**Paper 1 – Physical Environment**

**Challenge of Natural Hazards**

1. Types of natural hazards and the different factors that affect risk
2. Tectonic plates
   1. Names
   2. Types
   3. Plate boundaries – processes and hazards at each of these
   4. Plate tectonic theory
3. Earthquakes and volcanoes
   1. Effects – primary and secondary
   2. Responses – immediate and long term
   3. CASE STUDY – One of a LIC and one of a HIC
   4. Why people live in areas at risk from tectonic hazards
   5. Management to reduce the risk – Monitoring, prediction, protection and planning
4. Weather hazards
   1. Global atmospheric circulation
   2. Characteristics and formation of tropical storms
   3. Effects – primary and secondary
   4. Responses – immediate and long term
   5. CASE STUDY – include impacts and management
   6. Management to reduce the risk – Monitoring, prediction, protection and planning
5. UK weather Hazards
   1. Types of hazards and impacts
   2. Is UK’s weather becoming more extreme?
   3. CASE STUDY – include impacts and management
6. Climate Change
   1. Types – long term, short term, current
   2. Evidence - long term, short term, current
   3. Causes - long term, short term, current – enhanced g-h effect
   4. Impacts and management of current global warming

**Ecosystems**

1. Ecosystems – abiotic, biotic and factors affecting
2. Global ecosystems – location and features of these biomes eg tropical rainforest
3. Tropical Rainforests
   1. Features – location, plants, soil, climate, animals, people
   2. Biodiversity
   3. Plant and animal adaptations
   4. Deforestation – rate, causes, impacts, management, case study –
4. Hot Deserts
   1. Features – location, plants, soil, climate, animals, people
   2. Opportunities for development – tourism, mineral extraction, energy, farming
   3. Challenges for development – Extreme temperatures, water supply, accessibility case study -
   4. Desertification – what is it, causes, impacts, management

**River Landscapes**

1. Upper, middle and lower course
   1. Characteristics of channel and valley
   2. Explanation
2. Processes
   1. Erosion – hydraulic action, abrasion, attrition and solution
   2. Transportation – traction, saltation, suspension and solution (how and what)
   3. Deposition – why?
3. Formation of landforms
   1. Meander – river cliff and slip off slope (be able to draw a x-section
   2. Ox-bow lake
   3. Waterfalls and gorges
   4. Floodplains and levees
4. Hydrograph – what does it show and key terms.
5. Factors affecting discharge – rainfall, temperature, previous weather, rock type, land use and relief.
6. Flooding
   1. Human and physical factors that contribute to flooding – CASE STUDY - Carlisle
   2. Flood management –
      1. §  Hard
      2. §  Soft
   3. Case study – Boscastle – Causes, impacts and management and +/- of management

**Glacial Landscapes**

1. Ice coverage during the last glacial
2. Erosional processes and landforms
   1. Plucking, abrasion, freeze thaw action
   2. Corrie, pyramidal peak, arête, glacial trough, ribbon lake, hanging valley, truncated spur, striations
   3. For each landform be able to describe, explain its formation, recognise in a picture and spot on an OS map (exc striations)
3. Transport
   1. Pro, sub, en and supra glacial
   2. Know where these are on a glacier and how they got there
4. Depositional landforms
   1. Lateral, medial, terminal, recessional, push and ground moraine
   2. Know where these occur in a valley and how they are formed
   3. Drumlin and eratic – describe and explain formation
   4. Characteristics of the sediment that makes up depositional landforms
5. Land use in glacial landscapes
   1. Farming, forestry, quarrying, tourism
   2. Know how glacial landscapes are used and the conflicts that these uses may cause.
   3. CASE STUDY – Tourism in the Lake district – Why people visit, impacts and management of tourism and the impacts.

**Paper 2 –**

**Urban issues and challenges**

1. Urbanisation –
   1. What is it?
   2. how does it differ between LIC’s and HIC’s?
   3. What are the factors (push and pull) that affect and how do the differ between LIC’s and HIC’s?
   4. What is a mega city?
2. Opportunities and challenges of urban growth in a LIC/NEE. **CASE STUDY – MUMBAI**
   1. Location and importance of the city (regional, nationally and internationally)
   2. Causes of pop growth
   3. Opportunities – social and economic (eg education, employment, access to services…)
   4. Challenges – slums, environmental (waste, air, water pollution), social (health, crime, access to services, quality of housing) economic (employment – informal)
   5. Example of strategies to improve conditions in the slums
3. Opportunities and challenges of urban change in a UK city. **CASE STUDY – Bristol**
   1. Distribution of population and cities in the UK
   2. Location and importance of Bristol
   3. Impact of migration on the city
   4. How urban change has = opportunities
      1. Economic - Changing retail – out of town and CBD developments
      2. Social – development of the harbour side and the festival, improvement in sporting facilities
      3. Environmental – Urban greening and integrated transport scheme (also social)
   5. How urban change has = challenges
      1. Social/economic - Inequalities – Stoke Bishop and Filwood
      2. Environmental (also social) Housing – greenfield and brown field sites – link to urban sprawl
      3. Environmental - Derelict buildings
4. Urban Regeneration project – **CASE STUDY – SALFORD QUAYS**
   1. Reasons for regeneration
   2. Features of regeneration
5. Sustainable City – **CASE STUDY – Freiburg**
   1. Water and energy conservation
   2. Waste recycling
   3. Green space

**Changing Economic World**

1. Development gap
   1. Measuring development and the issues with these measures
   2. Demographic transition model
   3. Causes of uneven development – physical, economic and historical
   4. Impacts of uneven development
   5. Strategies to reduce the development gap – top down and bottom up
   6. CASE STUDY –Tourism reducing the development gap
2. CASE STUDY – Newly emerging Economy
   1. Global and regional importance of
   2. Increase of manufacturing and its impacts
   3. Growth of TNC’s and its impacts (include +/- of TNC’s)
   4. Changing political and trading relationships and its impacts
   5. Impacts of international aid
   6. Environmental impacts of economic development
   7. Impact of development on quality of life
3. Changes to the UK economy
   1. How has the UK economy changes (changes in % of people working in primary, secondary, tertiary and quaternary)
   2. Causes of economic change – de-industrialisation, globalisation, transport
   3. Post-industrial economy – increase in quaternary
      1. Science and business parks
   4. Impacts of industry on the environment
   5. Changes in rural landscapes
      1. Area of population growth of the +/-
      2. Area of population decline and the +/-
   6. Changes in UK’s infrastructure – roads, rail, ports and airports
      1. North-south divide – Extent, causes and strategies to address
   7. UK in the wider world – links to the rest of the world
      1. Trade, transport, culture, politics (Commonwealth), electronics (undersea cables)

Resource Management

1. Importance and global distribution of water, food and energy
2. Unevenness in supply and consumption globally
3. Food, energy and water in the UK
   1. Changing demand
   2. Impacts of exploitation/use
   3. Management of the issues
4. Water
   1. Global demand – rising demand and water insecurity
   2. Causes and impacts of insecurity
   3. Increasing water supply and sustainable use of water
   4. CASE STUDIES – small scale and large scale example

**Paper 3**

**Pre-release booklet**

See booklet

**Fieldwork**

You will be asked questions on the following –

1. Data collection techniques (primary and secondary)
2. Data analysis techniques (mode, mean, median, range, inter quartile range, %, % change)
3. Data presentation techniques
4. Interpretation of data