

SECTION A (15 MARKS)

THIS SECTION CONTAINS QUESTIONS ON TOPOGRAPHIC MAP.
ANSWER ALL QUESTIONS

Question 1

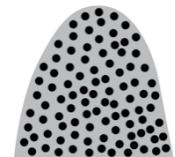
Use the extract map of Bumthang, No.78I/14 to answer the questions that follow:

a) What is the RF of the topographic map **78I/14**?

[1]

b) What do the following symbols represent?

[1]

i. 	
ii. 	

c) Identify **TWO** major land features of grid square 7020.

[2]

d) A group of monks from lhakhang at Wangchukling visits the lhakhang at grid square 2030 for an important ritual. Calculate the distance covered by them following the most convenient mode of transportation.

[2]

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e) Imagine you are the local leader of Phom Drong and you need to plan developmental activities. You note that your community needs public services like school, BHU and a dairy product sales counter. Which **ONE** of these mentioned services would you prioritise to benefit your community? Support your choice with **TWO** points. [2]

f) Identify and give explanation for any **TWO** business opportunities for the people living in Gongkhar and Jalekha. [3]

g) Limited road connectivity as shown in the topographic map could be a cause of low economic growth. Do you think that expansion of road connectivity would enhance economic development in that place? Justify with **TWO** points.

[2]

h) Do you agree that it is possible to construct a sports centre at grid reference 4020? [2]
Support your view with **TWO** points.

SECTION B (20 MARKS)

THIS SECTION CONTAINS THREE QUESTIONS FROM THE PRINCIPLES OF
GEOGRAPHY.

ATTEMPT ANY TWO QUESTIONS

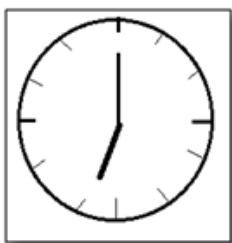
Question 2

a) Read the statement and circle the correct answer. [1]

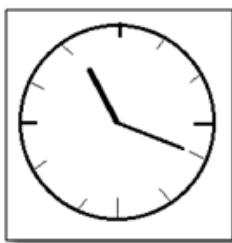
The equatorial circumference of the earth is

- A 40,077 Km.
- B 40,000 Km.
- C 12,713.8 Km.
- D 12,756.8 Km.

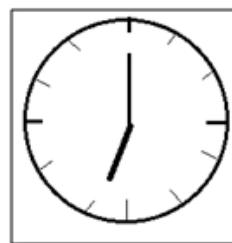
b) On 25th July, the clocks of places A, B, C, and D read as given below. Arrange the sequence of the places from west to east as per their time. [2]



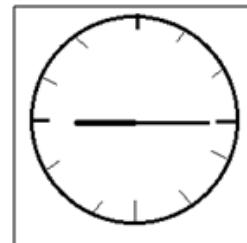
A (p.m)



B (a.m)



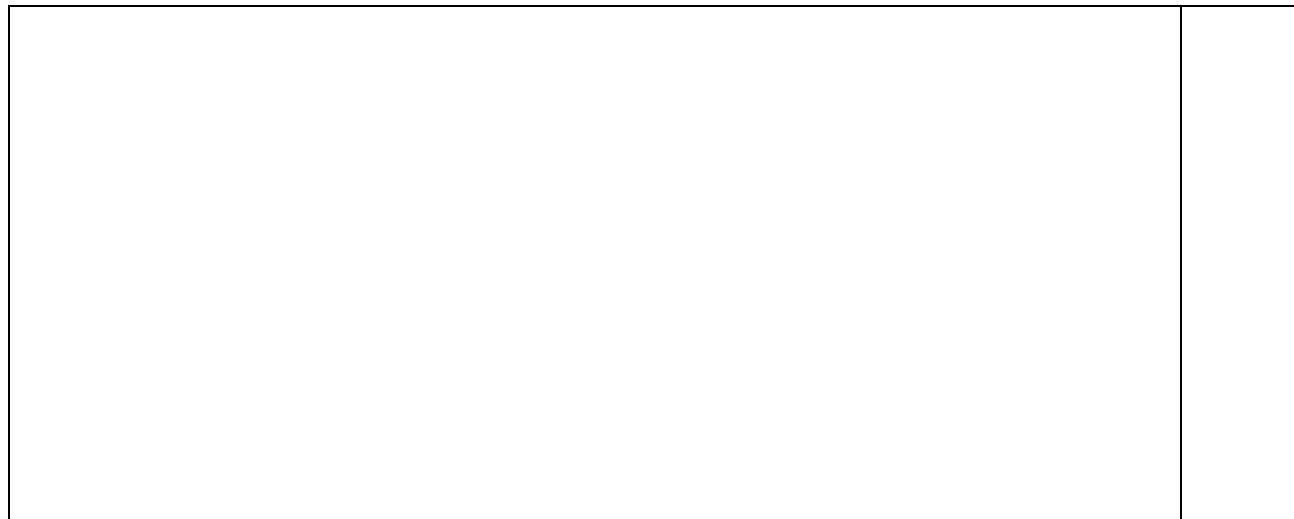
C (a.m)



D (p.m)

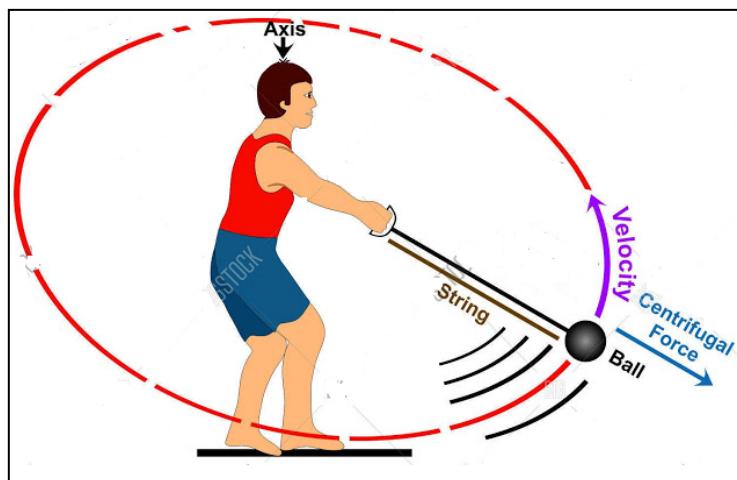
c) If the time at 60° east is 9 a.m, what would it be at 110° east? [2]

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d) Study the diagram given below.

[2]



Explain the shape of the earth.

e) "The Great Circle route has become important in navigation as it is the shortest distance between any two points on the earth's surface. However, the sailors cannot take advantage of this route in the Arctic and Antarctic region as navigation is unsafe."

Do you agree with the statement? Support your view with **TWO** points.

f) Differentiate between rotation and revolution.

[1]

Question 3

a) Define the International Dateline.

[1]

b) Which of the following is **NOT** the importance of lines of latitudes?

[1]

Circle the correct answer.

- A They are used in time calculation.
- B They estimate the scale of the map.
- C They determine climatic conditions.
- D They locate places quickly and accurately.

c) The earth's speed of rotation on its axis is 40,000 Km in 24 hours which is over 1600 Km per hour. What will happen if the speed becomes half of the current rotation? Explain with any **TWO** points. [2]

d) The BBC Sports Channel announces that the English Premier League 2019-2020 match between Tottenham and Leicester City will be broadcast live at 16:00 hour (4 p.m) United Kingdom (UK) time. UK is located at 3° west. Calculate the time that you should watch the match in Bhutan. [2]

e) What would happen if the earth's axis was perpendicular to its orbital plane? Explain with a diagram. [2]

f) Explain the terms: perihelion and aphelion. [2]

Question 4

a) Fill in the blanks. [1]

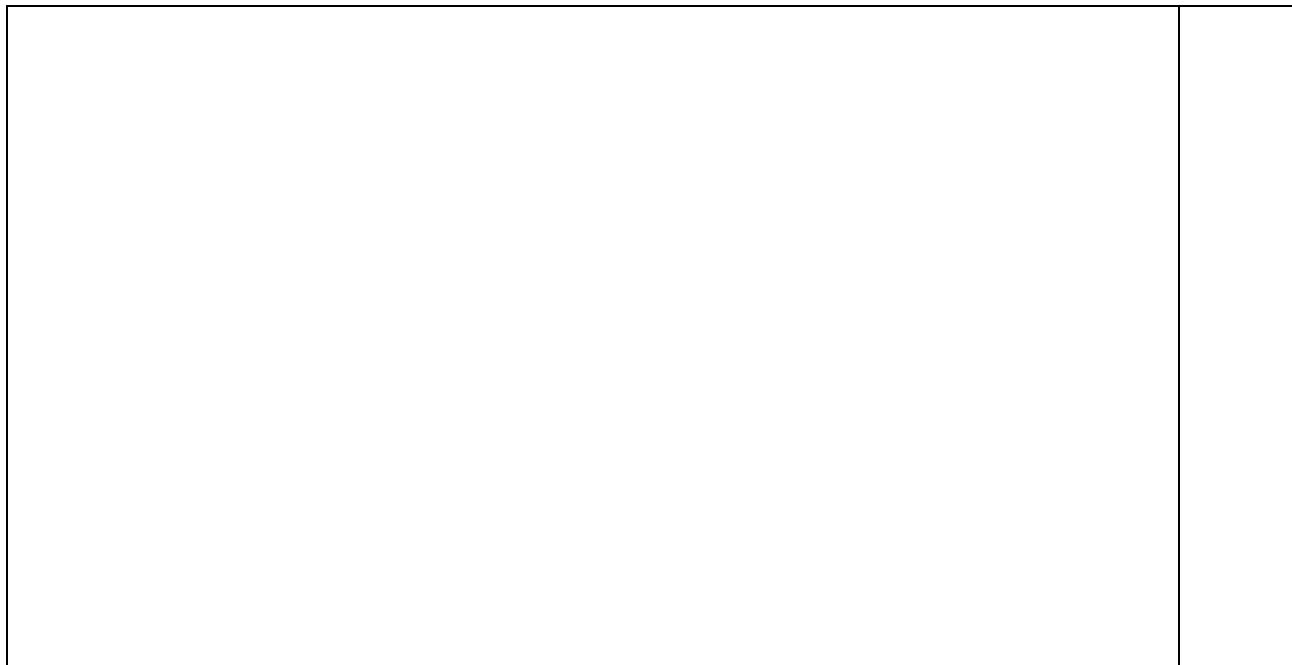
i. The date that winter solstice falls on is _____ of December.

ii. Autumnal equinox falls in the month of _____.

b) Why are there no seasons in the equatorial regions? [1]

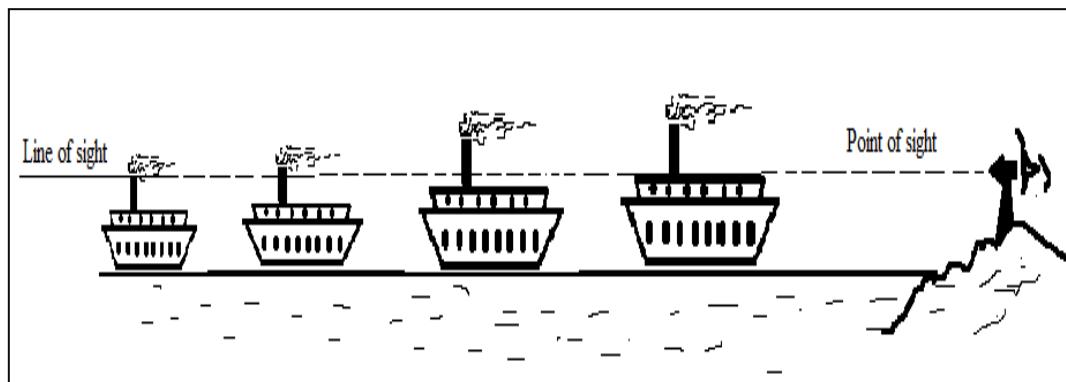
c) If the local time in place A located at 30° east is 8:00 a.m, what would be the [2]
location of place B where the local time is 11:30 a.m?

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d) Refer the diagram and answer the question that follows.

[2]



Would the approaching ship appear as shown in the diagram above? Explain.



e) What would be the consequence if the international dateline passed between you and your neighbour? Explain your answer with **ONE** example. [3]

f) Mount Kilimanjaro and Maldives are both located at the equatorial region. Given the choice, where would you prefer to establish a tourist resort? Give **ONE** reason to support your choice. [1]

SECTION C (30 MARKS)

THIS SECTION CONTAINS FIVE QUESTIONS FROM GEOGRAPHY OF BHUTAN.

ATTEMPT ANY THREE QUESTIONS

Question 5

a) List down any **TWO** energy sources used in early days.

[1]

b) How does increase in service facilities influence the growth of urban centers in Bhutan? Explain with **TWO** points.

[2]

c) Study the images A and B given below and fill in the table with correct information. [3]



(<http://sri.ciifad.cornell.edu/countries/bhutan/index.html>)

	A	B	
Types of Farming			
Farming methods applied			
Production Capacity			

d) A 27 Km road has been paved from Gasa to Laya. This would make Laya more accessible to tourists and bring positive impacts to the people. [2]

(Kuensel, June 22, 2020)

Do you agree with the report? Justify with **TWO** points.

e) Imagine you are the CEO of one of the mobile network and internet service providers in Bhutan. State **TWO** measures to improve the services to the customer to gain competitive edge over your competitors. [2]

Question 6

a) "Hot spring brings the geothermal energy from the interior of the earth to the surface." Name **TWO** places in Bhutan where this energy can be tapped for use. [1]

b) State whether the given statements are **TRUE** or **FALSE** in the boxes provided.

[1]

i. Mushroom, bamboo shoot, cane shoot, and <i>dambroo</i> are examples of non-timber forest products.	
ii. There are six agro-ecological zones in Bhutan.	

c) How did the COVID-19 situation affect the manufacturing industries in Bhutan? List down **THREE** points.

[3]

d) Choose any agro-ecological zone of Bhutan and identify **ONE** agro-based industry that can be established in it. Explain with **ONE** reason for its suitability. [2]

e) Industries are considered to be the main source of income for any nation, however, Bhutan has only a small number of manufacturing industries. Suggest **THREE** measures to encourage the investors to establish manufacturing industries in Bhutan. [3]

Question 7

a) List any **TWO** examples of pre-modern industries.

[1]

b) Explain what is meant by favourable and unfavourable balance of payment.

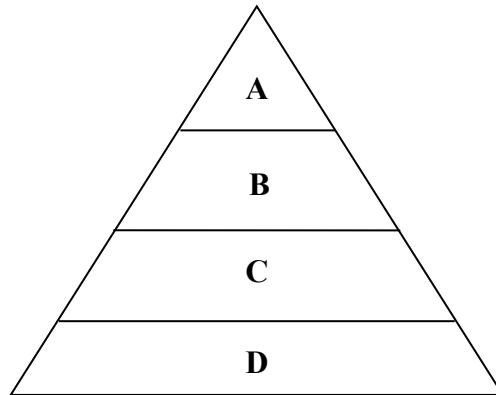
[2]

c) Industrial development does not pose severe environmental problems in Bhutan. Do you agree with the statement? Support your opinion with **TWO** justifications.

[2]

d) Choose the types of settlement from the box given below and write against the alphabet that suits the levels/hierarchy in the pyramid. [2]

City	Hamlet	Village	Town
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A:	
B:	
C:	
D:	

e) Bhutan has been practising subsistence agriculture since the time immemorial. Given the COVID-19 pandemic situation, the subsistence agriculture method poses threat to food security as access to neighbouring market has become difficult. Develop **THREE** strategies to maintain food security during such crisis. [3]

Question 8

a) Explain any **ONE** factor that affects the distribution of industries.

[1]

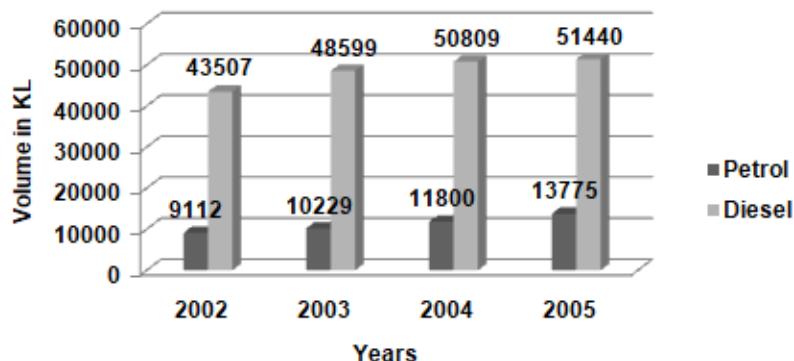
b) Explain any **TWO** technological limitations in farming.

[2]

c) According to Population and Housing Census of Bhutan (PHCB) 2005 and 2017, 32.7% and 48.7% of people respectively migrated within the country which indicates an increase of migrants by 16%. What could be the reasons for this increase? Explain with any **TWO** reasons. [2]

d) Print media and electronic media are two types of mass media popularly used by people today. Which **ONE** of the two would you prefer? Support your choice with **THREE** reasons. [3]

e) Study the increase in fuel consumption between the year 2002 and 2005 given below. [2]



(Source: Tashi Commercial Corporation, Phuntsholing)

Mention any **TWO** possible environmental impacts.

Question 9

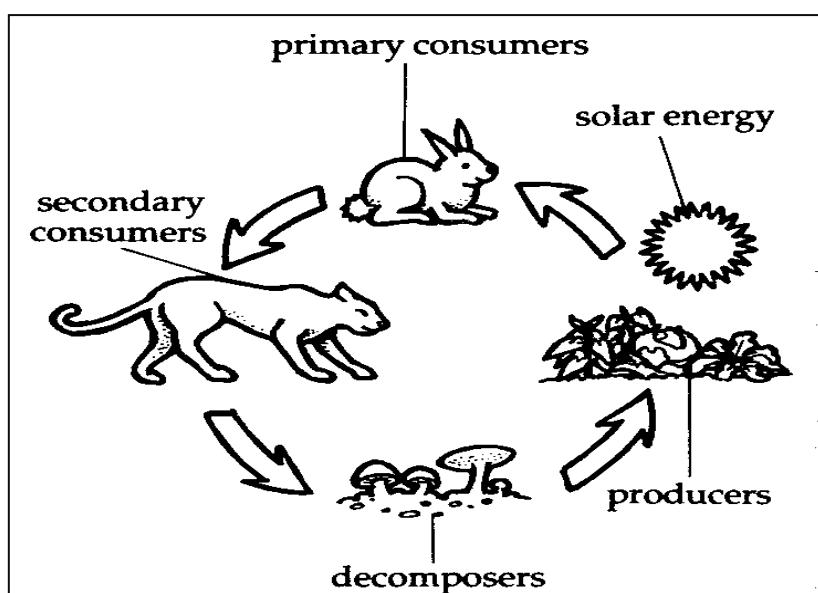
a) What do the following abbreviations stand for?

[1]

i. CFC:	
ii. GEF:	

b) Study the diagram given below.

[2]



(Source: https://garden.org/online_course/partII34.htm)

Explain energy flow in the natural ecosystem.

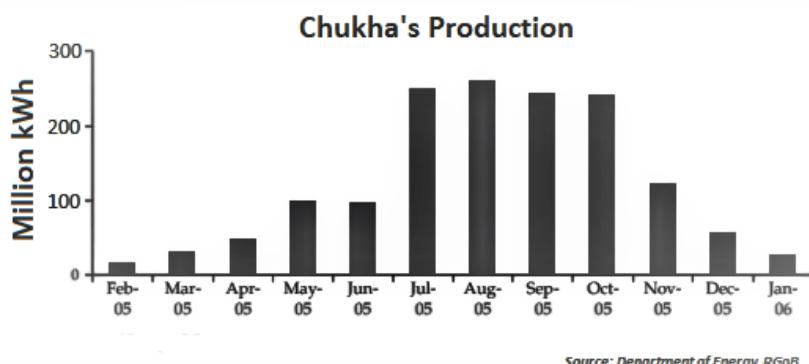
c) According to a report from the Bhutan InfoComm and Media Authority (BICMA), [3]
there is a decrease of more than 50 percent in the number of print media usage
between 2013 and 2018.

What could be the possible reasons for the sharp decline? Mention any **THREE**.

d) The natural environment of Bhutan is characterised by strong species diversity and density. Explain with any **TWO** reasons why our country has been able to maintain its rich natural environment. [2]

e) A graph below shows the power generation from Chukha Hydro Power Corporation (CHPC) in a year.

[2]



The highest energy production was in the months from July to October. Does the hydro power plant have the capacity to increase energy generation in other months? Support your answer with **TWO** reasons.

SECTION D (15 MARKS)

THIS SECTION CONTAINS MAP WORK ON ASIA, SOUTH ASIA AND BHUTAN.

ANSWER ALL QUESTIONS

Question 10

[5]

In the outline map of **Asia** provided:

- Shade and name Black Sea and Sea of Japan.
- Mark with a thick dot and name the places Laos and Malaysia.
- Mark with (ΛΛΛ) and name the mountain ranges Ural and Elbulz.
- Mark with thick lines and name the Ob River and Hwang Ho River.
- Shade and name Plateau of Arabia and Indo-Gangetic Plain.

Question 11

[5]

In the outline map of **South Asia** provided:

- Mark with the thick lines and name the Indus River and Godavari River.
- Shade and name Garo Hills and Eastern Ghats.
- Shade and name Thar Desert and Khasi Hills.
- Mark with a thick dot and name the places Kolkata and Hyderabad.
- Mark with (ΛΛΛ) and name Karakoram Range and Satpura Range.

Question 12

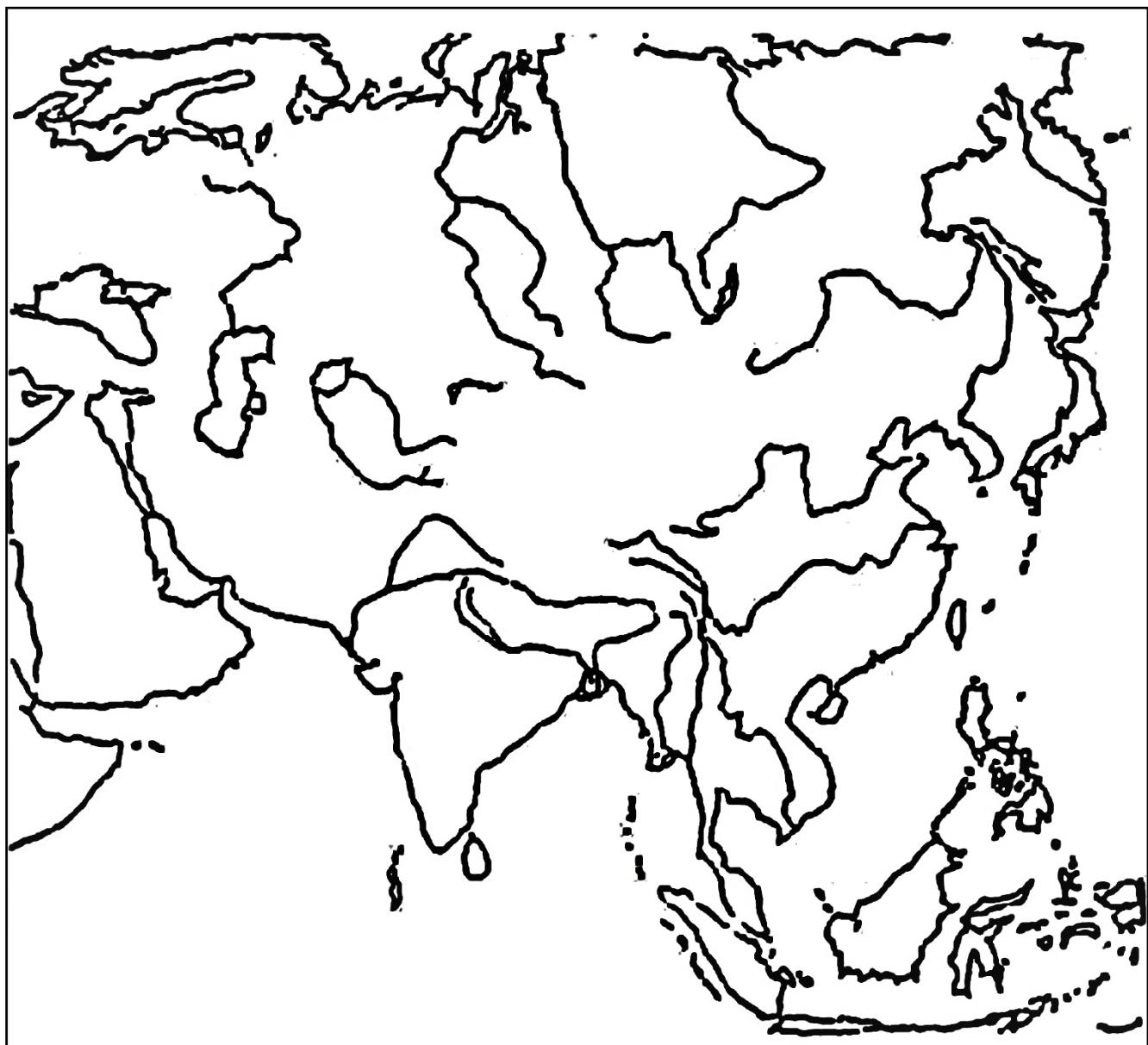
[5]

In the outline map of **Bhutan** provided:

- Mark 'HD' over Ha Dzong and 'YD' over Yangtse Dzong.
- Mark with thick lines and name Mo Chhu and Mangde Chhu.
- Mark with] [and name Tremo La and Zele La.
- Mark with (ΛΛΛ) and name Gangkar Puensum and Jomolhari.
- Mark 'D' over Daifam and 'Z' over Zhemgang.

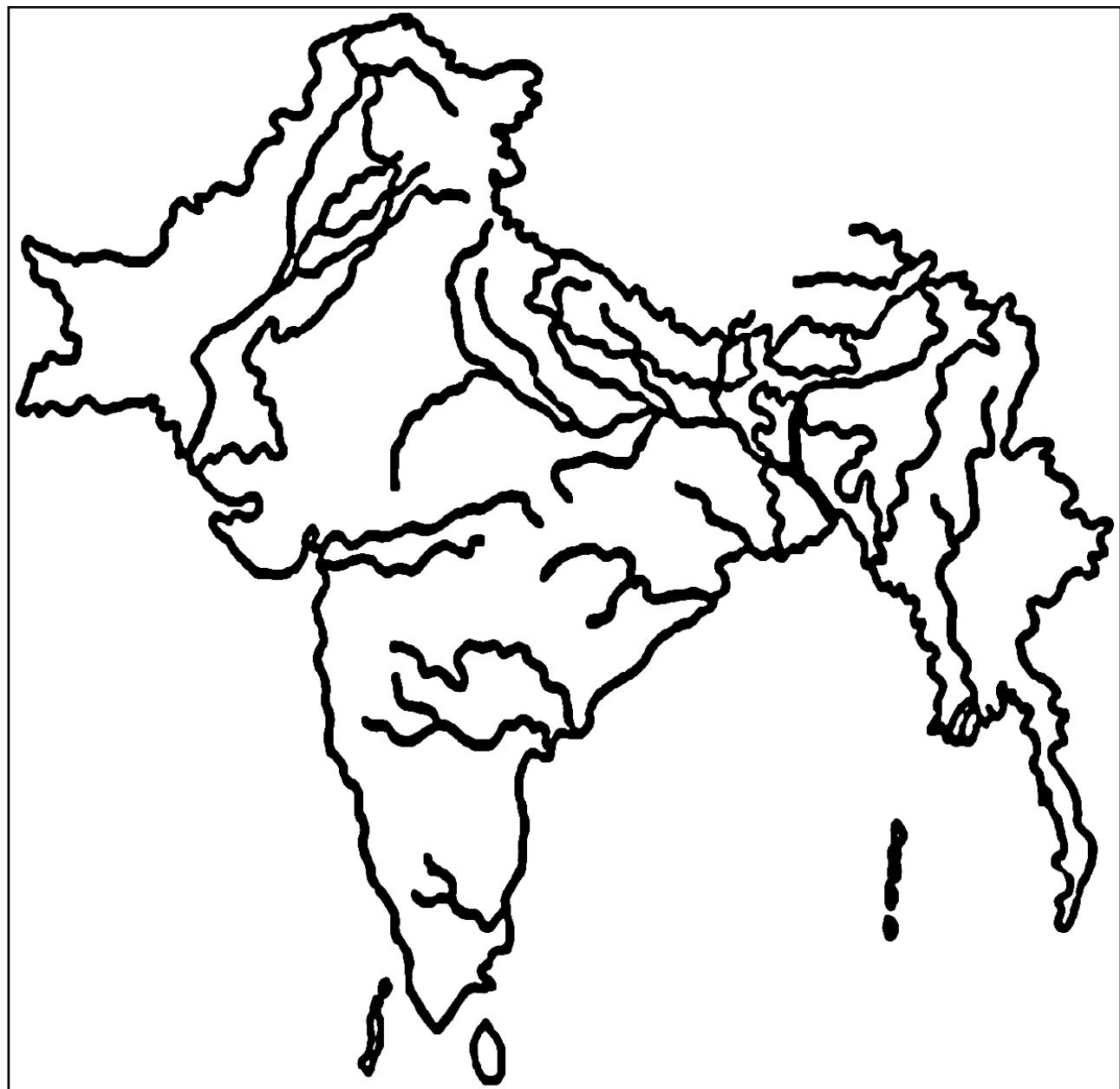
Map of Asia

This map is to be used for Question number 10.



Map of South Asia

This map is to be used for Question number 11.



Map of Bhutan

This map is to be used for Question no. 12.

