ANDERSON JUNIOR COLLEGE

JC2 H2 Geography
Preliminary Examination 2013

H2 Geography 9730/01

Paper 1

INSERT

Wednesday 18 September 2013 1.00 pm – 4.00 pm 3 hours

INSTRUCTIONS TO CANDIDATES

This insert contains all the Figures and Photograph referred to in the question paper.

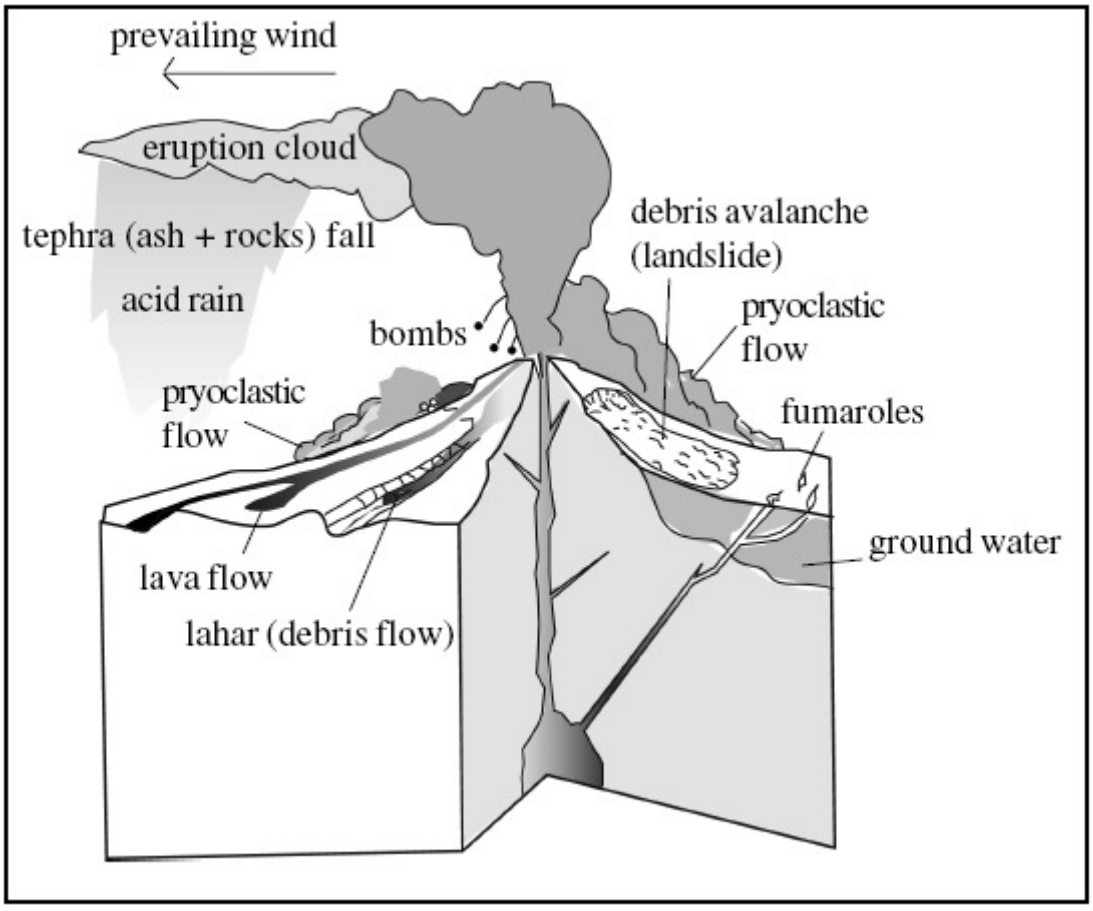
Fig. 1A for Question 1

VEI	Description	Plume Height	Volume of pyroclastics ejected	Duration of continuous blasts (hrs)	Frequency	Number of historic eruptions	Example
0	non-explosive	<100 m	1000s m^3	<1	daily	487	Kilauea
1	gentle	100-1km	1 0,000s m^3	<1	daily	623	Stromboli
2	explosive	1-5 km	1,000,000s m^3	1-6	weekly	3176	Galeras, 1992
3	severe	3-15 km	10,000,000s m^3	1-12	yearly	733	Ruiz, 1985
4	cataclysmic	10-25 km	100,000,000s m^3	1- 12+	10'sof years	119	Galunggung, 1982
5	paroxysmal	>25 km	1 km^3	1-12+	100's of years	19	St. Helens, 1981
6	colossal	>25 km	10s km^3	12+	100's of years	5	Krakatau, 1883
7	super-colossal	>25 km	100s km^3	12+	1000'sof years	2	Tambora, 1815
8	mega-colossal	>25 km	I,000s km^3	12+	10,000's of years	0	Yellowstone, 2 million years ago

The higher the VEI, the greater the potential hazard. Eruptions with a value of 0 or 1 tend to have very localised effects and are associated with the more gentle fiery eruptions involving mostly lava. Eruptions of 2 and above have much greater effects, with huge quantities of pyroclastics being erupted with the potential of affecting both the immediate area and, through global atmospheric circulation systems, parts of the world much further away. A volcano such as Mt St Helens with a VEI of 5 is potentially far more hazardous than Kilauea on Hawaii with a value of 0.

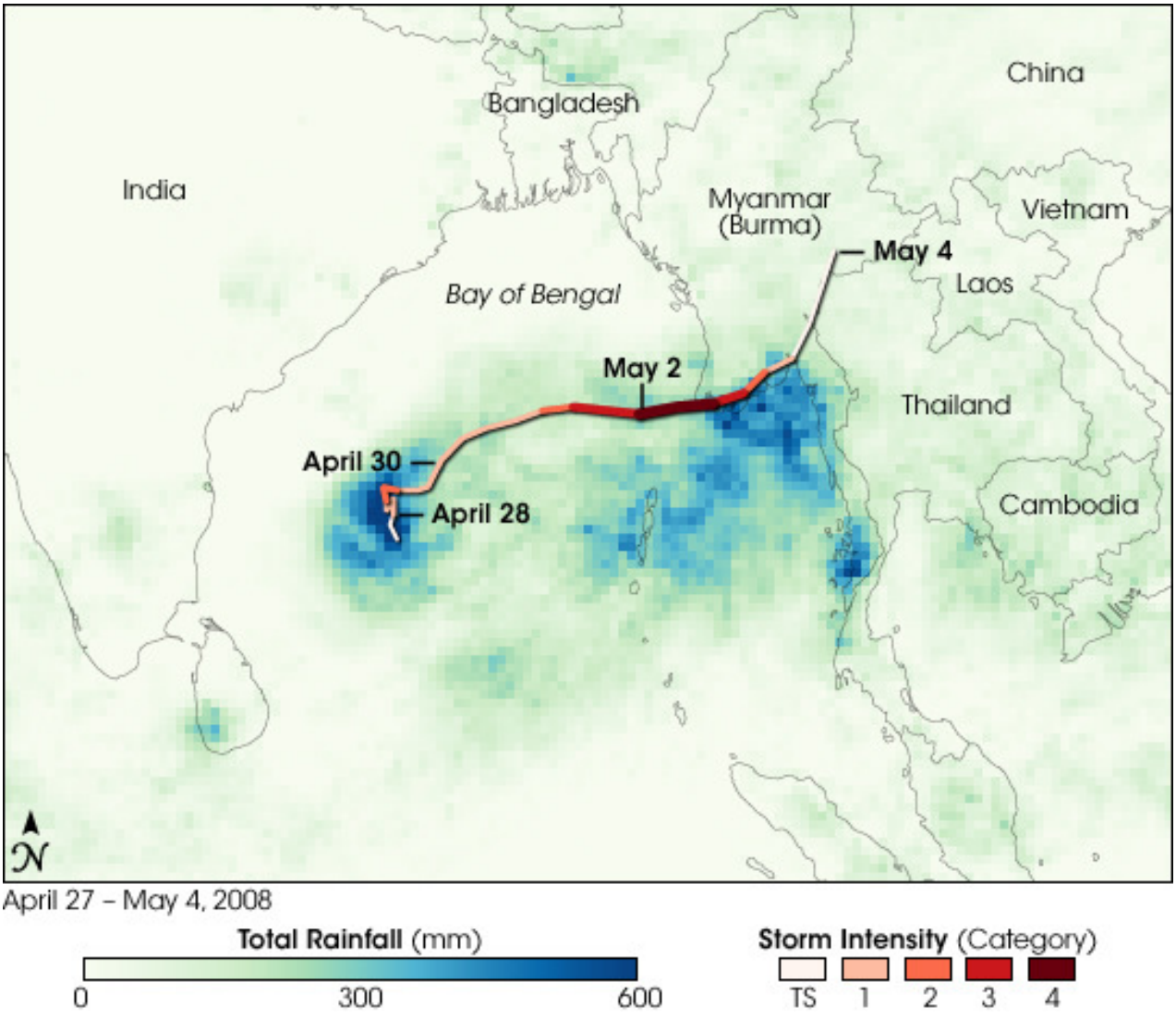
Source: Geofactsheet 164, Volcanoes: Why are some more hazardous than others?

Fig. 1B for Question 1



Source: Geofactsheet 164, Volcanoes: Why are some more hazardous than others?

Fig. 2 for Question 2



Source: http://earthobservatory.nasa.gov/NaturalHazards/view.php?id=19865

Photograph A for Question 3

Photographs B and C for Question 4

Photographs B and C show slopes in contrasting climatic areas.

Photograph B

Photograph C

Source: 8812/01/INSERT/O/N/08