

Oxygen Containing Organic Compounds-I

Level 1												DTS 1-5		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
B	A	D	C	B	D	D	B	A	B	B	A	C	A	D
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
C	C	A	A	D	B	B	B	A	D	B	A	A	C	D
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
D	A	A	C	A	B	C	C	D	C	D	A	A	B	A
46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
D	D	C	C	B	C	A	D	B	B	B	ABCD	AC	D	A
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
D	B	D	B	A	A	D	C	D	CD	D	A	A	B	CD

Level 2												DTS 6-10		
76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
C	ABC	B	C	D	AD	ACD	ACD	ABCD	AC	A	B	BD	B	D
91	92	93	94	95	96	97	98	99	100	101	102	103	104	
C	AD	ABC	AB	BCD	B	A	D	D	C	BD	D	ABC	AC	
105				106	107	108	109	110	111	112	113	114	115	116
[A-q, t] [B-r, s] [C-p, r, s] [D-p]				A	B	B	B	C	C	BD	ACD	AB	ABD	B
117	118	119	120	121	122	123	124	125						
A	C	C	AB	B	ABCD	A	ABC	[A-p, q, r] [B-p] [C-p, s] [D-r, s]						

Numerical Value Type								DTS 11						
126	127	128	129	130	131	132	133	134	135	136	137	138	139	140
3	12	1	2	23	2	3	1	3	6	5	3	3	5	4

JEE Main Archive												DTS 1-2		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
A	D	C	C	D	B	D	D	B	B	D	C	C	C	B
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
D	D	A	D	A	D	B	B	A	A	C	D	C	B	B
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
C	C	A	C	D	C	A	B	B	A	B	C	A	B	B
46	47	48	49		50									
D	D	A	66.66 to 66.67		C									

JEE Advanced Archive	DTS 1-3
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1. A : C₂H₅OH, B : C₂H₄ 2. (C) 3. (B) 4. (D) 5. X : (C₂H₅)₂O, Y : C₂H₅I, Z : C₂H₅OH 6. (C)
7. T 8. T 9. (i) Acid catalyzed hydration followed by reduction (ii) Reaction with C₂H₅Br
(iii) Hydrolysis followed by free radical chlorination 10. (A) 11. (D)
12. Resonance stabilization 13. Vicinal, adjacent 14. CH₃ and HCOONa 15. Iodoform test
16. H-bonding in alcohol 17. m-cresol (m-methylphenol) 18. Due to intramolecular H-bonding
20. F 21. $\text{C}_2\text{H}_5\text{OH} \xrightarrow[-\text{H}_2\text{O}]{\Delta} \xrightarrow{\text{Br}_2} \xrightarrow[\Delta]{\text{NaNH}_2} \xrightarrow[\text{Hg}^{2+}]{\text{CH}_3\text{COOH}} \text{CH}_2 = \text{CH} - \text{OCOCH}_3$ 22. (A)
23. Because PhOH is weaker acid than H₂CO₃ 24. D 25. Isobutane < n-butane < n-butylchloride < n-butanol
26. (B) 27. (C) 28. NaOH(s)/Δ ; salicylaldehyde 29. Nucleophilic 30. (BD) 31. (CD)
32. A : C₆H₅OCH₃ B : m-CH₃ - C₆H₄ - OH C : CH₃ - I D : C₆H₅OH E : 2, 4, 6-tribromo-3-methylphenol
33. (B) 34. Due to formation of peroxide 35. X : HC ≡ CCH₂CH₂CH₂OH 36. o-nitrophenol
37. m-benzenedisulphonic acid, m-dihydroxybenzene 38. (CH₃)₂C = CH₂ 39. n-Butanol, MnO₂
40. (AD) 41. D : C₆H₅COCH₃ E : C₆H₅COOH 42. A : p-MeO - C₆H₄ - COCH₂CH₂COOH B : m-MeO - C₆H₄ - (CH₂)₃COOH
43. A : HC ≡ C - C(OH)(CH₃)CH₂CH₃ B : (C₂H₅)₂C(OH)CH₃ 45. Secondary 46. Acid catalyzed ring cleavage (S_N1 type mechanism)
47. (C) 48. Because of less important contributing structures 49. (CH₃)₂CHI and CH₃I 50. (AD) 51. (A)
52. $\text{C}_6\text{H}_5\text{Br} \xrightarrow[\text{H}_2\text{SO}_4]{\text{HNO}_3} \xrightarrow[\Delta]{\text{CH}_3\text{ONa}} \xrightarrow[\Delta]{\text{Fe/HCl}} \xrightarrow[0-5^\circ\text{C}]{\text{NaNO}_2-\text{HCl}} \xrightarrow{\text{H}_2\text{O}} \text{p-HO}-\text{C}_6\text{H}_4-\text{OMe}$
53. A : Cyclobutylmagnesiumbromide B : 1-cyclobutylethan-1-ol
54. (i) Kolbe-schmidt reaction followed by acetylation
(ii) $\text{C}_6\text{H}_5\text{COOH} \xrightarrow[\text{H}_2\text{SO}_4]{\text{HNO}_3} \xrightarrow{\text{Sn/HCl}} \xrightarrow[0-5^\circ\text{C}]{\text{NaNO}_2-\text{HCl}} \xrightarrow[\Delta]{\text{HBF}_4} \text{m-F}-\text{C}_6\text{H}_4-\text{COOH}$

55	57	58	59	60	61	62	63	64	65	66	67
A	B	B	C	B	C	C	AC	D	B	BD	D
68	69	70	71	72	73	74					
B	A	C	D	ACD	ABC	B					