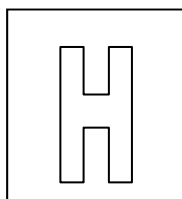


Candidate Name: _____

Class:

Adm No

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2018 Preliminary Exams

Pre-University 3

GEOGRAPHY

Paper 2 Data Response Questions

9751/02

10 September 2018

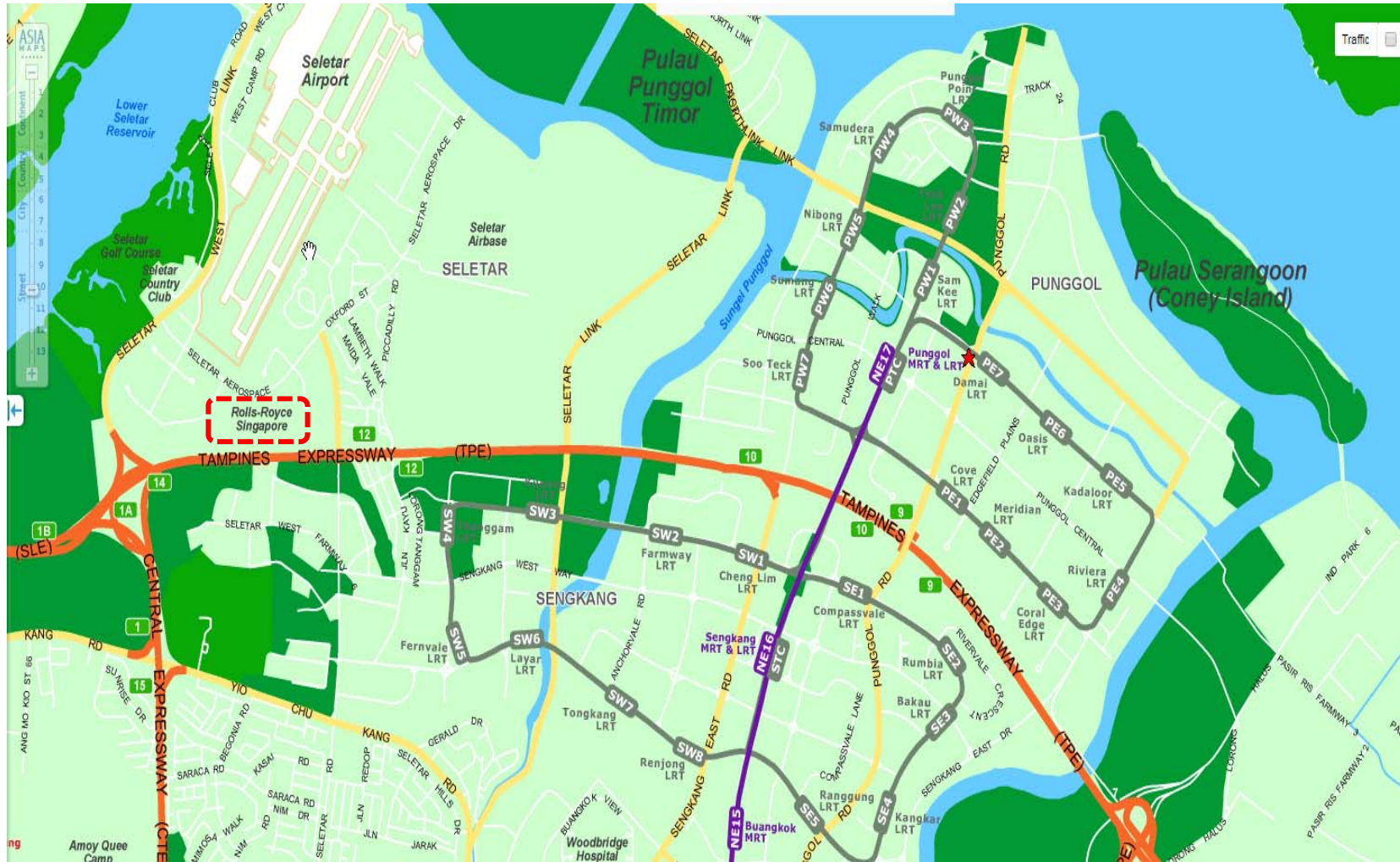
3 hours

READ THESE INSTRUCTIONS FIRST

This Insert contains all the Resources referred to in the questions.

Resource 1 for Question 1

Location of Rolls-Royce (in red box) in Seletar, Singapore



Resource 2 for Question 1

Types of partnership that Rolls-Royce has established with the local institutions in Singapore

Partnerships with local institutions	Type of institutions	Purpose of Partnerships
Institute of Technical Education (ITE)	Public Vocational Education Institution agency	To develop courses and promote information sharing in the fields of aircraft and marine propulsion
Singapore Workforce Development Agency (WDA)	Government Statutory Board under Ministry of Manpower of Singapore	To develop 11 new aerospace manufacturing programmes. This will be part of the Precision Engineering Workforce Skills Qualifications (PE WSQ) framework and will be pegged at Higher and Advanced Certificate levels.
Singapore Airlines Engineering Company	Singapore TNC	Provide aerospace professionals with opportunity to acquire advanced skills in specialist areas for long-term career development within aerospace industry
Agency for Science, Technology and Research (A*STAR)	Government Statutory Board under Ministry of Trade and Industry of Singapore	Joint lab collaboration programme to develop next-generation aerospace manufacturing and maintenance, repair and overhaul (MRO) capabilities enabled by advanced processes, automation and digital technologies. This for the Small-Medium Enterprises (SMEs) to adopt the latest technologies to be part of the high-value global manufacturing supply chain.
Defence Science and Technology Agency (DTSA)	Government Statutory Board under the Ministry of Defence of Singapore	To focus on the use of data analytics and digital twins aimed at optimising the time and resources spent on engine maintenance, and thereby improving the availability and performance of the Republic of Singapore Air Force (RSAF) aircraft ¹ . These capabilities will potentially transform engine support and maintenance training.
Total investment in the Rolls-Royce Seletar facility has exceeded S\$700 million and has created 500 new, highly skilled jobs.		

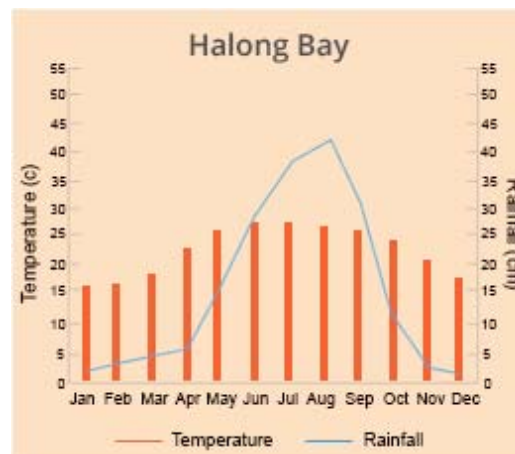
Resource 3 for Question 2

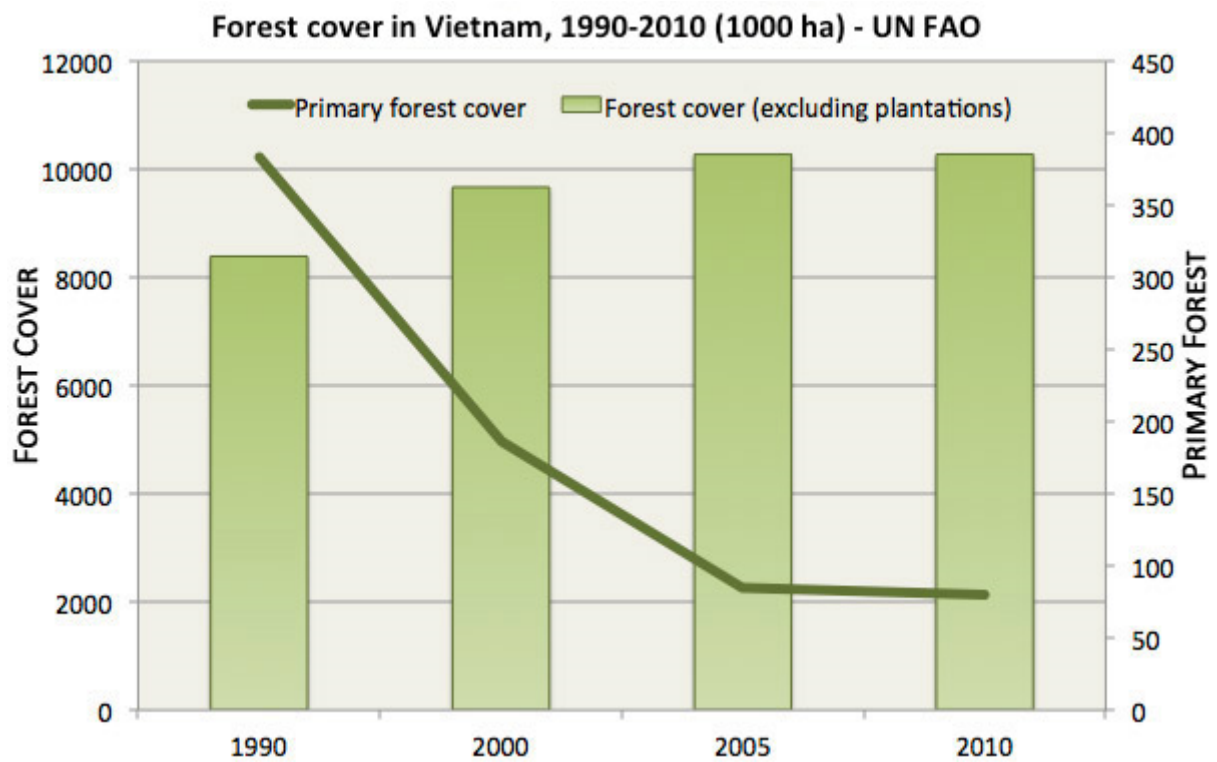
Protected Status of Karst Areas in Southeast Asia

Country	Karst area (km ²)	Protected karst area (km ²)	Karst protected (percentage)
Cambodia	20,000	0	0
Indonesia	145,000	22,000	15
Laos	30,000	3000	10
Malaysia	18,000	8000	44
Myanmar	80,000	650	1
Philippines	35,000	10,000	29
Thailand	20,000	5000	25
Vietnam	60,000	4000	7
Total	408,000	52,650	13

Resource 4 for Question 2

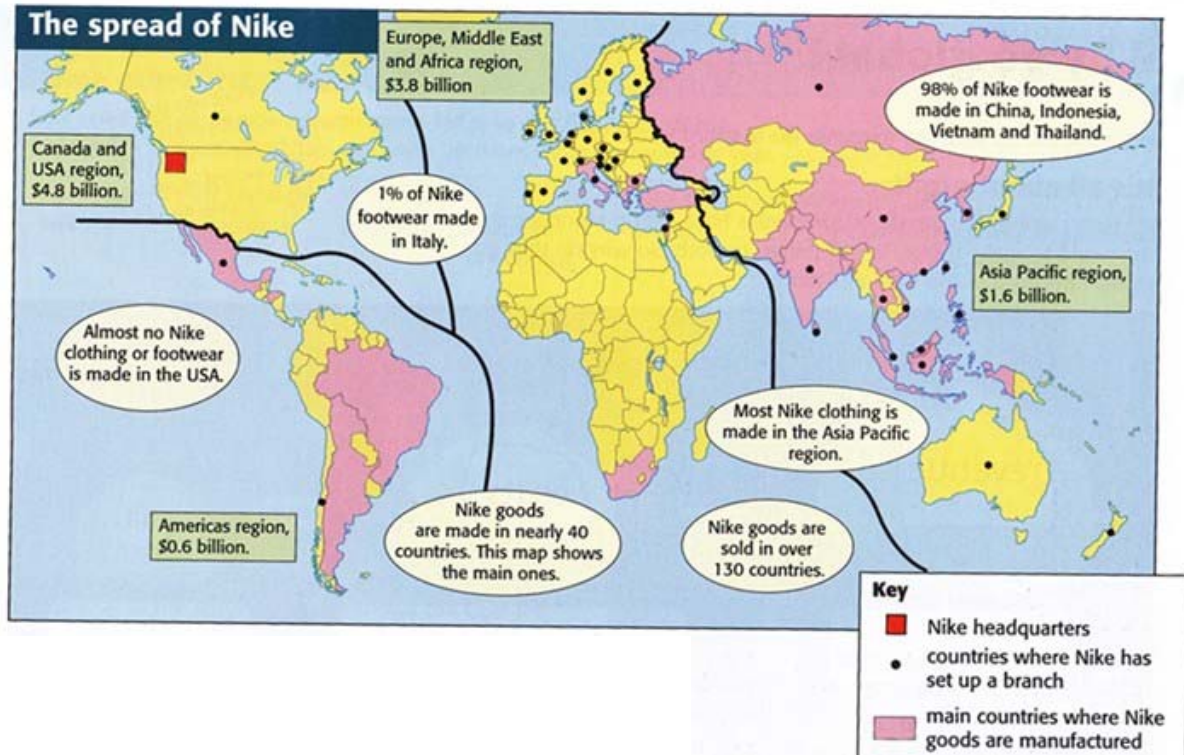
Climograph and Karst Landscape of Ha Long Bay, Vietnam



Resource 5 for Question 2**Mekong River in Vietnam****Resource 6 for Question 2****Forest Cover in Vietnam from 1990 to 2010**

Resource 7 for Question 3

Nike's production map in 2014



Resource 8 for Question 3

Nike's job openings and the description of the jobs offered in its US and global corporate offices in 2015



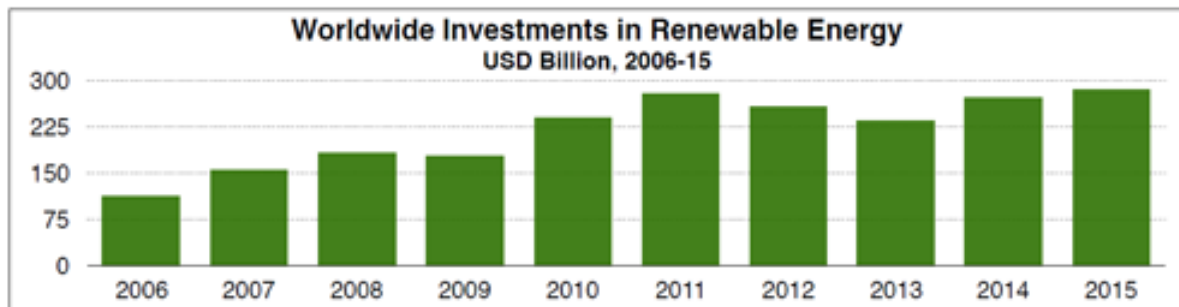
Resource 9 for Question 3

China's factfile

Year	2005	2010	2015
Total Population (billions)	1.304	1.338	1.364
Rate of natural increase (%)	-0.02%	-1%	-5.29%
GDP per person (US\$)	1753	4561	8069
Employment in manufacturing (%)	30.96	36.37	52.43

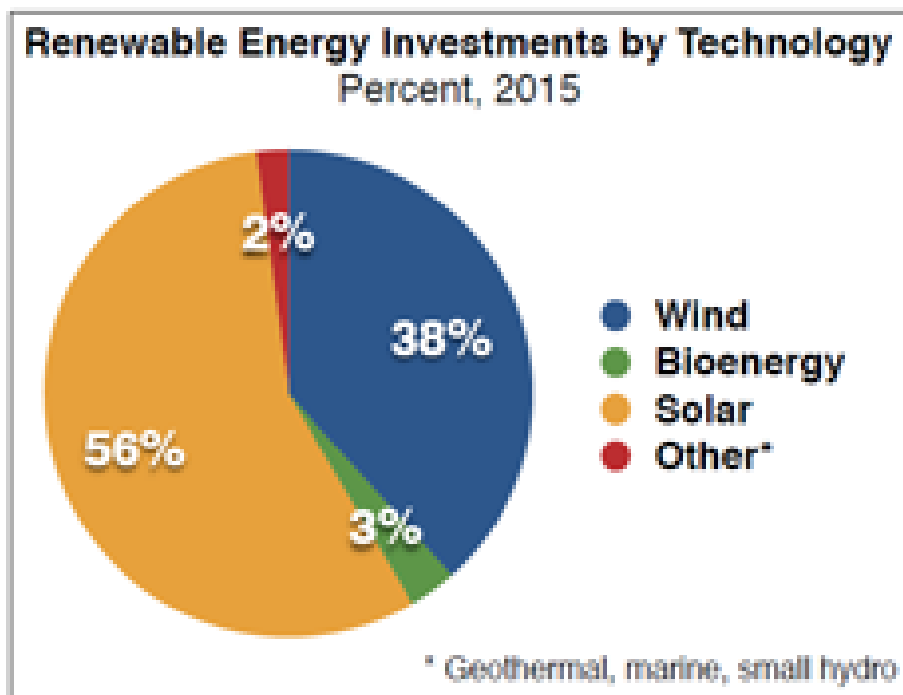
Resource 10 for Question 4

Worldwide Investments in Renewable Energy from 2006 to 2015



Resource 11 for Question 4

Renewable Energy Investments by Technology (%) in 2015



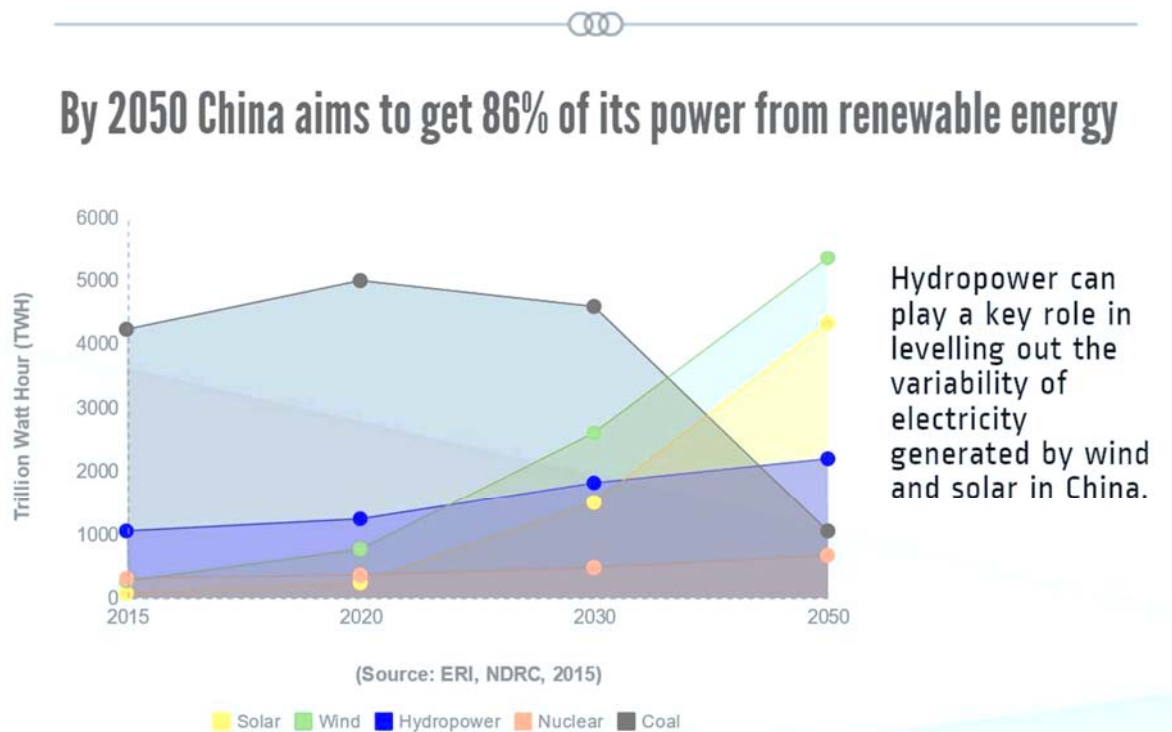
Resource 12 for Question 4

Leading Investors in Renewable Energy (USD Billion) in 2015

Leading Investors in Renewable Energy USD Billion, 2015		
#1	China	\$102.9
#2	U.S.	\$ 44.1
#3	Japan	\$ 36.2
#4	U.K.	\$ 22.2
#5	India	\$ 10.2
#6	Germany	\$ 8.5
#7	Brazil	\$ 7.1
#8	South Africa	\$ 4.5
#9	Mexico	\$ 4.0
#10	Chile	\$ 3.4

Resource 13 for Question 4

China's Targeted Energy Mix by 2050



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