

© Diethyl ketone (d) ethyl propanoate.

(11) Describe the laboratory preparation of acetoacetic ester. Write the mechanism of the reaction. Outline synthesis of following from acetoacetic ester (4+4+4x2)

(i) Succinic acid (ii) Chloroacetic acid

(iii) Acetyl acetone (iv) n-butyric acid

(12) Write short note on (any three) (5x3)

(a) Keto-enol tautomerism

(b) Spin-spin splitting and coupling constant.

(c) Organo lithium compound / Organo metallic compd.

(d) Sulphonamides.

(e) Alkylation of 1,3 dithianes (4+4+4x2)

(13) Describe the principle of NMR spectroscopy. Explain equivalent and non-equivalent proton with the help of suitable example. ~~Discuss~~ Discuss the PMR spectra of following molecule

(a) ethyl bromide (b) Benzaldehyde.

January '21													
M	T	W	T	F	S	S	M	T	W	T	F	S	S
					1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19	20	21	22	23
24	25	26	27	28	29	30	31						