1(c)	**Explain why the sediment size in a river channel might vary at different locations.**	**5**
1(c)	**Explain <u>two</u> factors that affect the shape of a storm hydrograph.**	**5**
1(c)	**Suggest how the storm hydrograph for a drainage basin in a forested area would differ from that in an urban area.**	**5**
1(c)	**Explain <u>two</u> reasons why some extreme rainfall events do not result in river flooding.**	**4**
1(c)	**Explain <u>two</u> reasons for the variation of deposition along a river channel.**	**4**
1(c)	**Explain why, during a rain event, there could be more overland flow than infiltration.**	**5**
1(c)	**Explain why catchment flows change after urbanisation.**	**5**
1(c)	**Explain why channel flow may change over time.**	**4**
1(c)	**Explain why the size of sediment deposited varies along a river.**	**5**
1(c)	**Explain why the velocity needed to pick up particles varies with their size.**	**5**
4(a)(ii)	**Briefly explain the process of saltation within a river channel.**	**3**
4(a)(ii)	**Explain how the type of vegetation affects the shape of a storm hydrograph.**	**4**
4(a)(ii)	**Briefly explain how river bluffs are formed.**	**3**
4(b)	**Describe and explain how soft engineering and hard engineering can be used to prevent river floods.**	**8**
4(b)	**Explain the effects of land use change on catchment flows and catchment stores.**	**8**
4(b)	**Explain how <u>two</u> drainage basin characteristics can influence the shape of a storm hydrograph.**	**8**
4(b)	**Explain how water stores in a drainage basin system are affected by changes in land use.**	**8**
4(b)	**Explain how river erosion can lead to the formation of waterfalls.**	**8**
4(b)	**Explain the relationship between riffle and pool sequences in meandering river channels.**	**8**

4(b)	**Describe and explain how the landforms of a braided river channel differ from those of a meandering river channel.**	**8**
4(b)	**Explain how the shape of a storm hydrograph is influenced by precipitation type and intensity.**	**8**
4(b)	**Explain the formation of river cliffs and point bars in a meandering river channel.**	**8**
4(b)	**Explain how a river flood can impact people.**	**8**
4(b)	**Describe and explain the formation of braided river channel landforms.**	**8**
4(b)	**Describe and explain different patterns of flow within a river channel.**	**8**
4(b)	**Explain how catchment flows and stores are affected by urbanisation.**	**8**
4(b)	**Explain the formation of levées and floodplains.**	**8**
4(b)	**Explain the formation of floodplains and river bluffs.**	**8**
4(b)	**Describe and explain the formation of deltas.**	**8**
4(c)	**With the aid of examples, examine the extent to which hard engineering prevents river floods.**	**15**
4(c)	**'River flooding impacts the environment more than it impacts people.'** **With the aid of examples, how far do you agree?**	**15**
4(c)	**'River flooding impacts people more than it impacts the environment.' With the aid of examples, how far do you agree?**	**15**
4(c)	**With the aid of examples, examine the extent to which soft engineering prevents river floods.**	**15**
4(c)	**With the aid of examples, assess the extent to which drainage basin size and shape influence flood risk.**	**15**
4(c)	**With the aid of examples, discuss the view that velocity is the most important influence on sediment deposition in a river.**	**15**
4(c)	**'Urbanisation always results in an increase in channel flow.' With the aid of examples, how far do you agree?**	**15**
4(c)	**'The intensity of precipitation is the most significant influence on the shape of a storm hydrograph.'** **With the aid of examples, how far do you agree?**	**15**
4(c)	**With reference to a recent river flood event, explain the causes of the flood and evaluate attempts to reduce its impact.**	**15**

4(c)	**With the aid of examples, assess the extent to which river floods can be prevented.**	**15**
4(c)	**With the aid of examples, evaluate attempts to reduce the impact of river floods.**	**15**
4(c)	**With the aid of a case study of a recent river flood event, evaluate the impacts on both people and the environment.**	**15**
4(c)	**'The characteristics of the soil are the most significant influence on the shape of a storm hydrograph.'** **With the aid of examples, how far do you agree?**	**15**
4(c)	**'Soft engineering is more effective than hard engineering in the prevention of river floods.'** **With the aid of examples, how far do you agree?**	**15**
4(c)	**'Climate is the most important factor influencing flows and stores in a drainage basin system.'** **With the aid of examples, how far do you agree?**	**15**
4(c)	**With the aid of examples, assess the extent to which it is possible to reduce the impacts of river floods.**	**15**