NANYANG JUNIOR COLLEGE

Preliminary Examination

H1 GEOGRAPHY 8812/01

Physical and Human Geography 10 September 2008

INSERT

3 hours

READ THESE INSTRUCTIONS FIRST

This Insert contains the Photograph and the Figures referred to in the questions.

Figs 1A and 1B for Question 1

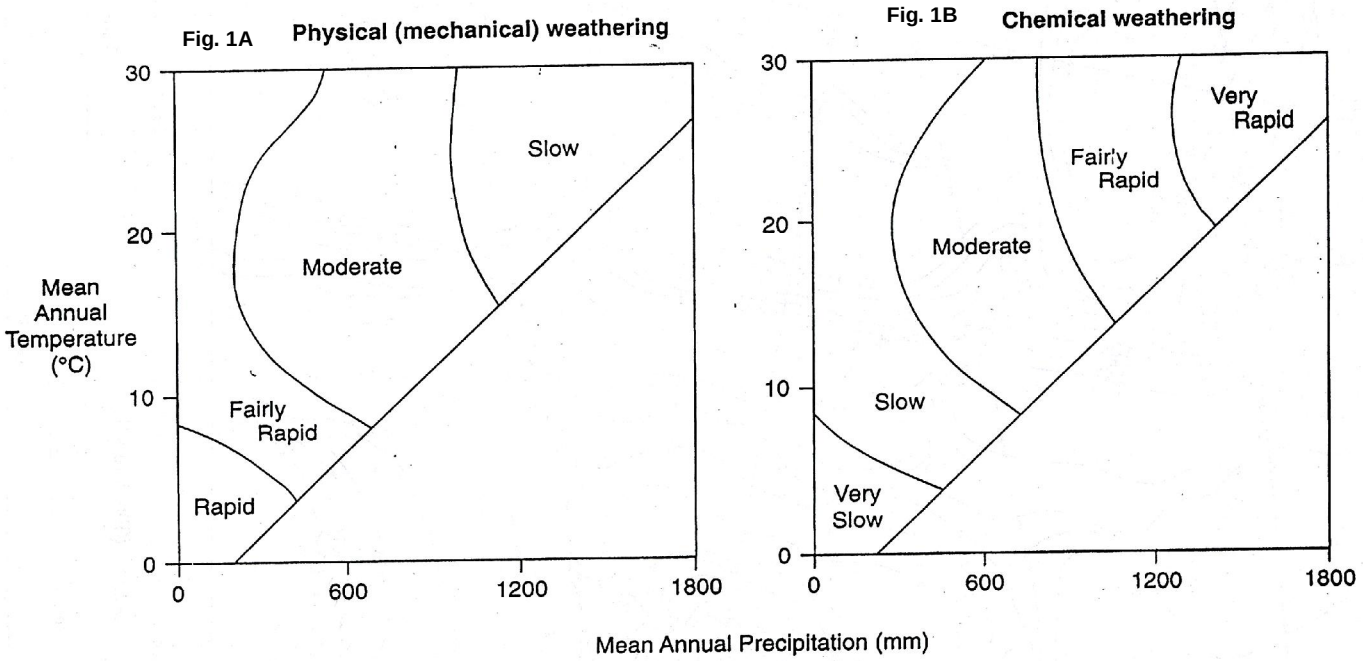

Fig. 2 for Question 2

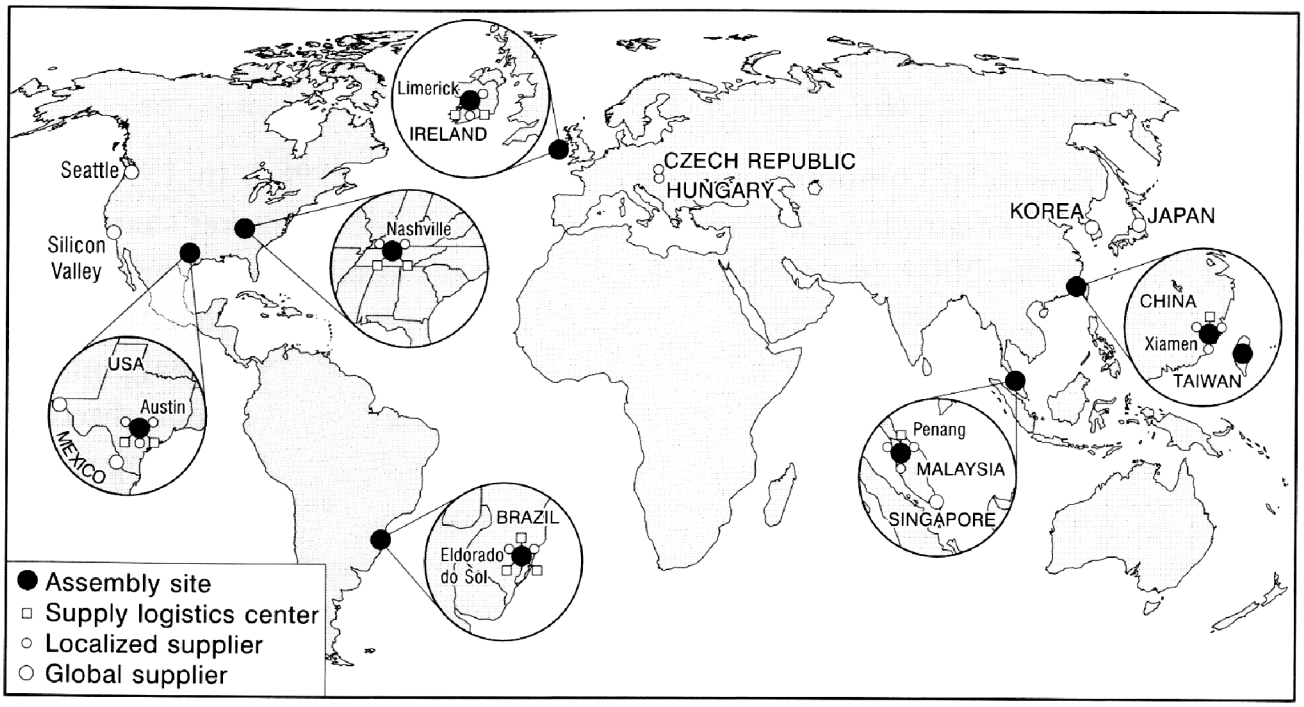

Fig. 3 for Question 3 EITHER

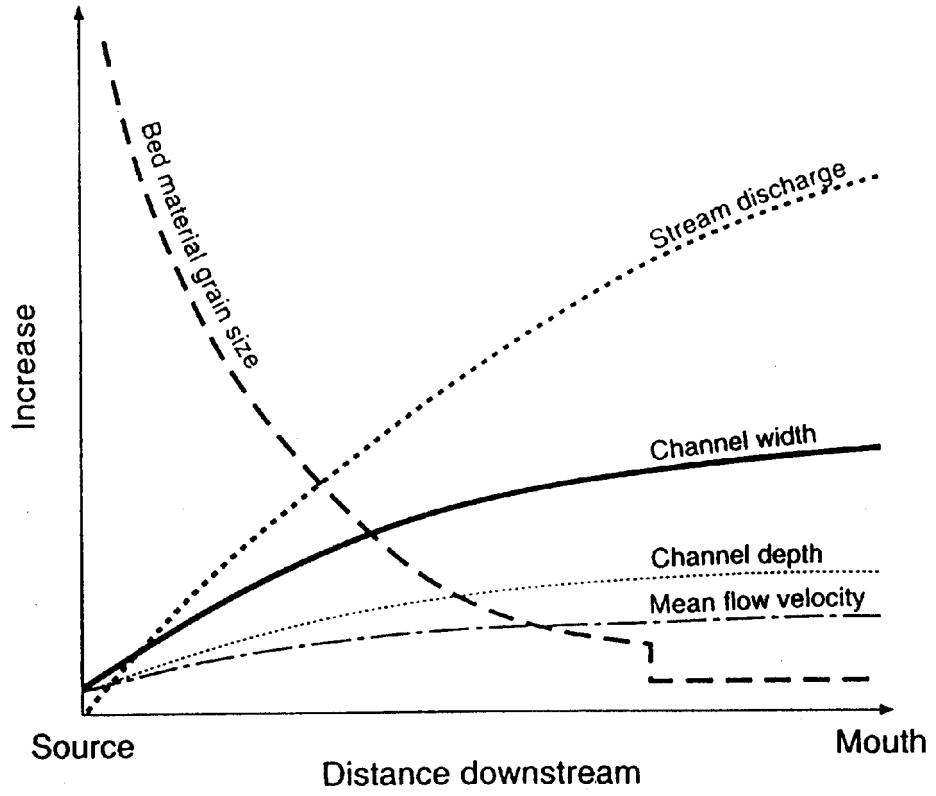

Fig. 4 for Question 3 OR

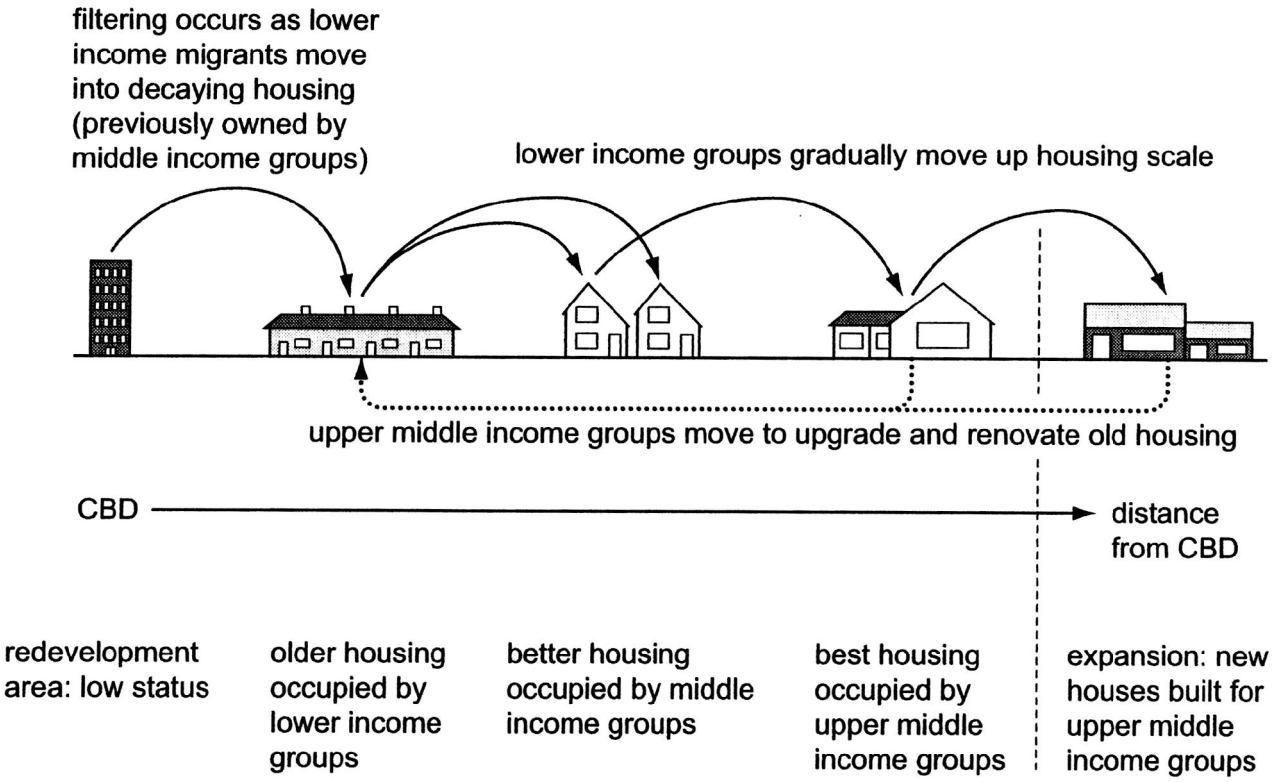

Fig. 5 for Question 4 OR

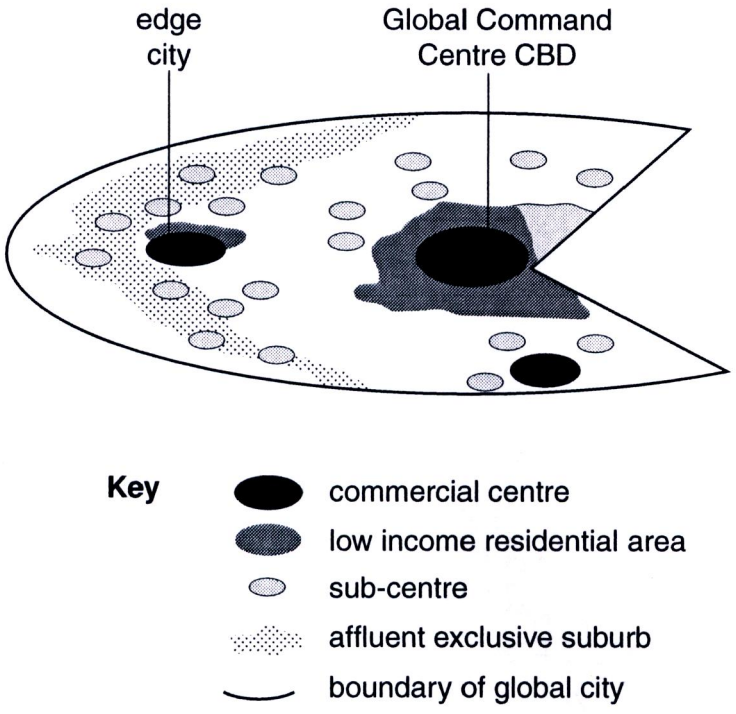

Fig. 6 for Question 5 EITHER

Japan quake a 'shock'

Experts, unaware of faultline, did not consider inland area at risk

KURIHARA (JAPAN)

A POWERFUL earthquake in north-eastern Japan has struck at a previously unknown faultline, raising new alarm that the dreaded "Big One" could hit anywhere in the country, experts said yesterday.

The 7.2-magnitude quake on Saturday was the most powerful to strike inland Japan in eight years, killing at least nine people and triggering massive landslides.

About a dozen more people were missing, and more than 200 people were injured.

The meteorological agency said it had predicted an offshore jolt could strike near the region, in the north of Japan's main island of Honshu, but admitted it had not considered the inland area at major risk.

"We had not been aware of faults in the area where the earthquake occurred this time," Mr Takashi Yokota, a senior official of the agency's earthquake and tsunami monitoring bureau, told a news conference.

Experts yesterday said the quake, whose epicentre was located a shallow 8km deep in Iwate prefecture, was triggered by the build-up of pressure where the Pacific Plate meets the Japanese archipelago.

Japan, which lies at the crossing of four tectonic plates, experiences 20 per cent of the world's powerful earthquakes, and is constantly striving to protect itself against major tremors.

Japan has started the world's first early warning system for earthquakes by monitoring seismic waves.

But much about earthquakes has yet to be understood, experts said.

"A lot of questions have not been answered," said Professor Yoshimasu Kuroda, honorary professor of geology and geochemistry at Shinshu University in Nagano, central Japan.

"We have to face this reality. All we can do is to collect as much information as possible from the latest one and analyse it for better understanding of the Earth."

Despite the strength of the tremor, damage to facilities and casualties was limited as it hit rural areas. Train services, water and electricity supplies have been restored to most areas.