



VICTORIA JUNIOR COLLEGE

2023 JC1 Promotional Examinations

**H2 GEOGRAPHY
INSERT**

9173

READ THESE INSTRUCTIONS FIRST

Write your name and index number on the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use an HB pencil for any diagrams or graphs.
Do not use staples, paper clips, glue or correction fluid.

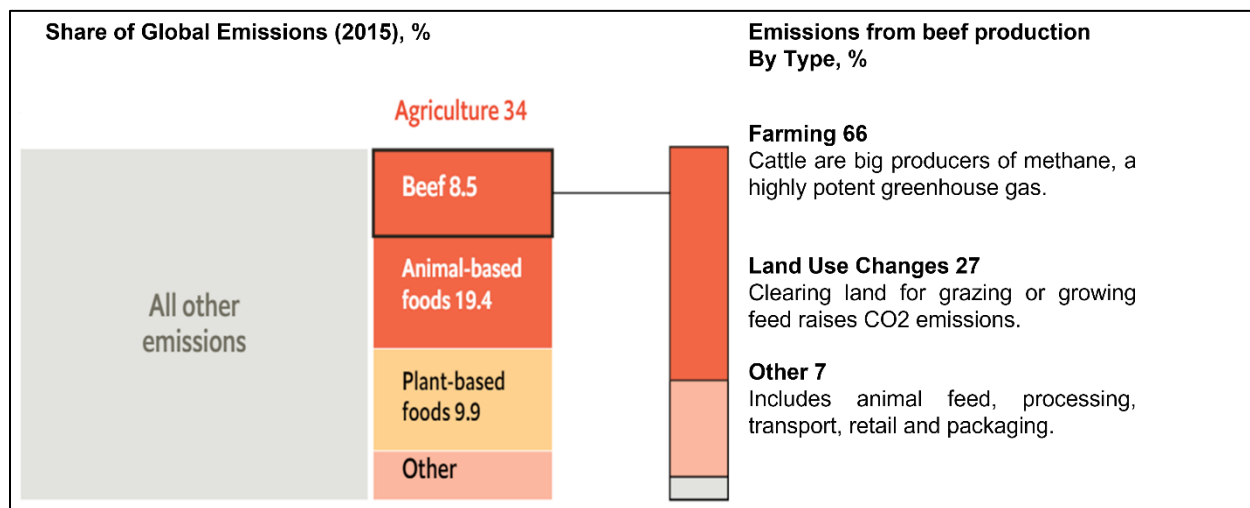
Answer **all** questions.

The Insert contains all the Resources referred to in the questions.
You should make reference to appropriate examples studied in the field or the classroom, even where such examples are not specifically requested by the question.
Diagrams and sketch map should be drawn whenever they serve to illustrate and answer.
You are reminded of the need for good English and clear presentation of your answers.

At the end of the examination fasten all your work securely together.
The number of marks is given in brackets [] at the end of each question or part question.

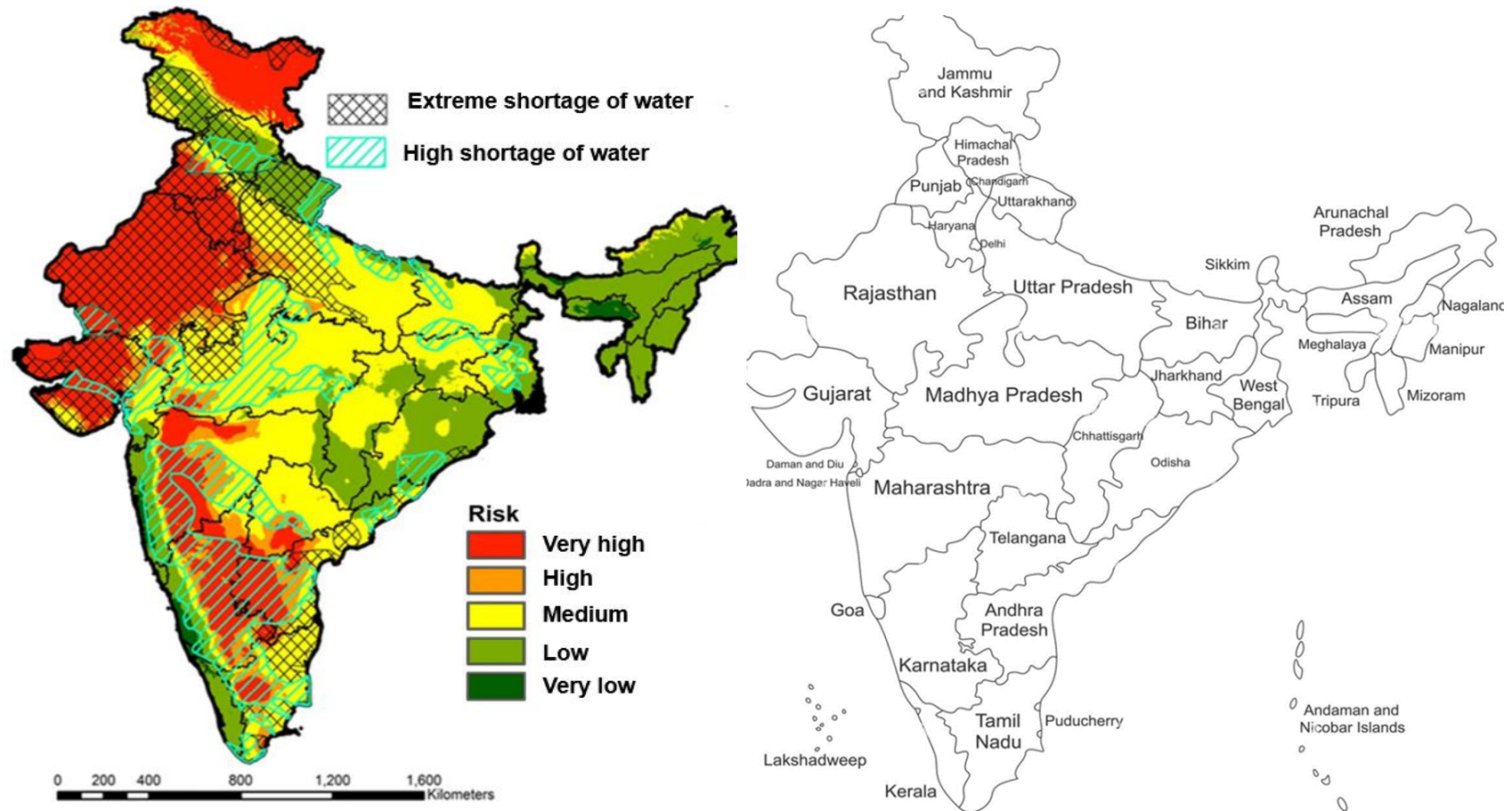
Resource 1 For Question 1

Agriculture's contribution to greenhouse gas emissions in 2015



Resource 2 for Question 1

Distribution of climate change sensitivities* in India



*Sensitivity is the degree to which a region gets affected by climate-related stimuli, such as climate variability and the frequency and magnitude of extremes events like cyclone and drought. It is determined by demographic and environmental conditions of the region.

Resource 3 for Question 1

Some extreme weather events in India caused by climate change

There's little doubt now that extreme weather events in India are becoming more common.



Heatwaves*

50% of India to get heatwaves of more than 3°C.
20% of India to get heatwaves of more than 2°C.
15% of India to witness heatwaves of more than 1.5°C.

* In the absence of any solutions



Extreme Heat

Annual mean temperature of India has risen by 0.6°C in the past 114 years. West coast and Southern India are projected to shift to new, high temperature climatic regimes.



Droughts

In 1987, 2002-2003 and 2009 droughts gripped more than half of India's sown area. Western states will be very drought prone.



Rainfall

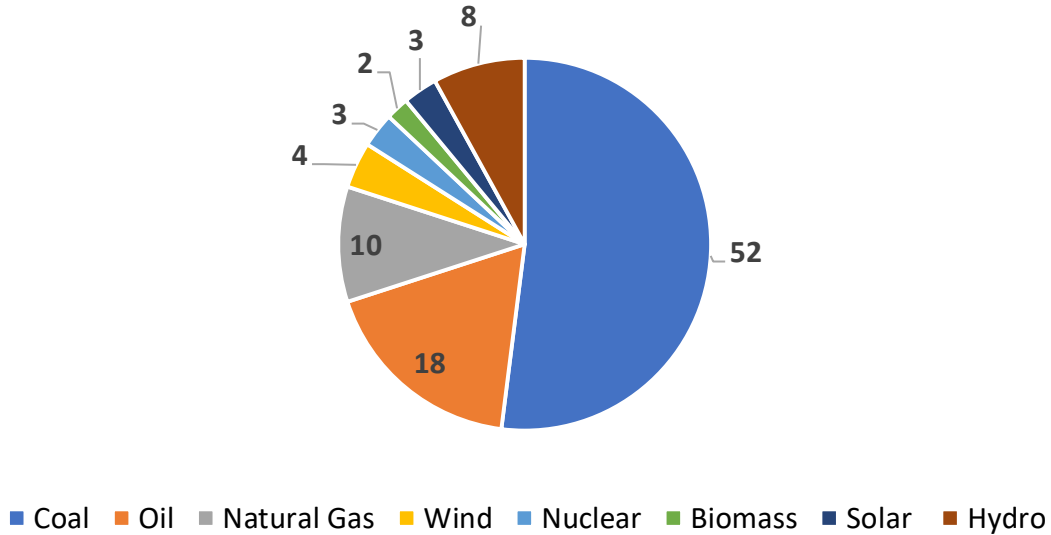
A decline in monsoon rainfall since the 1950s has happened. A 2°C rise in global average temperature will make India's monsoon go haywire.

Source: IPCC & World Bank

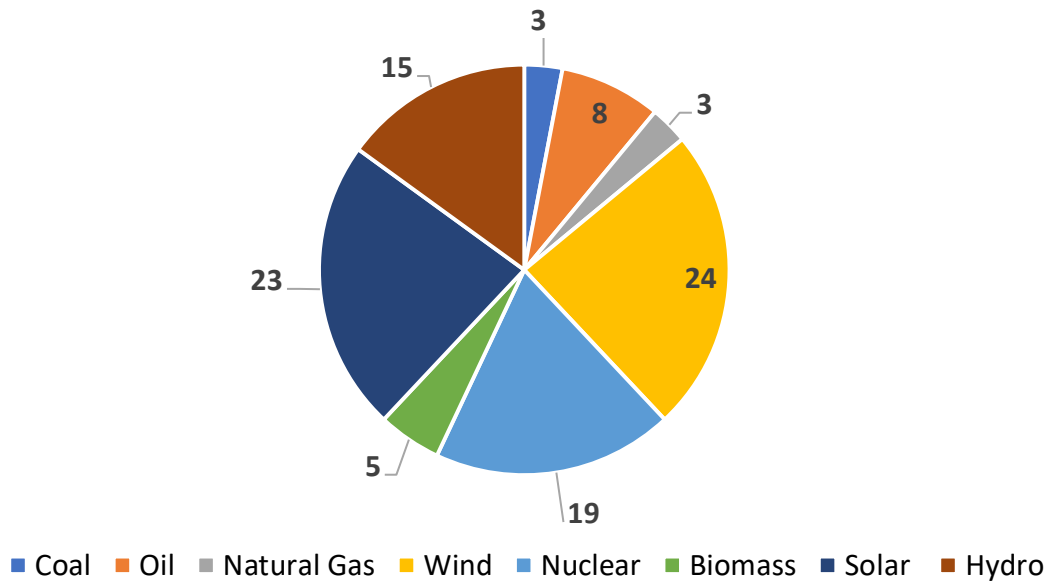
Resource 4 for Question 2

China's projected energy source in 2025 and 2060

China's projected energy source in 2025 (%)

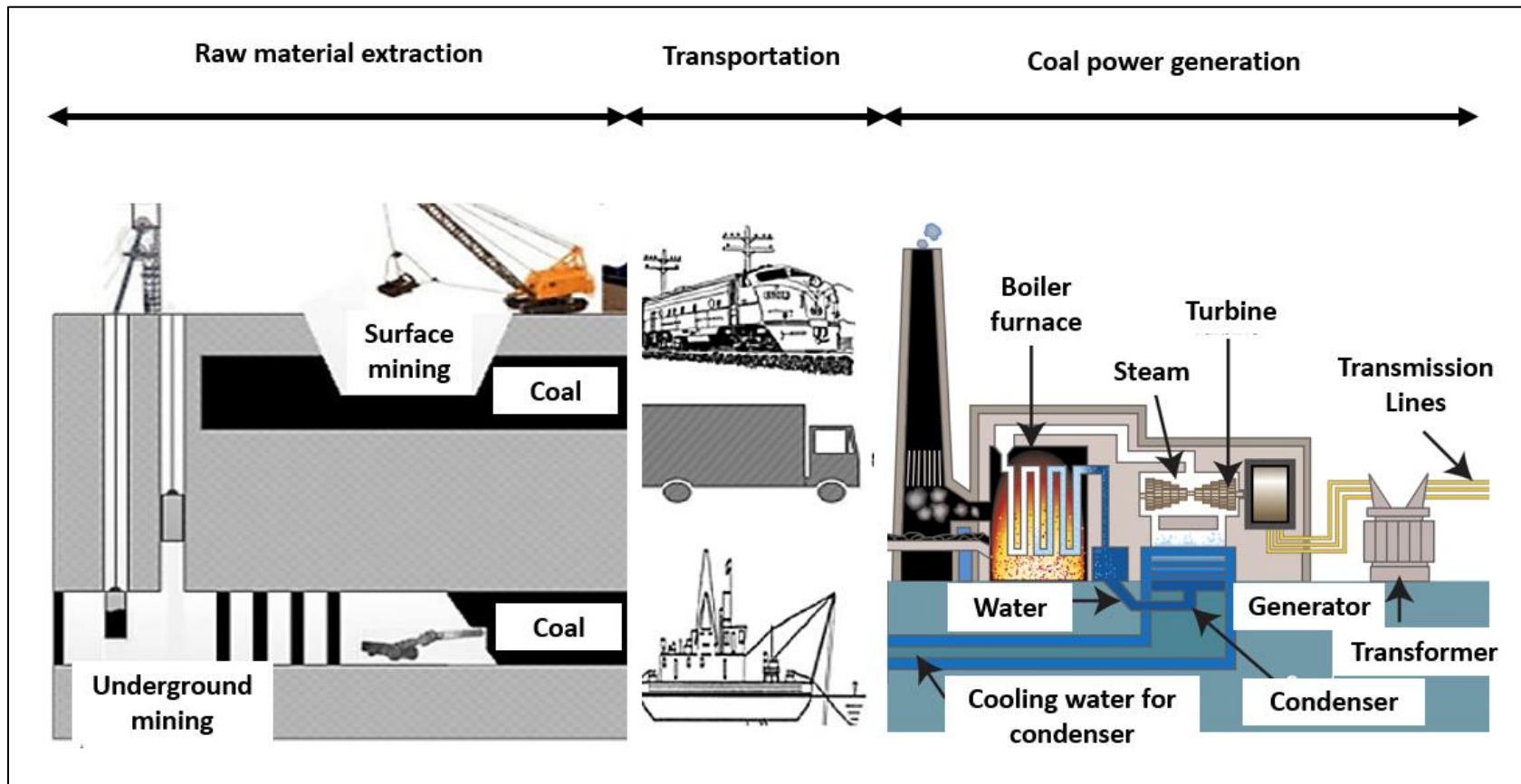


China's projected energy source in 2060 (%)



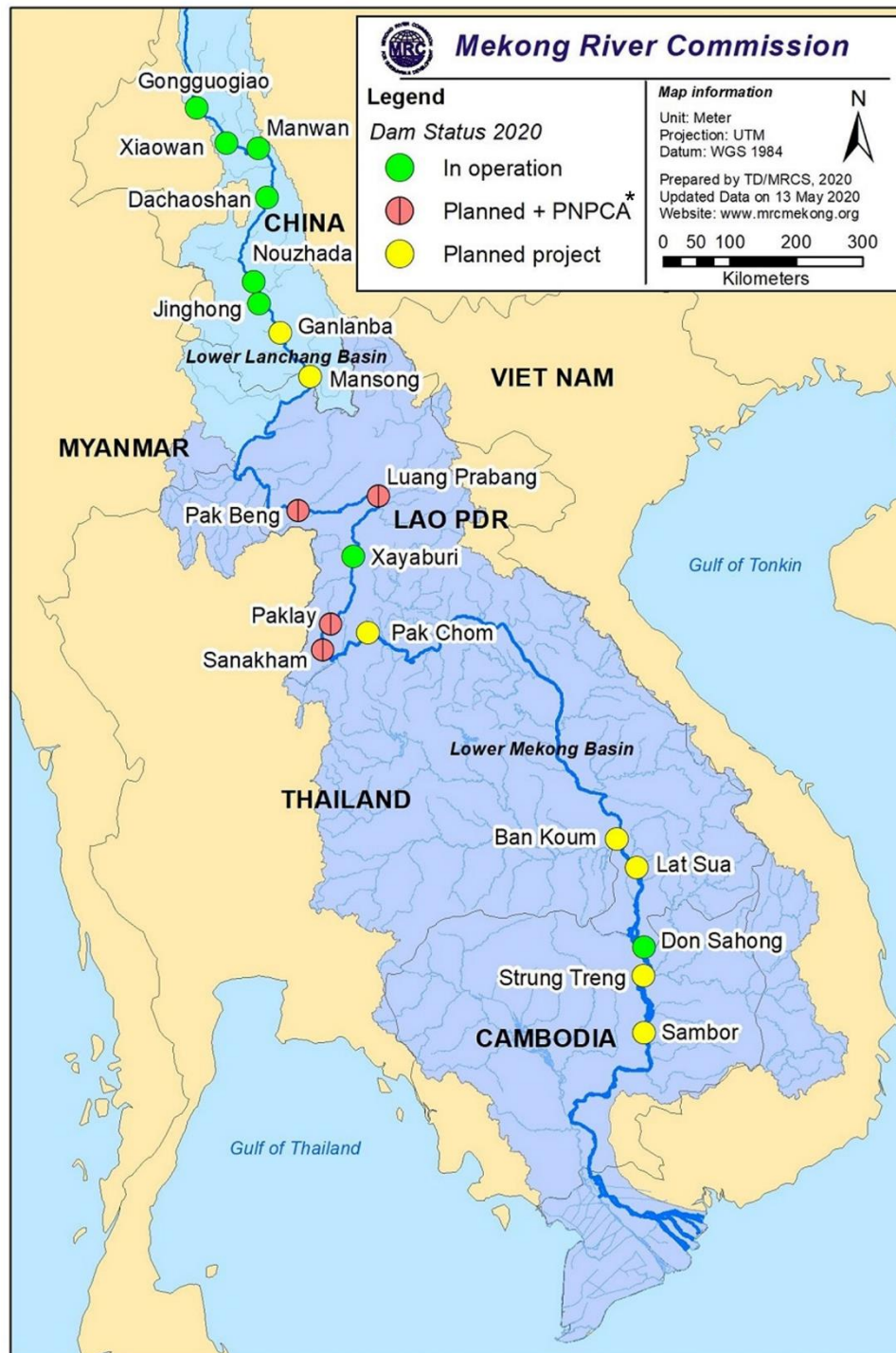
Resource 5 for Question 2

Life cycle of coal from extraction to electricity



Resource 6 for Question 2

Location of hydropower dams along Mekong River



*PNPCA - Procedures for Notification, Prior Consultation and Agreement; PNPCA are primarily based on Article 5 of the 1995 Mekong Agreement in which the Member Countries agree “to utilize the waters of the Mekong River system in a reasonable and equitable manner.”

Resource 7 for Question 2

An article on the impacts of hydropower dams in Mekong River

Hydropower dams have had a dramatic effect on the Mekong river over the last two decades. Exacerbated by climate change and a lack of cross-border communication, the cumulative effects of mainstream dams present a danger to the forests, mangroves and fisheries that depend on the Mekong's waters.

The sediment that has flowed from Yunnan province in China to Vietnam for thousands of years has been severely depleted due to the relatively recent spate of hydropower dams built on the Chinese stretch of the river. This has resulted in the collapse of riverbanks downstream in highly populated areas of the Mekong delta, causing homes and roads to be washed away.

Upstream fish migration is hindered by dams when the fish cannot get over the spillway or through turbines. Hydropower can also prevent downstream migration, with larvae and adult fish unable to cross the dam itself or navigate large bodies of standing water created by the dams.

The Mekong's wider biodiversity relies heavily on the natural and predictable flooding and receding, or pulse, of the river's waters. Beach-nesting birds and fish are seriously impacted by unseasonable flooding of the Mekong caused by dams.

Mekong civil society groups are urging governments to shift their Mekong River policy towards protecting ecosystems and promoting environmental justice. They want to reverse the current stance towards hydropower investment in favour of protecting the river's rich biological treasures and unique ecosystems, as well as the environmental rights of local communities across the region.

"Phenomena such as unseasonal fluctuations in the water level result from the dams on the river, but the governments of the Mekong countries are silent on this matter. The governments of the Mekong region normally view the river merely in terms of economic development and investment opportunity, while overlooking other vital values such as it being an important source of food and income for the people a cradle of diverse Mekong cultures, and the river being one of the major biodiversity hotspots of the world," said Ms Chanang, one of the representatives of the civil society groups.

Source: TheThirdPole.Net