PAPER 3 – Geographical Skills

Geographical Skills will be assessed in all three written exams. Ordnance Survey (OS) maps or other map extracts may be used in any of the three exams. They include the following:

Cartographic skills

Cartographic skills relating to a variety of maps at different scales.

Atlas maps:

I AM ABLE TO…	Topic
use and understand coordinates – latitude and longitude	
recognise and describe distributions and patterns of both human and physical features	
maps based on global and other scales may be used and students may be asked to identify and describe significant features of the physical and human landscape on them, eg population distribution, population movements, transport networks, settlement layout, relief and drainage	
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Ordnance Survey maps:

I AM ABLE TO…	Topic
use and interpret OS maps at a range of scales, including 1:50 000 and 1:25 000 and other maps appropriate to the topic	
use and understand coordinates – four and six-figure grid references	
use and understand scale, distance and direction – measure straight and curved line distances using a variety of scales	
use and understand gradient, contour and spot height	
numerical and statistical information	
identify basic landscape features and describe their characteristics from map evidence	
•• identify major relief features on maps and relate cross-sectional drawings to relief features	

draw inferences about the physical and human landscape by interpretation of map evidence, including patterns of relief, drainage, settlement, communication and land-use	
interpret cross sections and transects of physical and human landscapes	
describe the physical features as they are shown on large scale maps of two of the following landscapes – coastlines, fluvial and glacial landscapes	
infer human activity from map evidence, including tourism.	

Maps in association with photographs:

I AM ABLE TO…	**Topic**
be able to compare maps	
sketch maps: draw, label, understand and interpret	
photographs: use and interpret ground, aerial and satellite photographs	
describe human and physical landscapes (landforms, natural vegetation, land-use and settlement) and geographical phenomena from photographs	
draw sketches from photographs	
label and annotate diagrams, maps, graphs, sketches and photographs.	

Graphical skills

I AM ABLE TO…	**Topic**
select and construct appropriate graphs and charts to present data, using appropriate scales –	
Line charts	
Bar charts	
Pie charts	
Pictograms	
Histograms with equal class intervals	
Divided bar	
Scatter graphs	
Population pyramids	
suggest an appropriate form of graphical representation for the data provided	
complete a variety of graphs and maps –	
Choropleth	
Isoline	
Dot maps	

Desire lines	
Proportional symbols	
Flow lines	
use and understand gradient, contour and value on isoline maps	
plot information on graphs when axes and scales are provided	
interpret and extract information from different types of maps, graphs and charts, including population pyramids, choropleth maps, flow-line maps, dispersion graphs.	

Numerical skills

I AM ABLE TO…	**Topic**
demonstrate an understanding of number, area and scales, and the quantitative relationships between units	
design fieldwork data collection sheets and collect data with an understanding of accuracy, sample size and procedures, control groups and reliability	
understand and correctly use proportion and ratio, magnitude and frequency	
draw informed conclusions from numerical data.	

Statistical skills

I AM ABLE TO…	**Topic**
use appropriate measures of central tendency, spread and cumulative frequency:	
Median	
Mean	
Range	
Quartiles	
Inter-quartile range	
Mode	
Modal class	
calculate percentage increase or decrease and understand the use of percentiles	
Describe relationships in bivariate data:	
Sketch trend lines through scatter plots	
Draw estimate lines of best fit	
Make predictions	
Interpolate trends (insert information)	
Extrapolate trends (predict, extend from a graph etc)	
be able to identify weaknesses in selective statistical presentation of data.	

Use of qualitative and quantitative data

Use of qualitative and quantitative data from both primary and secondary sources to obtain, illustrate, communicate, interpret, analyse and evaluate geographical information.

Examples of types of data:

I AM ABLE TO…	**Topic**
maps	
fieldwork data	
geo-spatial data presented in a geographical information system (GIS) framework	
satellite imagery	
written and digital sources	
visual and graphical sources	
numerical and statistical information.	

Formulate enquiry and argument

Students should demonstrate the ability to:

I AM ABLE TO…	**Topic**
identify questions and sequences of enquiry	
write descriptively, analytically and critically	
communicate their ideas effectively	
develop an extended written argument	
draw well-evidenced and informed conclusions about geographical questions and issues.	