## K Edacation Centre

## GCSE Maths - Higher

Statistics : Sampling and more complex diagrams -2

Assignment Questions
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Year 2022

Q1 : Table shows how many people were present in seminar during winter term .

| Number of <br> people attending | $1-3$ | $4-6$ | $7-9$ | $10-12$ |
| :--- | :---: | :---: | :---: | :---: |
| Frequency | 16 | 10 | 6 | 2 |

a) Draw frequency polygon for above table.
b) Calculate the estimated mean number of people attending the seminar.

Q2: Following is the data of patients waiting time in a hospital during weekends.

| Time, m <br> (minutes) | $0<\mathrm{m} \leq 10$ | $10<\mathrm{m} \leq 20$ | $20<\mathrm{m} \leq 30$ | $30<\mathrm{m} \leq 40$ | $40<\mathrm{m} \leq 50$ | $50<\mathrm{m} \leq 60$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Saturday | 5 | 8 | 17 | 9 | 7 | 4 |
| Sunday | 9 | 8 | 16 | 3 | 2 | 1 |

a) On the same pair of axes, draw frequency polygon for above data.
b) What is average amount of time spent during each day.

Q3: 48 people went on a coach trip to a sea side. The grouped frequency table shows the information about their ages.

| Age, $a$ (years) | Frequency |
| :---: | :---: |
| $0<a \leq 10$ | 4 |
| $10<a \leq 20$ | 6 |
| $20<a \leq 30$ | 10 |
| $30<a \leq 40$ | 22 |
| $40<a \leq 50$ | 4 |
| $50<a \leq 60$ | 2 |

a) Draw a cumulative frequency graph
b) Use your graph to estimate median age
c) Use your graph to estimate interquartile range.

