Section B – Photogrammetry-Answer only one question from this section

Question 3 (5+12+8)

a. Define the following terms: (2+2+1)

i. Vertical photograph
ii. Low oblique photograph
iii. High oblique photograph

b. Points A and B are at elevations 223 m and 162 m above datum respectively. The photographic coordinates of their images on a vertical photograph are

	X (mm)	Y (mm)
A	-52.35	-48.27
B	40.64	43.88

What is the horizontal length of the line AB if the photo was taken from a height of 1510m above datum with a 152.4mm focal length camera?

c. Mention and describe any four products of aerial photogrammetry.

Question 4 (3+5+4+5+3+5)

a. Name three major components of an aerial camera. (3)

b. Aerial photos of a project area were taken at scale 1:24,000 with a 153mm focal length camera. The end lap was 65% while the side lap was 30%.

Calculate:

(i) The flying height of the place was 1584m above mean sea level,

(ii) Ground dimensions covered by a 230mm by 230 mm picturdformat.

(iii) The ground spacing between exposure stations,

(iv) The ground spacing between the flight lines,

(v) The total ground area expressed in hectares covered by a pair of overlapping photographs.