



A-1525
M. Sc. (Sem. III) Examination
March / April – 2015
Paper - IV : Dyes & Intermediate - I

Time : 3 Hours]

[Total Marks : 70

Instruction :

<p>नीचे दर्शावेक निशानीवाणी विगतो उत्तरवही पर अवश्य कपवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : ☛ M. Sc. (SEM. 3)</p> <p>Name of the Subject : ☛ PAPER - 4 : DYES & INTERMEDIATE - 1</p> <p>☛ Subject Code No. : 1 5 2 5 ☛ Section No. (1, 2,.....) : Nil</p>	<p>Seat No. : <input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/></p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center; width: 100%;">Student's Signature</div>
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- 1 Answer any three of the following : 18
- (a) What are azo dyes ? Give the Lapworth's system for classification of his azo dyes with examples.
 - (b) Discuss the chemistry of azoic dyes.
 - (c) Assign the position at which the coupling reactions take place
 - (i) H-Acid
 - (ii) R-Acid
 - (iii) Naphthioc acid
 - (iv) N-Ethylaniline
 - (v) 2-Naphthol
 - (vi) 1, 6-cleave acid
- 2 Answer any three of the following : 18
- (a) Classify fluorescent whitening agents giving atleast one example of each class. Discuss the chemistry of coumarin, pyrazoline and naphthalimides derivatives of fluorescent whitening agents.
 - (b) What are white dyes ? What are the characteristics properties of white dyes ? Give the synthesis of Blankophor G.
 - (c) Give broad classification of textile fibres.
 - (d) Describe fastness properties of dyes.

- 3 Answer any three of the following :
- (a) Discuss the chemistry of azine and thiazine dyes.
 - (b) Give an account of organic pigments.
 - (c) What are heterocyclic dyes ? Give the chemistry of pyrazolone dyes.
 - (d) Give the synthesis of :
 - (i) Sirius supra light green FFGL
 - (ii) Basic orange 21
 - (iii) Acid yellow 19.
- 4 Answer any three of the following :
- (a) Discuss chemistry mono azo dyes.
 - (b) Write a note on oxazine dyes.
 - (c) Describe about hydrophobic and hydrophilic fibres.
 - (d) Give the synthesis of :
 - (i) Direct Blue-15
 - (ii) Tinopal SP.
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