## K Edication Centre

## GCSE Maths - Higher

Statistics : Sampling and more complex diagrams -1

Assignment Questions
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Q1 : Thomas record the time taken in hours and the average speed in mph , for several different journeys.

| Time (h) | 0.5 | 0.8 | 1.1 | 1.3 | 1.6 | 1.75 | 2 | 2.4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Speed(mph) | 42 | 38 | 27 | 30 | 22 | 23 | 21 | 9 |

a) Draw the line of best fit
b) Estimate the average speed for a journey of 90 minutes.

Q2: Give examples of negative, positive and no correlation.
Q3: Give steps for testing a hypothesis.
Q4: You are going to conduct a survey among an audience of 50,000 people at a football match. How would you choose the sample.

Q5 : A manager wants to conduct survey on employee motivation among all the employees. Table shows number of employees in four groups.

|  | Male | Female | Total |
| :--- | :--- | :--- | :--- |
| Full- Time | 142 | 158 | 300 |
| Part - time | 108 | 92 | 200 |
|  |  |  | 400 |

He wants to sample 40 employees, using the same proportion from each group. Complete a table to show sample of employees in the sample.

