SASTRI COLLEGE
MARCH CONTROLLED TEST: 2020
DEPARTMENT OF SOCIAL SCIENCES
GEOGRAPHY: GRADE 11
PAPER 1 - THEORY

TIME: 1hour (P1) + 30minutes (P2) = 1½hrs **TOTAL:** 40 marks(P1) + 20 marks (P2) = 60Marks

EXAMINER: G.T. MOODLEY **MODERATORS:** K. Jaggeth & K. Singh

INSTRUCTIONS:

1. **Answer ALL the questions.**
2. **Write neatly and legibly.**
3. **This Examination consists of TWO QUESTION PAPERS**
4. **Paper 1 (Theory – 40 Marks: 1 hour to complete) with TWO questions and SIX pages.**
5. **Paper 2 (Mapskills–20 Marks: 30minutes to complete) with FOUR questions and FIVE pages.**

LEVELS

Question	Level 1	Level 2	Level 3	Level 4	Total	Time
1	10				10	10
2	05	20	05		30	30
Total	15	20	05		40	40
%	40%	50%	10%			

SECTION A: THE ATMOSPHERE

QUESTION 1

1.1 Select from the list below a suitable term that matches the definition provided below. Write only the question number (1.1.1–1.1.5) and the term of your choice, for example 1.1.8 Geography.

Wind,	**Isotherms,**	**Climatic region,**	**Front,**	**Föhn,**
Insolation,	**Geostrophic flow,**	**Ridge ,**	**Terrestial radiation**	

1.1.1 An area over which temperature and rainfall conditions are very similar, and different from those in other areas.

1.1.2 The boundary between air masses that have different characteristics.

1.1.3 Theoretical wind that would result from an exact balance between the Coriolis force and the Pressure Gradient force.

1.1.4 Lines joining places of equal temperature.

1.1.5 A warm dry wind that descends the leeward side of a mountain.

[5x1=5]

1.2 Refer to FIGURE1.2 showing the relationship between air pressure and wind. Choose ONE term in brackets to make each of the following statements true.

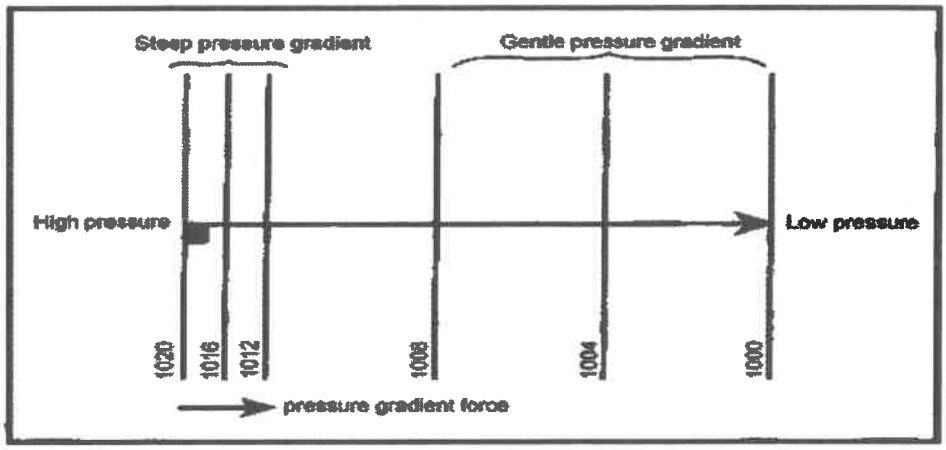


FIGURE 1.2

1.2.1 We measure air pressure in (hectopascals / degrees).
1.2.2 Lines joining places of equal pressure are known as (isotherms / isobars).
1.2.3 Winds always blow from an area of (1.2.3 (a) low / high) pressure to an area of (1.2.3 (b) high / low) pressure.
1.2.4 The isobaric interval depicted in figure 1.2 is (four / eight) hectopascals.
1.2.5 Air that subsides on the surface of the earth creates a high pressure, and so (convergence / divergence) takes place.

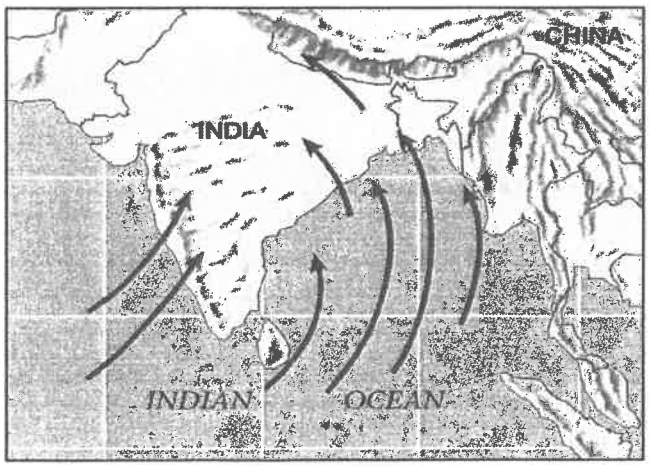
[5x1=5]

TOTAL QUESTION ONE : 10 MARKS

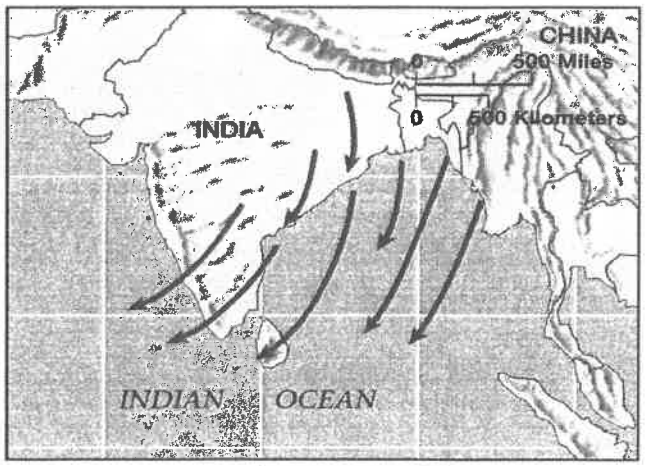
SECTION B: MONSOONS, DESERTIFICATION, SYNOPTIC MAPS

QUESTION TWO:

2.1. Refer to the diagrams labelled A and B below and read the extract on Monsoons over India on page 3 and answer the questions that follow:



A



B

MONSOONS IN SRI LANKA

Sri Lanka lies 400 miles north of the equator and is affected by two monsoon seasons caused by the winds originating from the Indian Ocean and the Bay of Bengal. The monsoon weather patterns in Sri Lanka ensure that some coastal waters are always in season for swimming, snorkeling, and diving. Due to climate change, monsoon season has become increasingly erratic over the past several years, with long stretches of drought followed by heavy rainfall that damages crops and threatens food security. Additionally, monsoons cause deadly flooding and landslides, which present additional obstacles for aid workers trying to provide recovery and health assistance in the aftermath of earthquakes. Food security, flooding and landslide events, triggered by monsoon season also pose multiple health issues.

Sri Lankan farmers depend on the regularity of monsoon season to produce the requisite level of crops to ensure food security. Too much rain floods the crops, while too little rain delays the harvest. Those who successfully planted crops are concerned about the risks of monsoon season. Farmers worry that rainstorms may trigger the collapse of unstable terraces, precipitating landslides, destroying crops and causing more deaths. Monsoon season further threatens crop sustainability, thereby jeopardizing food security and public health.

www.monsoon casestudy

2.2.1 Define the term "**monsoon**". (1x2=2)

2.2.2 Which diagram represents:

2.2.1 Summer monsoon (1X1=1)

2.2.2 Winter monsoon (1X1=1)

2.2.3 State 2 economic problems that will be experienced during the summer monsoons. (1x2=2)

2.2.4 Tabulate 2 ***positive*** and 2 ***negative*** effects of Monsoons on the people of Sri Lanka. (2+2=4)

[10]

2.3 Read the case study below and answer the questions that follow:

Case Study: Sahel Desertification

Desertification: is severe in Sudan, Chad, Senegal and Burkina Faso, it is the changing of semi-arid (dry) areas into desert.

What are the causes:

Over-cultivation: the land is continually used for crops and does not have time to recover eventually all the nutrients are depleted (taken out) and the ground eventually turns to dust.

Overgrazing: In some areas animals have eaten all the vegetation leaving bare soil.

Deforestation: Cutting down trees leaves soil open to erosion by wind and rain.

Climate Change: Decrease in rainfall and rise in temperatures causes vegetation to die.

What is being done to solve the problem?

Over the past twelve years Oxfam has worked with local villagers in Yatenga (Burkina Faso) training them in the process of BUNDING. This is building lines of stones across a slope to stop water and soil running away. This method preserves the topsoil and has improved farming and food production in the village.

Burkina Faso – desertification

The Sahel region south of the Sahara is at risk of becoming desert. Elders in a village in Burkina Faso describe how the area has changed from a fertile area to a drought-prone near-desert. The area experiences a dry season which can last up to eight or nine months. During this time rivers dry up and people, animals and crops are jeopardised.

2.3.1 Define the term "***desertification***". (1x1=1)

2.3.2 List **ONE** cause of desertification mentioned in the article. (1x1=1)

2.3.3 Describe **ONE** negative effect of desertification on the environment. (1x1=1)

2.3.4 Write a short paragraph of approximately 8 lines in which you explain sustainable strategies that can be implemented to manage desertification. (4x2=8)

[11]

2.4 Study the Synoptic map on page 6 and answer the questions that follow:

2.4.1 Is the map a typical summer or winter map? Provide a reason for your answer. (1+1=2)

2.4.2 Provide labels for: (3x1=3)

a) High pressure cell labelled B
b) Low pressure cell labelled C
c) Low pressure cell labelled F

2.4.3 In a short paragraph of about 6 six lines, explain how front labelled **A** will influence the weather of Cape Town if it had to pass through it ? (4x1=4)

[9]

TOTAL QUESTION TWO : 30 MARKS

TOTAL MARKS: 40 MARKS

"Geography explains the past, illuminates the present and prepares us for the future. What could be more important than that?"
Michael Palin 2007

SYNOPTIC MAP