

PRESENTATION COLLEGE SAN FERNANDO

FORM 4

GEOGRAPHY-SCHEME OF WORK (2016-2017)

TERM I(15 weeks)- MAPWORK

WEEK	TOPIC	CONTENT
1	<ul style="list-style-type: none">• Introduction• 4&6 figure Grid References	<ul style="list-style-type: none">• Term Outline• Introduction- Types of maps• Essential elements of maps• Locating places using 4 & 6 figure grid references
2	*4&6 figure grid references (continued)	<ul style="list-style-type: none">• Additional practice/worksheets- 4&6 figure grid references
3	* Compass direction * Grid bearings	<ul style="list-style-type: none">• Stating the direction of one place from another• Stating the direction as a bearing from one place to another-measured clockwise from Grid North
4	<ul style="list-style-type: none">• Map scales	<ul style="list-style-type: none">• Measuring straight and curved distances (to nearest 100 metres)• Using the linear scale, representative scale and statement scale• Copying, reducing or enlarging topographic maps guided by the map scale.
5	<ul style="list-style-type: none">• Contour lines• Cross sections	<ul style="list-style-type: none">• Introduction to contour lines on a topographic map and how they are used to draw cross sections of the map.• Profile view of the landscape and relief and whether or not one point can be seen from another.
6	<ul style="list-style-type: none">• TEST #1• Calculating gradient on topographic maps	<ul style="list-style-type: none">• Formula for calculating gradient (using ratios and %)• Variations in slope-steep, moderate, gentle.
7	<ul style="list-style-type: none">• Landscape descriptions• Relief	<ul style="list-style-type: none">• The distribution, height and size of landforms; types of slopes(concave, convex, straight, terraced/stepped); nature and height of slopes(steepest, gentle, undulating, uneven); spurs, valleys, plains, depressions, ridges, plateaux, escarpments, cliffs, passes(cols, saddles)
8	<ul style="list-style-type: none">• Drainage• Land Use	-drainage patterns, density, direction of flow, quality of the drainage, shape and size of the channel. - vegetation, agriculture, industry transport networks and
9	<ul style="list-style-type: none">• Land Use (continued)• Landscape inter-relationship	- settlement form and distribution. <ul style="list-style-type: none">• Landscape inter-relationship and patterns (map correlations); the association among relief, land use patterns and drainage.
10	<ul style="list-style-type: none">• Review of Location & Time	<ul style="list-style-type: none">• Latitude, longitude, earth's rotation, longitude and time, Caribbean countries, sketch maps.
11	* Review of Tables, Graphs, Maps and Central Tendency	* Construction of tables, bar graphs, line graphs, divided circles, climate graphs dot maps * Measures of central Tendency- mean, median, mode * Interpretation of data on charts, tables, bar graphs, population pyramids, line graphs, climate graphs, divided circles, dot maps, choropleth maps and isopleth maps.
12	<ul style="list-style-type: none">• Review of Term 1	<ul style="list-style-type: none">• Review and Preparation for End of Term Exams

TERM II(13 weeks)- THE COASTAL ENVIRONMENT & THE LIMESTONE ENVIRONMENT

WEEK	TOPIC	CONTENT
1	<ul style="list-style-type: none"> • Review end of term test paper • Introduction • Waves 	<ul style="list-style-type: none"> • Introduction to the coastal environment • Features of waves- crest, trough, wave length, wave height, fetch • Types of waves & Characteristics of constructive & destructive waves
2	<ul style="list-style-type: none"> • Waves (continued) • Coastal erosion processes 	<ul style="list-style-type: none"> • Factors determining size & energy of waves • How waves break • Coastal erosion processes- hydraulic action, abrasion, solution & attrition
3	<ul style="list-style-type: none"> • Transportation and deposition • Coastal erosion landforms 	<ul style="list-style-type: none"> • How waves transport and deposit eroded material • Definition and explanation of longshore drift • Groynes • Landforms of coastal erosion- cliffs, wave-cut platforms
4	<ul style="list-style-type: none"> • Coastal erosion landforms (continued) 	<ul style="list-style-type: none"> • Landforms of coastal erosion- caves, arches, stacks, stumps, bays & headlands
5	<ul style="list-style-type: none"> • TEST #1 • Landforms of coastal deposition 	<ul style="list-style-type: none"> • Landforms of coastal deposition- beaches, spits, tombolos, bay-bars
6	<ul style="list-style-type: none"> • Coral Reefs 	<ul style="list-style-type: none"> • Types of coral reefs- fringing, barrier and atoll • Conditions for coral reef growth • Importance of coral reefs • Factors causing damage to coral reefs • Consequences of coral reef destruction
7	<ul style="list-style-type: none"> • Mangrove Wetlands 	<ul style="list-style-type: none"> • Importance of mangrove wetlands in the Caribbean
8	<ul style="list-style-type: none"> • Limestone 	<ul style="list-style-type: none"> * Characteristics of limestone • Processes occurring in limestone areas- carbonation & evaporation & deposition
9	<ul style="list-style-type: none"> • Limestone (continued) 	<ul style="list-style-type: none"> • Formation of surface landforms- sinkholes, clints, grykes, etc. • Formation of underground landforms- caves, stalactities, stalagmites, pillars, underground rivers
10	<ul style="list-style-type: none"> • Review 	<ul style="list-style-type: none"> • Review all topics for end of term exam

TERM III (11 weeks)- WEATHER, CLIMATE, VEGETATION & SOIL

WEEK	TOPIC	CONTENT
1	<ul style="list-style-type: none"> • Review end of term test paper • Introduction • Factors influencing weather and climate 	<ul style="list-style-type: none"> • Difference between weather and climate • Latitude, Altitude, Relief
2	<ul style="list-style-type: none"> • Factors influencing weather and climate (continued) 	<ul style="list-style-type: none"> • Distance from the sea(continentality) and winds(land and sea breezes and prevailing winds)
3 4	<ul style="list-style-type: none"> • Rainfall and temperature graphs and maps • Caribbean weather systems • Caribbean weather systems(continued) 	<ul style="list-style-type: none"> * Range, seasons, relationship between temperature and rainfall\. * Weather conditions associated with tropical waves, ITCZ, cold fronts anticyclones (Before, During and After) • Hurricanes- origin and development • Conditions for hurricane formation • Cross section of a hurricane • The structure of a hurricane • Weather conditions associated with hurricanes(Before, During, After) • Saffir-Simpson Scale • Preparing for hurricane * Caribbean weather systems- pattern of isobars; relevant symbols and wind direction for each.
5	<ul style="list-style-type: none"> • Equatorial & Tropical Marine climates • Vegetation 	<ul style="list-style-type: none"> • Characteristics of Equatorial and Tropical Marine climates- temperature, precipitation, pressure. • Adaptations of vegetation to the environmental factors of climate, soil, biotic conditions(including humans)
6	<ul style="list-style-type: none"> • Vegetation (continued) 	<ul style="list-style-type: none"> • The inter-relationship among climate, vegetation and soil seen in the characteristics of the Tropical Rainforest biome: types of trees; types of leaves and roots; structure; species composition; seasonality. • Positive impacts (sustainable management) and negative impacts (deforestation, soil erosion, soil exhaustion) of human activities on tropical forests' biomes.
7	<ul style="list-style-type: none"> • Soil 	<ul style="list-style-type: none"> • Major constituents of soil: organic and inorganic matter, bacteria, water and air. • Factors influencing the formation of Latosols : interaction amongst climate, vegetation, biota and water in soil.
<u>Project</u>	<ul style="list-style-type: none"> • Greenhouse Effect • Global Warming 	<ul style="list-style-type: none"> * Insolation, radiation and the role of greenhouse gases in heating the earth. • Human activities that contribute to global warming and influence climate change(deforestation)
8	<ul style="list-style-type: none"> • Climate Change 	<ul style="list-style-type: none"> • Examples of the consequences of climate change in the Caribbean and USA or UK e.g sea level rise-examples of increased incidence of coastal flooding, impacts on corals reefs, coastal wetlands and settlements; changes in weather patterns and their impacts. • Measures to reduce the effects of climate change in the Caribbean and USA or UK e.g mitigation measures including reduced emissions, sustainable forestry, education. • Review of Term's Work

