DOS : Turbulent wind excitation

Number of participants: 0

1. Assuming that the wind model is a stationnary gaussian process, it is characterized by

0 correct answer
out of 0 respondent

✓	A mean and a standard deviation	0%	0 votes
✓	A mean and a power spectral density	0%	0 votes
	A probability density function	0%	0 votes

2. The standard deviation can be obtained knowing

0 correct answer
out of 0 respondent

	The mean value	0%	0 votes
✓	The PSD	0%	0 votes
	Both the mean value and the PSD	0%	0 votes

3. A wind spectrum is given as a function of

0 correct answer
out of 0 respondent

	An intensity factor	0%	0 votes
✓	A non-dimensional frequency	0%	0 votes
	The maximum value of the wind speed	0%	0 votes

4. The turbulence is

0 correct answer
out of 0 respondent

✓	constant with the height	0%	0 votes
	decreasing with the height	0%	0 votes
	increasing with the height	0%	0 votes

5. The mean velocity

0 correct answer
out of 0 respondent

✓	increases with the height	0%	0 votes
	decreases with the height	0%	0 votes
	is constant with the height	0%	0 votes

6. The aerodynamic admittance is a factor which

0 correct answer
out of 0 respondent

	represents the dynamic flexibility of an object	0%	0 votes
✓	represents the total aerodynamic force acting on an object	0%	0 votes
✓	is larger for small objects	0%	0 votes

7. The dynamic force acting on an object due to turbulent flow requires to have access to

0 correct answer
out of 0 respondent

	The PSD of the wind	0%	0 votes
	The aerodynamic admittance of the object	0%	0 votes
	An aeroelastic model (quasi-steady)	0%	0 votes
✓	All of the above	0%	0 votes