

M.Sc (I.C.) Sem. 4 : નોંધ :

Sub code: 3571

૧. દરેક પ્રશ્નનો [a] અથવા [a(i)] અને [a(ii)] જ લખવાના રહેશે.

૨. પ્રશ્ન : ૧[a] અથવા ૧[a(i)] અને ૧[a(ii)] તથા ૨[a] અથવા ૨[a(i)] અને ૨[a(ii)] ના 14 માર્ક્સ ના બદલે ૧૮ માર્ક્સ રહેશે.

૩. પ્રશ્ન : ૩[a] અથવા ૩[a(i)] અને ૩[a(ii)] તથા ૪[a] અથવા ૪[a(i)] અને ૪[a(ii)] ના 14 માર્ક્સ ના બદલે ૧૭ માર્ક્સ રહેશે.

૪. દરેક પ્રશ્નનો પ્રશ્ન નં ૧(b), પ્રશ્ન નં ૨(b), પ્રશ્ન નં ૩(b) તથા પ્રશ્ન નં ૪(b) (ટુંકા પ્રશ્નો) વિદ્યાર્થીએ લખવાના નથી.

Que.1 (A) What is color? Give a relation between color and chemical constitution with help of Armstrong theory. [14]

OR

Que.1 (A-1) Give synthesis and application of Gama – acid and R – acid. [07]

(A-1I) Give synthesis and application of 1, 2, 4 – acid and A.A.A. [07]

Que.1 (B) Give the answer of following question. (Any four) [04]

(1) Give melting point of acetoacetanilide.

(2) Give full name of T.E.A.

(3) Alkali fusion of sodium naphthalene β – sulphonate gives _____ product.

(4) Which compound is used for rapid melting of naphthalene in sulphonation kettle for production of β – naphthol?

(5) Give molecular weight of Bon – acid.

(6) 2 – Naphthol – 6, 8 di sulphonic acid is also known as _____.

Que.2 (A) What do you mean by reactive dyes? Explain it in detail. [14]

OR

Que.2 (A-1) Give synthesis and application of naphthol AS. [07]

(A-1I) Give synthesis and application of naphthol ASG. [07]

Que.2 (B) Give the answer of following question. (Any four) [04]

(1) Give full name of I.C.I.

(2) In which year first reactive dyes were introduced?

(3) Ultramarine blue absorb _____ light.

(4) Over 80% of the fluorescent brightening agents in use are _____ derivatives.

(5) Give full name of A.A.C.

(6) In which year remazole introduced?

Que.3 (A) Discuss DPM and TPM dyes. [14]

OR

Que.3 (A-1) Give synthesis and application of florescence. [07]

(A-1I) Give synthesis and application of eosin. [07]

- Que.3 (B) Give the answer of following question. (Any three) [03]
- (1) Phenolphthalein is _____ colour crystalline solid.
 - (2) _____ is used as a laxative in medicine.
 - (3) Which product was obtained by interaction of 1 mole phthalic anhydride with 2 mole resorcinol?
 - (4) The sodium salt of fluorescein is known as _____.
 - (5) _____ dyes are having a solubilizing group such as sulfonic acid.
- Que.4 (A) Write a note on pH indicators, oxidation-reduction indicators, adsorption indicators and precipitates determination metals as dyes. [14]
- OR
- Que.4 (A-1) Write a note on food dyes. [07]
- (A-1I) Write a note on leather dyes. [07]
- Que.4 (B) Give the answer of following question. (Any three) [03]
- (1) Natural leather is _____ substance.
 - (2) Finished leather can be dyed with _____ dyes.
 - (3) Paper is a _____ material.
 - (4) Which dye is used for detection of Co metal?
 - (5) Which dye is used for detection of Ca and Mg metal?