

## Analysis of final exam Quantum Physics 1 of 28 Nov. 2013

Analysis by skills

Third you by skills																		
_	1a	ıb	1c	ıd	1e	2a	2b	2c	2d	за	зb	зс	3d	зе	4a	4b	4c	4d
Use concepts in a		X	X			X	X	X							X	X		X
discussion / essay.							X											
Calculate	X			X	X	X			X	X	X	X	X	X	X	X		X
quantities																		
Estimate								X									X	
quantities																		
Evaluate answers								X								X		X

Note: students are trained and informed that they can earn points on questions adding comments about evaluating the answer.

Analysis by knowledge (main themes)

Analysis by knowledge (main themes)																		
	1a	ıb	1c	ıd	1e	2a	2b	2c	2d	за	3b	3c	3d	зе	4a	4b	4c	4d
Eigenvalue	X					X	X				X				X	X		
equation,																		
eigenvalues,																		
states																		
Representations,	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
Dirac notation,																		
<i>x</i> -to- <i>p</i> Fourier																		
transform																		
Expectation		X	X	X	X							X	X				X	
values, quantum																		
uncertainties																		
Time evolution					X									X				
Quantum							X	X	X						X	X	X	X
measurement																		
Wave mechanics,	X	X	X			X	X	X	X									
tunneling, particle																		
in one dimension																		
Spin and angular										X	X	X	X	X	X	X	X	X
momentum, incl.																		
matrix notation																		