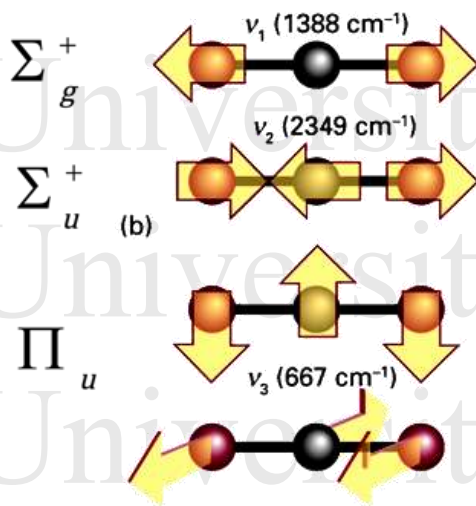


فعالیت IR و Raman را در مولکول CO₂ تعیین نمایید.

CO₂: D_{∞h}

	D _{∞h}	E	2C _∞ ^φ	...	∞σ _v	i	2S _∞ ^φ	...	∞C ₂	
Σ_g^+	1	1	1	...	1	1	1	...	1	$x^2 + y^2, z^2$
Σ_g^-	1	1	1	...	-1	1	1	...	-1	R _z
Π_g	2	2 cos φ	2 cos φ	...	0	2	-2 cos φ	...	0	(R _x , R _y) (xz, yz)
Δ_g	2	2 cos 2φ	2 cos 2φ	...	0	2	2 cos 2φ	...	0	(x ² - y ² , 2xy)
...
Σ_u^+	1	1	1	...	1	-1	-1	...	-1	z
Σ_u^-	1	1	1	...	-1	-1	-1	...	1	
Π_u	2	2 cos φ	2 cos φ	...	0	-2	2 cos φ	...	0	(x, y)
Δ_u	2	2 cos 2φ	2 cos 2φ	...	0	-2	-2 cos 2φ	...	0	
...



IR Inactive	Raman Active
IR Active	Raman Inactive
IR Active	Raman Inactive