Mark Scheme Entrance 2018

1. **Tectonic Processes**
   (a) A – Crust, B – Mantle, C – Inner Core   (3 marks)

   (b) Constructive Boundary   (1 mark)

   (c) Ideas such as:
   Close to plate boundary / constructive plate boundary;
   Plates are moving away from each other / diverging / plates separate;
   Gap created;
   Magma can reach the surface etc.

   3 @ 1 mark

   (d) Ideas such as:
   Uneven/clustered/in belts;
   On/near plate boundaries/where plates meet;
   On destructive margins/where plates move towards each other; E.g. Pacific Ring of Fire/W.coast of Americas;
   On constructive margins/where plates move apart; e.g. mid Atlantic Ridge;
   Hot spots/few in middle of plate;

   4 @ 1 mark

   (e) Expect a range of environmental and human effects with place specific detail.   (9 marks)

2. **Coasts**
   a) Data must be used for two marks. (2 marks)

   b) Global warming. The main cause of this sea-level rise is the increase in average global temperatures over the last 130 years. (1 mark)

   c) Flood, higher storm surges, increased erosion, cliff collapse, loss of farmland, loss of property/housing. (2 marks)

   d) The most obvious way to solve the problem of future sea-level rise is to stop global warming.

   Coastal management: hard engineering techniques such as sea walls and tidal barriers like the Thames Barrier can be used, as well as soft engineering techniques to protect coastal towns and cities to some degree against sea-level rise.

   Building and planning regulations: planning offices can block developments in high-risk areas or can insist that buildings and infrastructure are built several metres above sea level

   Monitoring and prediction of potential coastal floods.

   (4 marks)

e) Wearing away/breaking down of land/cliffs by the sea/waves   (2 mark)

f) Attrition. Waves smash rocks and pebbles on the shore into each other, and they break and become smoother. (2 marks)

g) Ideas such as:
   hydraulic action; air in cracks compressed (dev);
   corrasion/abrasion; loose materials thrown at cliff by waves (dev);
   corrosion; rocks dissolved by chemicals in sea water (dev);

   undercutting; slumping/collapse;
   as cliff cannot take weight of overhanging section (dev) etc.

   Landforms: Cave, stack, stump diagram could be drawn.   (9 mark)

3. **Population and Settlement**

   a) Birth Rate = number of births per thousand of the population in a year. (2 marks)

   b) Natural Population growth = Change in population as a result of difference in number of births and deaths / birth rate minus death rate or births minus deaths. (2 marks)

   c) 12.1 – 9.4 (1st mark)
      = 2.7 (per 1000) (2nd mark)
      2 @ 1 mark

   d) The balance between immigration and emigration (net migration) (2 marks)

   e) Ideas such as:
      Poor quality/not enough housing/living spaces/need to invest more on housing;
      traffic congestion/need to improve road network;
      air pollution;
      water pollution;
      noise pollution etc.
      lack of/need to provide clean/reliable water supply;
      lack of/need to provide good sanitation/sewage disposal;
      lack of/need to provide electricity;
      problems associated with waste disposal;
      need for more public transport;
      unemployment/lack of work/need to create more work opportunities;
      specified crime (e.g. violence/robbery/theft)/need to maintain security/need to finance police force;
      increased pressure on hospitals/health services/need to invest more in health services;
      increased pressure on education/need to build more schools/colleges;

(f) Expect a variety of factors which early settlers considered when choosing sites for new settlements (7 marks)

4. Transport and Industry

(a) Secondary

(b) Primary

(c) Ideas such as:
• employment/jobs/earn money;
• so can people can buy better food/send their children to school/better housing;
• improved service provision or an example (healthcare; education)
• more money circulating in area/multiplier effect;
• development of transport network;
• development of infrastructure/electricity/water supply;
• can export/sell products from the factory
• Learn new skills; etc.

2 @ 1 mark [2]

(d) Ideas such as:
• atmospheric pollution/gases such as carbon dioxide/greenhouse gases;
• pollution of rivers/groundwater/water pollution;
• clearance of natural vegetation/plants are killed;
• loss of habitat;
• impact on fauna/animals die
• impact on ecosystems/food chains/nutrient cycle;
• global warming;
• noise disturbs animals; etc.

3 @ 1 mark

(e) Air or sea (1 mark)

(f) Ideas such as:
industries aim to keep transport costs as low as possible/decrease transport costs;
if raw materials are bulky/heavy/large amounts the factories will be located close to their source;
if power supplies (e.g. coal) are heavy/large amounts the factories will be located close to them (e.g. mines);
if finished products are bulky/heavy/large amounts the factories will be located close to market;
factories sometimes locate close to a cheap method of transport (e.g. rail, canal) to lower transport cost;
near to port for importing raw materials/ exporting goods.

4 @ 1 mark [4]

Expect a named example with developed reasons e.g. natural resources/raw materials, site, labour, power source, market, transport.   (8 marks)

Map Skills

POLAND

ETHIOPIA

PERU

HIMALAYAS

Mississppi

Q4: A = Seoul B= Kolkata

Q5: a) UK Map

B) Isle of Wight 0602
C) 061064
D) River Tyne
E) 06
F)