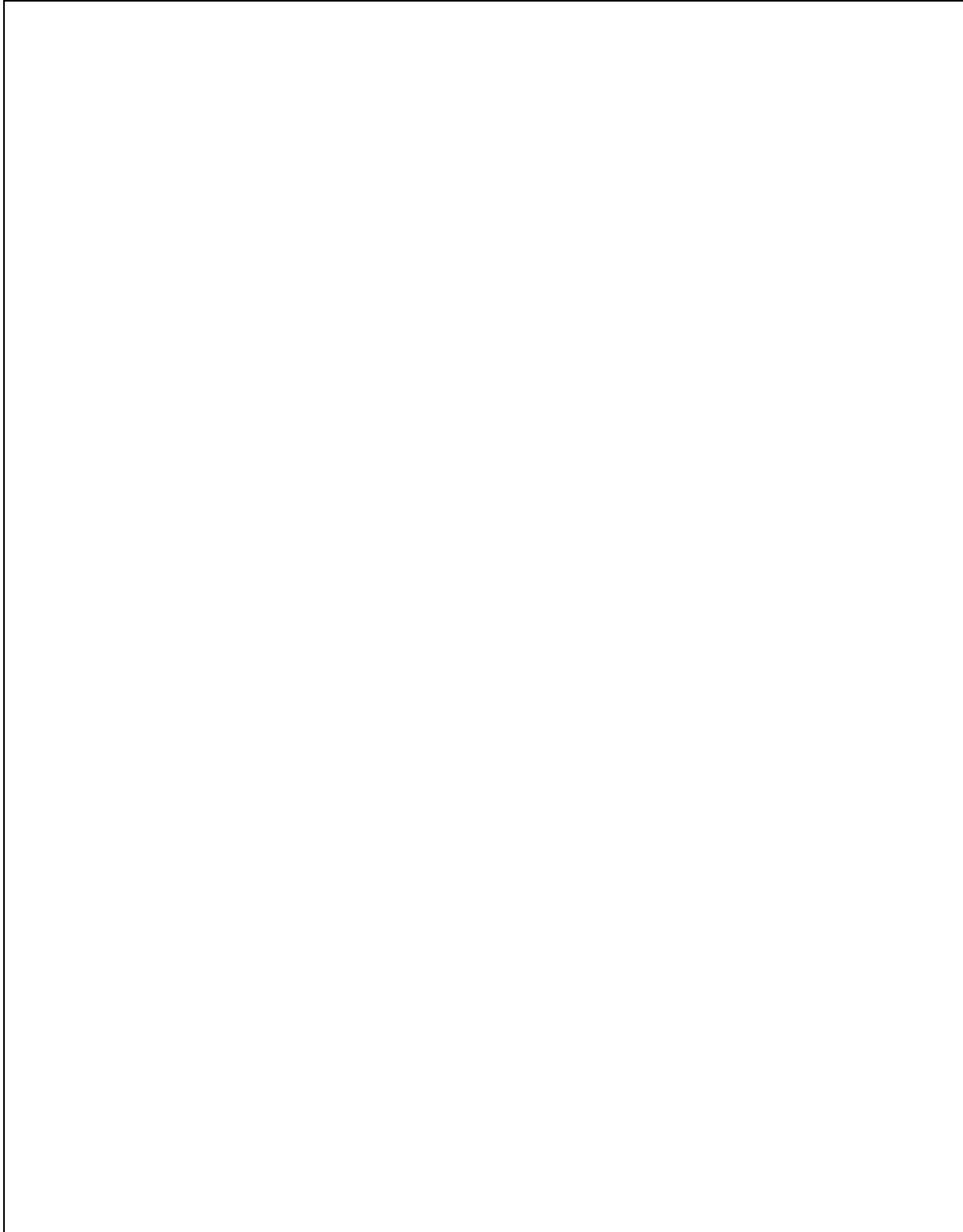
- iv. Convert the statement scale 1cm = 2 km to representative fraction (RF). (2)

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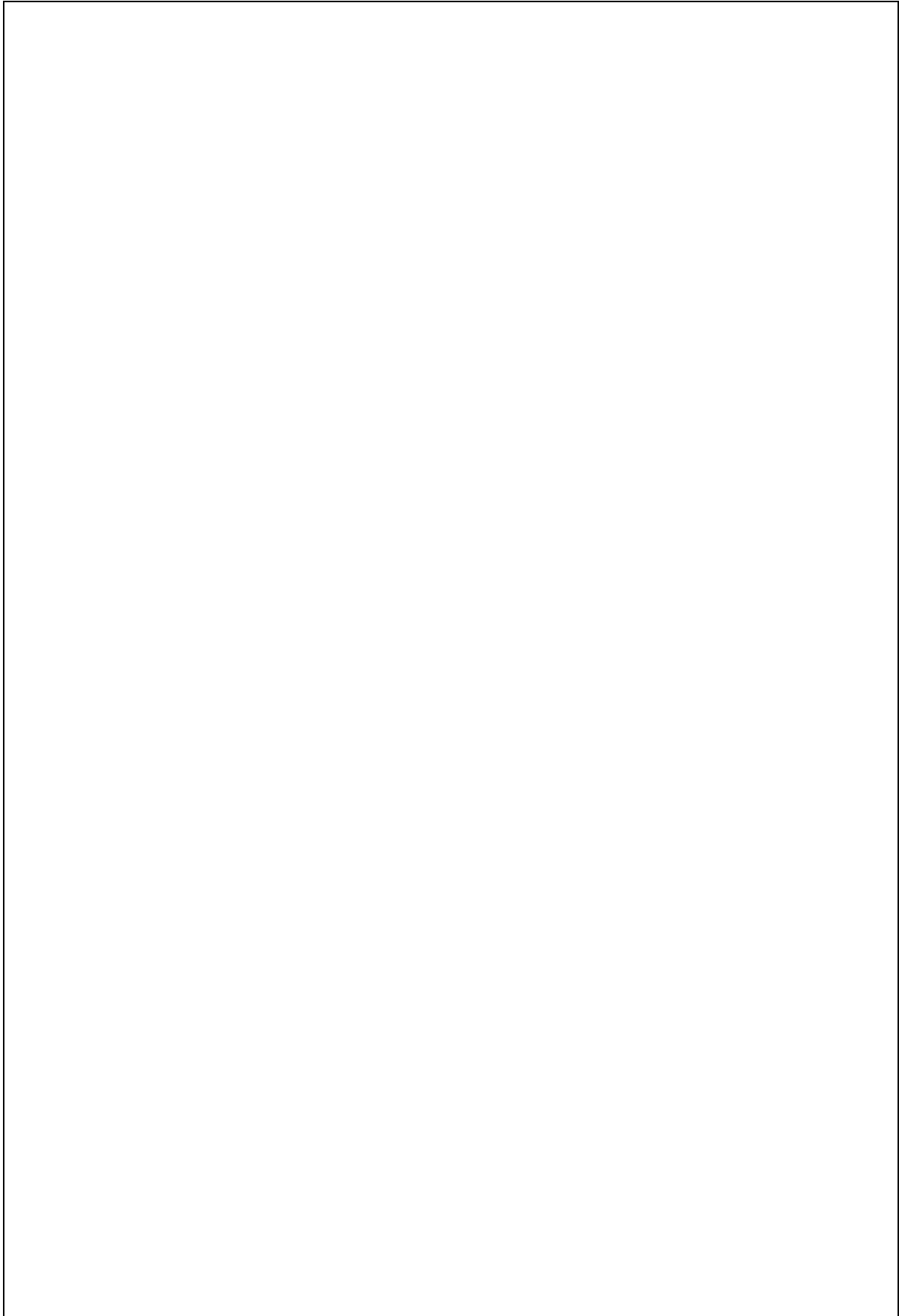
Question 3

(10 Marks)

- i. Draw a one standard Conical Projection on (5)
- R.F. 1:125,000,000
 - Standard Parallel= 45°
 - Latitudinal extent= 0° to 60° N
 - Longitudinal extent= 60° E to 60° W
 - Class Interval= 15°



- ii. Draw a linear scale to read 12 kilometers on Primary division and 4 kilometers on Secondary division on R.F. 1:250,000. (5)

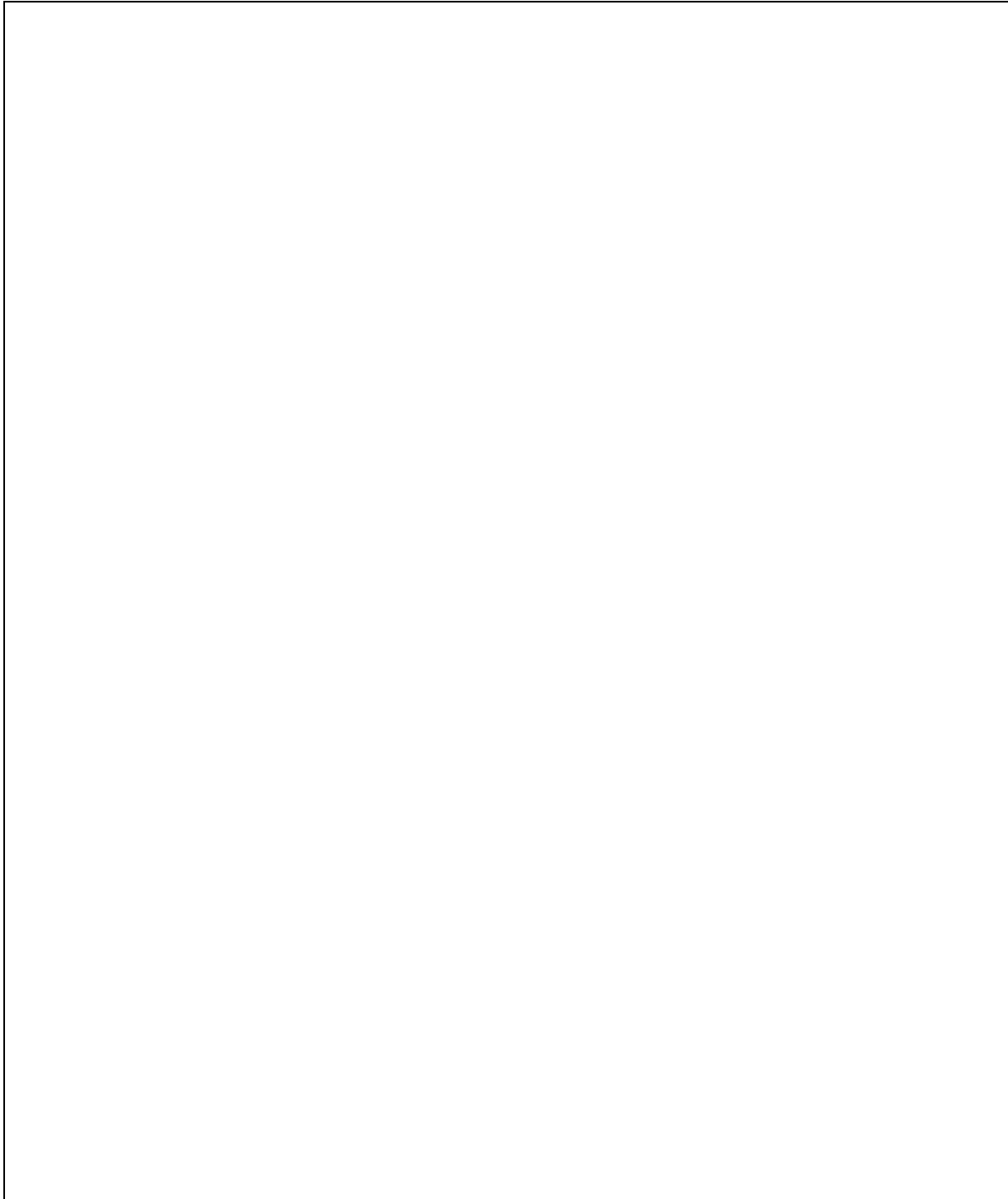


Question 4

(10 Marks)

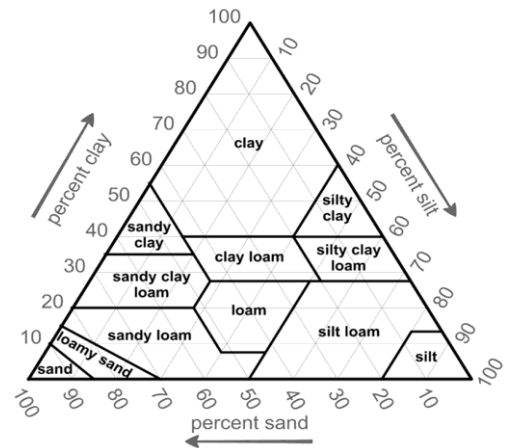
- i. “Foreign Minister Dr. Tandi Dorji presented a letter from a class two student of Mendrelthang Extended Classroom in Lunana, the remotest gewog in Bhutan, to the 77th United Nations General Assembly (UNGA) in New York. Chimi Yangzom expressed her concerns about glacial lakes in the mountains becoming bigger due to global warming threatening her village downstream” (Kuensel, 28th September, 2022).

Do you see any threat posed by climate change in your village? Write a letter, poem or design a poster to let your concern heard over the world. (4)



- ii. The table below shows soil samples collected by grade XI students. Complete the table with the help of the soil texture triangle given below. (3)

Sl.no	% Sand	% Silt	% Clay	Soil texture
1	_____	40	20	_____
2	20	70	_____	_____
3	10	_____	30	_____



- iii. Imagine you are a Disaster Management Focal Teacher of our school. What preparedness measure would you implement in our school to reduce the risk of an earthquake? (3)

Question 5

(10 Marks)

- i. Differentiate between dormant and extinct volcanoes. (2)

- ii. Farmers in Bhutan face challenges such as human-wildlife conflict, shortage of labour and small land holdings. From the above, what is the most prominent challenge farmers in your village face? Provide at least three measures that people can adopt to solve the problem. (3)

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iii. What are the features of Bhutanese agriculture? Mention at least four. (2)

iv. Design a poster showing negative impacts of environment degradation. (3)

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Question 6

(10 Marks)

- i. “Forestry sector underutilized, says World Bank report” (July 25, 2019). What is your view on the above report? Mention the pros and cons of exploiting forest resources. (4)

- ii. Do you think Demographic Transition Theory can be applicable for our country? Share your views. (4)

- iii. Write two challenges of conducting population census. (2)

Question 7

(10 Marks)

- i. Evaluate why there is unequal distribution of people in Bhutan. Mention at least three reasons. (3)

- ii. Analyse the causes of urbanization. (4)

- iii. According to the National Statistical Bureau (NSB) (2021), rural to urban migration in our country is declining. What could be some of the reasons for declining rural to urban migration? Mention at least three reasons. (4)
