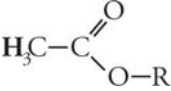
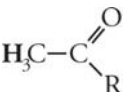
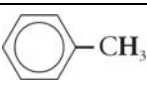
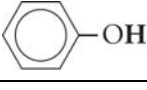
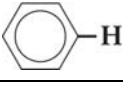
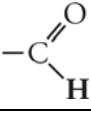
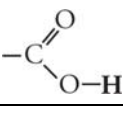
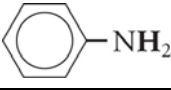
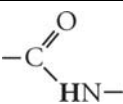


Data sheet 6

Typical proton chemical shift values relative to TMS = 0

Type of proton	Chemical shift / ppm
R-CH ₃	0.9
R-CH ₂ -R	1.3
R ₃ CH	1.4–1.7
	2.0
	2.1
	2.3
R-C≡C-H	1.8–3.1
R-CH ₂ -Hal	3.2–3.7
R-O-CH ₃	3.3–4.0
R-O-H	0.5–6.0*
R ₂ C=CH-	4.5–6.0
	4.5–7.0*
	6.0–9.0
	9.0–10.0
	9.0–13.0*
R-NH ₂	1.0–5.0*
	3.0–6.0*
	5.0–12.0*

*Sensitive to solvent, concentration.