

Coursework 1

Q1 and Q2 – There are mistakes in the formulae for the standard deviation of the limit state function.

Q4 - In the limit state function you cannot just multiply the weight of one person by 5. The weights of each person are independent random variables so the weight of 5 people should be represented by a random variable with mean = 5 x weight of a single person and standard deviation = $\sqrt{5}$ x standard deviation of a single person.

Coursework 2

Part 1

Q1 – The defect size was modelled incorrectly. It should be modelled by an extreme value distribution.

Q2 – In the formulation of the limit state function the influence of corrosion over 5 years (and not only the defect size) should be taken into account. A wrong form of the extreme value distribution is used for modelling the defect size.

Part 2

Q1 – The answer to the question is not properly explained.

Coursework feedback

Mungur Kumar Mungur, Reg. No 081415768 Grade A (97)

D2ISS

Coursework 1

There is just one mistake in Q4 – in the limit state function you cannot just multiply the weight of one person by 5. The weights of each person are independent random variables so the weight of 5 people should be represented by a random variable with mean = 5 x weight of a single person and standard deviation = $\sqrt{5}$ x standard deviation of a single person. The rest is correct.

Coursework 2

Part 1 – There are small mistakes in modelling the maximum defect size in Q1 and Q2.

Coursework 1

Q1 and Q2 – There are mistakes in the formulae for the standard deviation of the limit state function.

Q4 - In the limit state function you cannot just multiply the weight of one person by 5. The weights of each person are independent random variables so the weight of 5 people should be represented by a random variable with mean = 5 x weight of a single person and standard deviation = $\sqrt{5}$ x standard deviation of a single person.

Coursework 2

Part 1

Q1 – The defect size was modelled incorrectly. It should be modelled by an extreme value distribution.

Q2 – In the formulation of the limit state function the influence of corrosion over 5 years (and not only the defect size) should be taken into account. A wrong form of the extreme value distribution is used for modelling the defect size.

Part 2

Q1 – The answer to the question is not properly explained.

Q2 – Incorrect calculation of the final probability (the formula for numerical integration is incorrectly used).