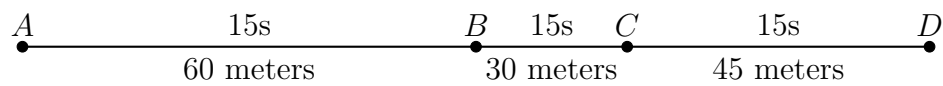


[**N.B.** – The figures of the right margin indicate full marks. Read the stems carefully and answer the associated questions. Answer all the questions.]

1. **A vehicle moves along the path ABCD, covering each segment at a uniform velocity.**



- |   |   |
|---|---|
| (a) What is the formula of harmonic mean?   | 1 |
| (b) When should we use the harmonic mean?   | 2 |
| (c) Find the average velocity of the vehicle.   | 3 |
| (d) Compare the average speed estimated using the arithmetic and harmonic mean and verify their suitability in the given situation. | 4 |

— AAM —