**Written Test Set D**

**Section A**

|  |  |
| --- | --- |
| Question | Answer |
| A1 | A |
| A2 | B |
| A3 | D |
| A4 | B |
| A5 | D |
| A6 | C |
| A7 | A |
| A8 | C |
| A9 | D |
| A10 | B |

**B1 Solution**

Error rate of 5% mean 95% of the product must be within +/-0.1m **- 0.5 mark**

Require distance measured to be within tolerance 95% of the time, the accuracy is from 199.9m to 200.1m **- 1 mark**

Process1: 95% of the time, the accuracy will be from 198m to 204m **- 0.5 mark**

Process 2: 95% of the time, the accuracy will be from 198m to 200m **- 0.5 mark**

Process 3: 95% of the time, the accuracy will be from 198.9 to 199.14**- 0.5 mark**

Process 4: 95% of the time, the accuracy will be from 201.9m to 202.02m **- 0.5 mark**

NoProcess can meet the specification. **– 1.5 mark (only given if working is provided)**

**B2 Solution**

Total number of days =31 (1 mark)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Action | Highest 30min Rainfall (mm) | Wind speed (km/h) | Frequency | Probability |
| Stop all water sports | >=5 | >=15 | 13 (1 mark) | 0.419354839 (1 mark) |
| Stop all land sports | >=10 | >=30 | 3 (1 mark) | 0.096774194 (1 marks) |