

SECTION A [25 MARKS]
ANSWER ALL QUESTIONS

Question 1

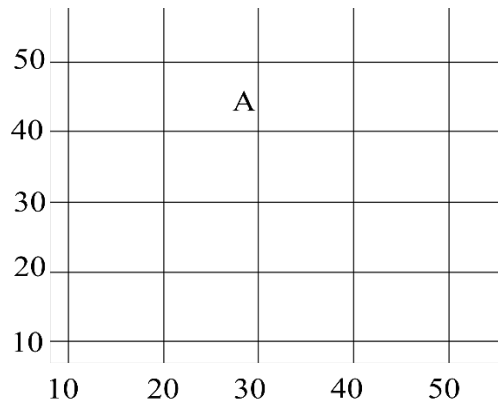
[10]

a) 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 circled, NO score will be awarded.

i. When does Bhutan experience winter solstice?

- A 21st June
- B 21st March
- C 23rd September
- D 22nd December

ii. A four-figure grid reference shows location of a feature on a map. In which grid is the letter 'A' located in the figure below?



- A 2030
- B 3040
- C 2040
- D 4050

iii. The volume of a water in river usually increases towards its lower course due to

- A increase in the load of a river.
- B increase in the speed of a river.
- C increase in the number of tributaries.
- D decrease in the number of tributaries.

iv. The soil has little space between the particles for air or water to pass through. It becomes sticky when it is wet and cracks when it is dry. Which soil is best described in the above statement?

- A Silt
- B Clay
- C Sand
- D Loam

v. Following are the statements regarding the composition of the atmosphere. Which combination of statements are true?

- I. The atmosphere is composed of gases only.
- II. The atmosphere is composed of 20.9% Oxygen.
- III. The composition of the atmosphere is different in different places

- A I and II
- B II and III
- C I and III
- D I, II and III

vi. Which of the following statements correctly distinguish between a hazard and a disaster?

- A A hazard causes minor damage, while a disaster causes severe damage.
- B A hazard is a human-made event, while a disaster is a natural phenomenon.
- C A hazard is a temporary disruption, while a disaster is a permanent alteration.
- D A hazard has potential to cause harm, while a disaster causes significant damage.

vii. Study the picture and identify the settlement pattern depicted below:

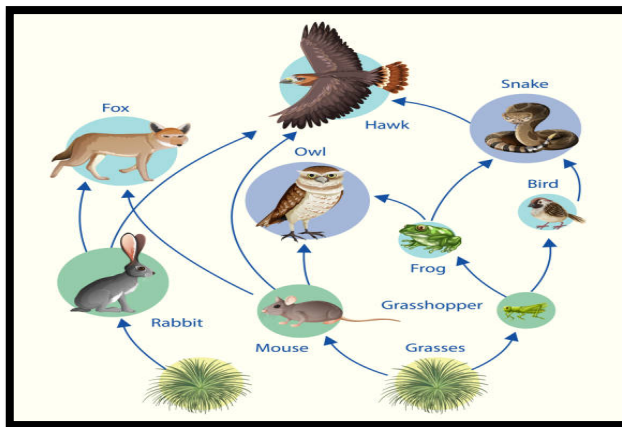


- A Circular
- B Terraced
- C Nucleated
- D Dispersed

viii. An environment consists of biotic and abiotic components. Which of the following alternatives show the combination of **ONLY** abiotic components of the ecosystem?

- A Air, Water, Plants, Land
- B Air, water, Animals, land
- C Air, Water, Sunlight, Land
- D Air, Water, Sunlight, Animals

- ix. This stage occurs during and immediately after a disaster. It involves mobilising emergency services, conducting search and rescue operations, and setting up emergency shelters. Which stage of the disaster management cycle is described above?
- A Recovery
 B Mitigation
 C Response
 D Preparedness
- x. If a mouse is an example of a primary consumer, what is the trophic level of Frog and Fox in the food web?



- A Primary producer
 B Primary consumer
 C Secondary producer
 D Secondary consumer

Question 2

[5]

Direction: Fill in the blanks with appropriate word/s.

i. The settlement pattern where houses are built around a Lhakang is an example of _____.	
ii. The motion of the Earth that causes varying length of day and night is _____.	
iii. Replacement level is the average number of children born per woman at which a population exactly replaces itself from one generation to the next, without migration. The minimum number of children required in each family to increase population is _____.	
iv. The point directly beneath the epicentre where seismic waves originate is known as _____.	
v. A bear consuming both plants and flesh to get energy in an ecosystem is an example of _____.	

Question 3

Direction: Match each item in Column A against the most appropriate item in Column B. Write the correct LETTER in the space provided in the 'Answer' column. [5]

Column A	Column B	Answer
i. Accumulation of materials	a. Deposition	i.
ii. Removal of materials from the surface	b. Suspension	ii.
iii. Picks up materials and carries along	c. Saltation	iii.
iv. Occurrence of weather phenomena	d. Surface creep	iv.
v. Reflects Radio waves back to earth	e. Abrasion	v.
	f. Deflation	
	g. Erosion	

Question 4.

Direction: Write TRUE or FALSE against each statement. [5]

Statements	Answer
I. Tropical grassland has tall and thorny grasses while temperate grassland has short and soft grasses	
II. Inward bending of contours on the map indicates a valley on the earth surface.	
III. If Thrimshing La, located at an altitude of 3,780m experiences a mean temperature of 3°C, then the mean temperature of Ura located at 3,285m will be 5°C.	
IV. People living in urban areas are usually engaged in manufacturing, business and services	
V. Map reading skills is important for farmers to understand the weather condition of a place for cultivation	

SECTION B [45 MARKS]
ANSWER ALL QUESTIONS

Question 5

- a) "In less than a decade, Bhutan recorded a total of 1,403 forest fire incidents..... [2]
(Kuensel, 11 Januray, 2020). What are the reasons that contribute to the high number
of forest fire incidents in Bhutan? Write **TWO** reasons.

- b) An employee of Bhutan Trust Fund for Environmental Conservation (BT FEC) has been [3]
assigned the responsibility of raising awareness about the significance of utilising
renewable resources. However, the person lacks expertise in this area and seeks your
support. Design a suitable poster for the assigned task.

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c) Settlement is classified into two: Rural and Urban. If you are given a choice, where would you settle? Write **TWO** justifications. [2]

d) The interaction between biotic and abiotic components support life on Earth. Justify the above statement by providing **TWO** reasons. [2]

Question 6

a) Observe the picture and identify the landform. [1]



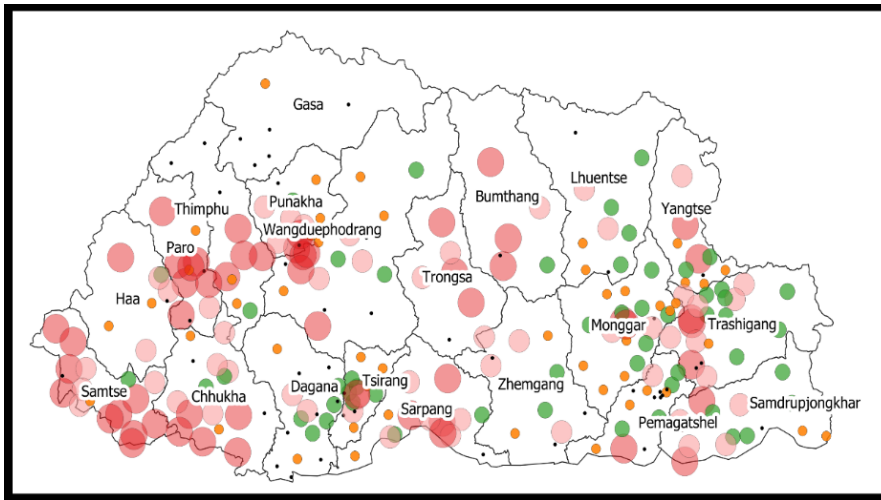
b) A traveller, working in the United Arab Emirates (UAE) is on vacation in Bhutan. While returning, has to travel 30° west of Bhutan, calculate the longitude of the UAE? **[2]**

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c) The map distance between Changzamto and Lungtenphu is 6 cm. If the RF of the map is 1:50,000, what will be the actual distance on the ground? **[2]**

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- d) As part of the assignment, Dorji used QGIS to create the population map shown below. [2]
 As a Geography teacher, what feedback would you provide on the map produced, considering the essential elements of a map?



- e) Higher birth rate and death rate are generally experienced by underdeveloped countries. Do you agree? Justify with **TWO** points. [2]

Question 7

- a) You are studying in a school which is located at 25° west. How many hours are you behind from your friend who is studying in a place located at 65° east? **[2]**

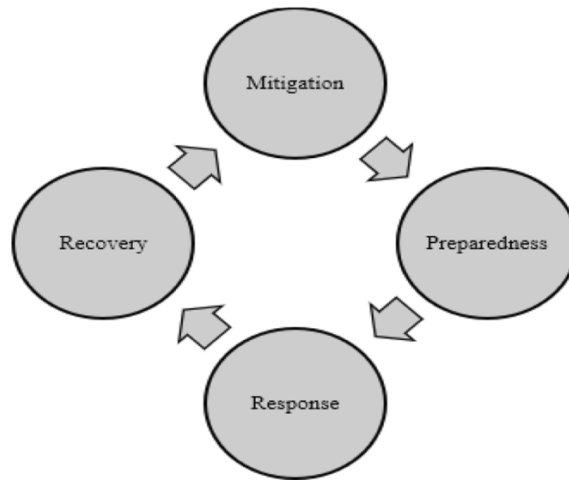
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- b) Cartographers cannot create a map without using a scale. State **TWO** importance of scale in cartography. **[1]**

- c) Suppose there are two Earths: one with an atmosphere and the other without an atmosphere. Which Earth would you prefer to live on? Justify with **THREE** reasons. **[3]**

d) Considering yourself as the head of the Disaster Management Committee, prepare a disaster management plan to be used during the event of an earthquake as per the flow chart given below.

[3]



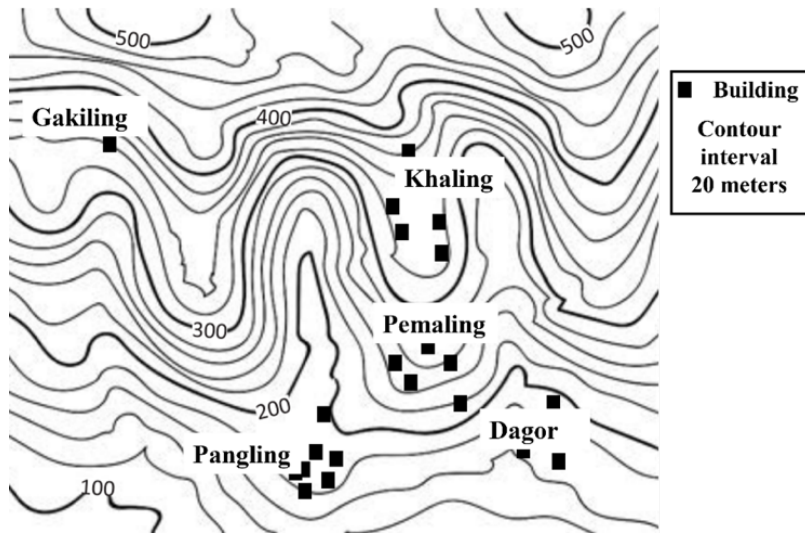
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Question 8.

a) Why does climate vary from place to place? Explain any **ONE** reason.

[1]

b) **Study the given map and answer the questions that follows.**



i. If Dagor lies towards the South East of Pemaling, what is the direction of Khaling from Pangling?

[1]

ii. Find the altitude of a building located in Gakiling.

[1]

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- c) People living in northern and southern regions of Bhutan have different tradition and culture. How do these differences shape their lifestyles and social practices? **[3]**

- d) Explain **THREE** measures that individuals and communities may adopt to conserve biodiversity, considering its significance in creating a healthy and sustainable future for all. **[3]**

Question 9

- a) Compare and contrast the lines of latitude and longitude with **ONE** point for each. **[2]**

b) Rivers are responsible for the formation and reshaping of different landforms on the surface of the Earth. Explain any **TWO** processes which results in the formation and modification of landforms. [2]

c) Describe a journey of a river from its source to the mouth. [3]

d) Human activities are responsible for the increase in carbon dioxide in the atmosphere. What are some of the activities that increase the amount of carbon dioxide in the atmosphere? [2]

SECTION C [10 MARKS]
ATTEMPT ALL QUESTIONS

Question 10

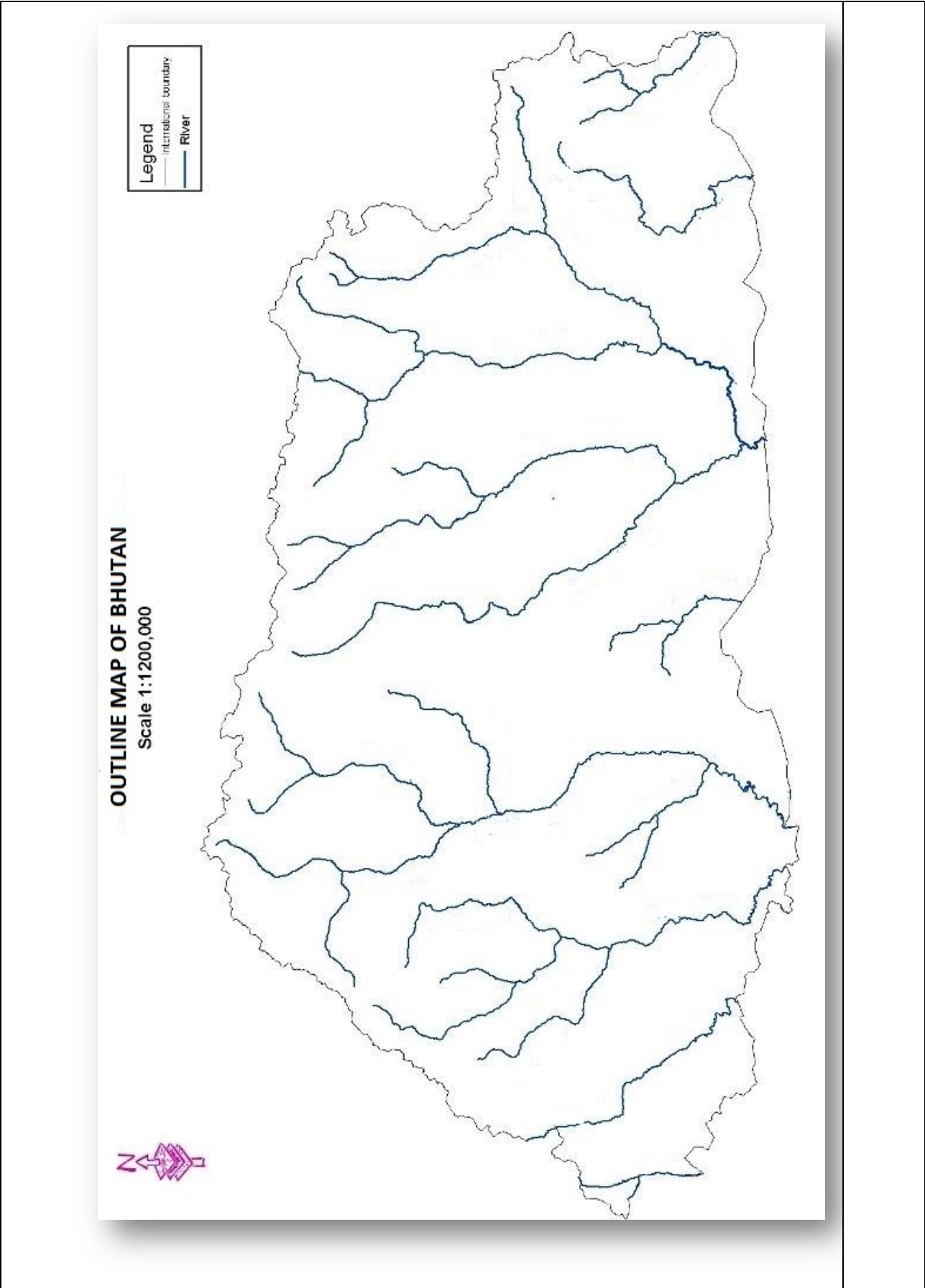
a) **Direction: In the outline map of Bhutan given below:** **[6]**

- i. Mark with (—) and name the rivers that flow through
 - a. Bumthang
 - b. Lhuentse.
- ii. Imagine that you are travelling from Paro to Haa, on the way, you have to cross one important pass (*La*). Mark with (X) and name the pass.
- iii. Mark with (C) and name capital of Bhutan.
- iv. Mark with (▲) and name mountain Jichudrake.
- v. Mark with (●) and name the place where there is least population according to PHCB -2017 in Bhutan.

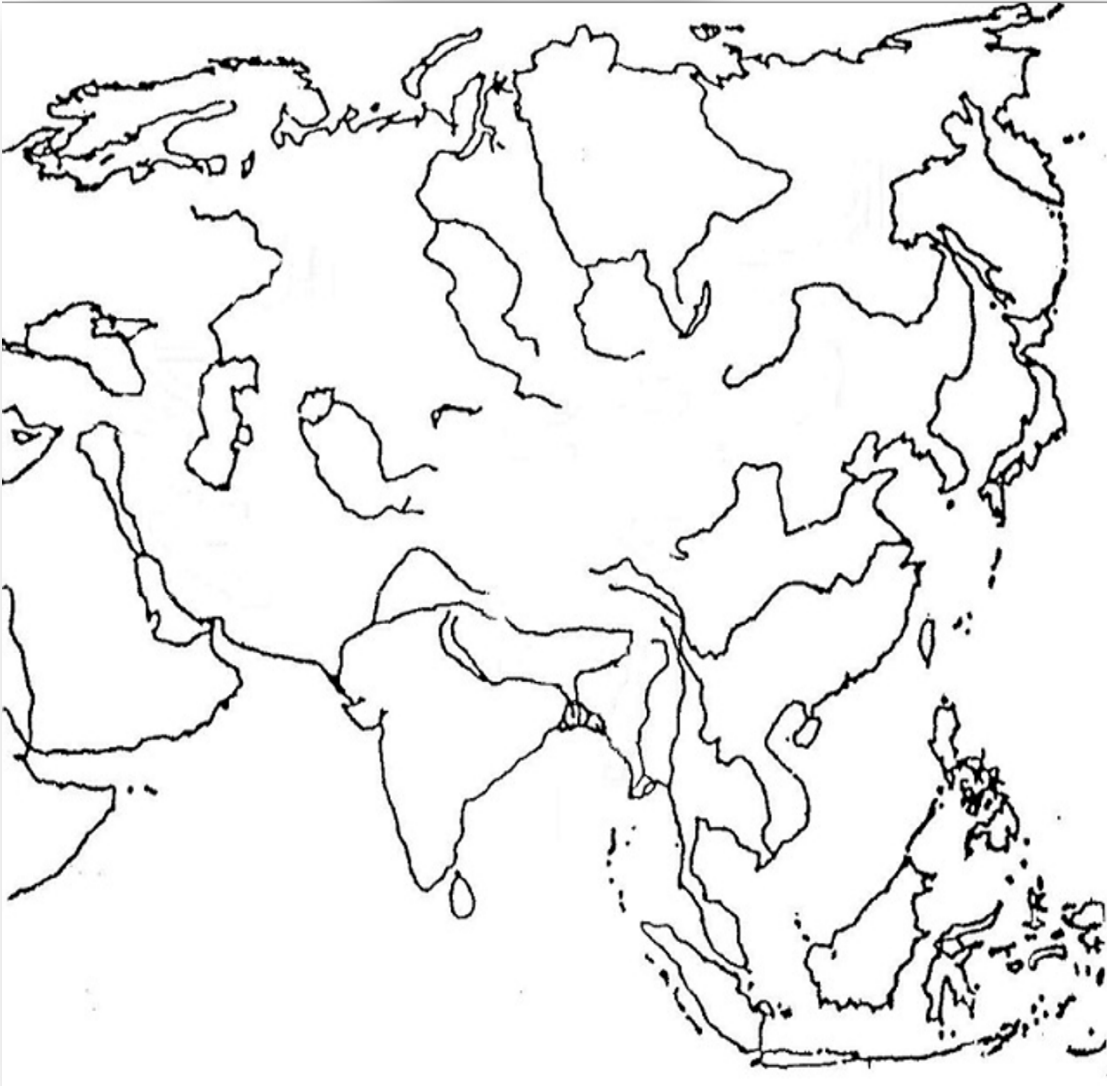
b) **In the outline map of Asia given below:** **[4]**

- i. Mark with (▲) and name mountain Caucasus and Khingan.
 - ii. Mark with (—) and name river Indus and Yangtze.
 - iii. Shade (// // //) and name Caspian Sea and Yellow Sea.
 - iv. Mark with (●) and name Bhutan and Indonesia
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This map should be used for Question 10- a)



OUTLINE MAP OF ASIA



This map should be used for Question 10- b)