Question 1

(a)		15
(i)	Each category inserted correctly for 3m each. Sedimentary = Limestone Metamorphic = Marble Igneous = Basalt	9
(ii)	Valid location for each rock type @ 2m each	6
(b)		12
(i)	Any valid example of a location stated for 2 marks. Valid statement on how rocks are being exploited at this location for 2 marks. N2 + EV2 = 4 marks Examples could include: Tara Mines where zinc and lead are dug underground, Irish Cement in Platin where there are limestone quarries, etc.	4
(ii)	Two impacts explained @ 4m each For each impact named 2m and explanation with one valid point (N2 + VP2) + (N2 + VP2) = 8 marks Examples of economic impacts could include: Jobs are created, improved roads in the area, etc. Examples of environmental impacts could include: Noise pollution, water pollution, harmful emissions produced from extraction, etc.	8

Question 2

(c)		26
(i)	Each feature labelled correctly for 3m each. **A** – Stalactite **B** – Stalagmite **C** – Pillar/column	9
(ii)	Any two valid surface features for 3m each Examples could include: Grikes, clints, swallow holes etc.	6
(iii)	Chemical	3
(iv)	Explanation of the process of carbonation with 4 valid points VP2 + VP2 + VP2 + VP2 = 8	8

Question 3

Question 2

		52 marks
(a)		9
(i)	Estuary	3
(ii)	Meander	3
(iii)	Longshore drift	3
(b)		21
(i)	Any valid river	3
(ii)	Any two features formed by deposition (3 + 3) Features named could include: Delta, levee, flood plain, meander, ox-box lake etc.	6
(iii)	Explanation with 5 valid points @ 2m each Labelled diagram (1m if no labels) = 2m VP2 + VP2 + VP2 + VP2 + VP2 + Dg2 = 12 marks	12

Question 4

Question 1

		32 marks
(a)		
(i)	Quartzite	3
(ii)	Limestone	3
(iii)	Granite	3

Question 5

(b)		
(i)	100,000	3
(ii)	Impact named and one valid point of description N3 + VP3 = 6 marks Impacts could include: Loss of income etc.	6
(iii)	Valid process named = 2m 5 Valid Points = 10m Labelled diagram (1 m if no labels) = 2m N2 + VP2 + VP2 + VP2 + VP2 + VP2 + Dg2 = 14 marks Processes could include: Freeze thaw action (frost weathering), onion weathering, etc.	14

Question 6

Question 4

		38 marks
(a)		
(i)	False	3
(ii)	False	3
(iii)	True	3
(iv)	False	3
(b)		
(i)	Ireland	3
(ii)	(US$) 1,238 Unit not required	3
(iii)	25.6 (per 1,000) Per 1,000 not required for full marks	5
(c)		
(i)	130	3
(ii)	Development aid	3
(iii)	4 valid points @ VP3 + VP2 + VP2 + VP2 = 9 marks If both answered, mark both and award highest.	9

Question 7

Question 5

			26 marks
(a)		D A ~~C~~ B	2 2 - 2
(b)		N3 + VP3 + VP2 + VP2 + Dg2 *Accept valid features of erosion only.* *One VP reserved for a named process of glacial erosion. [Plucking, Abrasion, Freeze-thaw action]*	12
(c)		N2 + VP2 + VP2 + VP2 *Increase in temperature, human activity, etc.*	8

Question 8

Question 6

			30 marks
(a)	(i)	~~3~~ 1 4 2	- 2 2 2
	(ii)	Named type of weathering: Physical, Chemical, Biological	3
(b)		VP2 + VP2 + VP2 *Climate: rate of weathering depends on temperature and precipitation* *Vegetation: creates plant litter which breaks down to form humus* *Parent Material: weathered rock provides minerals and nutrients*	6
(c)	(i)	A third	3
	(ii)	Intensive agriculture Industrial activity	2 2
	(iii)	N3 + VP3 + VP2 Soil is no longer fertile, crop failure, famine	8

Question 9

(a)		8
	Inner core **B** Crust **A** Outer core **C** Mantle **D**	2 2 2 2

Question 10

(b)		25
(i)	Dormant volcano	3
(ii)	Explanation of formation of a volcano @ 12m. Labelled diagram 2m (1m if no labels). Explanation with 6 valid points @ 2m each VP2 + VP2 + VP2 + VP2 + VP2 + VP2 + DG2 =14m	14
(iii)	Impact of volcanic activity named 2m Discussion with two valid points @ 2m and example 2m N2 + VP2 + VP2 + EV2 = 8 marks Impacts of volcanic activity could include: Geothermal energy, increased fertility of soils, destruction of property, etc. Examples can be specific volcanoes or locations that have experienced volcanic activity including: Mt Etna, Iceland, Hawaii, Mt St Helens, etc.	8

Question 11

(a)		
(i)	Beach = C Factory = A House = B	2 2 2
(ii)	Supermarket = Commercial Factory = Industrial House = Residential	2 2 2
(iii)	Background	3
(iv)	Religious (also accept ecclesiastical)	3

Question 12

(b)		
(i)	A3	3
(ii)	One reason named with one piece of evidence and two valid points of explanation @ 8 marks N2 + EV2 + VP2 + VP2 Reasons could include: Close to the town, workforce living nearby, good road network, etc.	8

Question 13

(c)		
	Valid town or city named = N2 Reference to change and three valid points of explanation Ref2 + VP2 + VP2 + VP2 References to change could include: Functions in the past no longer present, urban sprawl, urban decline, etc.	10

Question 14

Question 8

		49 marks
(a)		
(i)	Eurasian	3
(ii)	Crust	3
(iii)	Two valid plates named @ 6Marks	6
(iv)	Two valid landforms @ 3m each For example volcano, mid ocean ridge, earthquake etc.	6

Question 15

(b)		
(i)	Valid mountain range outside of Ireland Examples could include: The Alps, the Andes, the Pennines etc.	3
(ii)	Each item correctly shown and labelled on diagram for 8m total Show = 1m Labelled = 1m	8

Question 16

(c)		
(i)	Three items correctly drawn on chart @ 2/1/0 marks	6
(ii)	9.1	3
(iii)	Seismograph / seismometer	3
(iv)	Way to reduce impact named and two valid points N3 + VP3 + VP2 = 8 marks Examples could include: Using shock absorbers in foundations, using fire resistant building materials etc.	8