

- Q.33 Draw a neat sketch of valley beater.
- Q.34 Find out consistency of 150 m<sup>3</sup> pulp slurry containing 10 kg OD pulp.
- Q.35 Describe the merits of using the fillers in paper making process.

### SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Explain filtration and sedimentation. Name the equipments used for filtration and sedimentation.
- Q.37 Make a flow diagram of stock system illustrating stock chest, agitators and other equipments.
- Q.38 Classify the acid, basic, direct dyes in context to their use for chemical pulps, kraft pulp and ground wood pulp.

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### 5th Sem / Branch: P&P Sub. : Stock Preparation - II

Time : 3Hrs.

M.M. : 100

### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 What is stock preparation.
- a) Loading                      b) Beating  
c) Refining                      d) All
- Q.2 Choose the method of preparation of resin size.
- a) Hot process                      b) Cold Process  
c) Both A & B                      d) None
- Q.3 Choose a type of refiner used in stocks preparation.
- a) Jorden                      b) Mordan  
c) Mixed                      d) None
- Q.4 Choose the chemical formula of fortified resin.
- a) C<sub>15</sub>H<sub>20</sub>O<sub>6</sub>                      b) C<sub>16</sub>H<sub>20</sub>O<sub>7</sub>  
c) CH<sub>3</sub>COOH                      d) C<sub>20</sub>H<sub>22</sub>O<sub>8</sub>
- Q.5 Choose different symbol of transparent grade roison.
- a) WW                      b) BP  
c) WG                      d) A & C
- Q.6 What is stock preparation?
- a) Loading                      b) Beating  
c) Refining                      d) All of above

- Q.7 What is the specific gravity of  $\text{TiO}_2$ ?  
 a) 3.9                                  b) 5.6  
 c) 4.4                                  d) 7
- Q.8 Choose test methods to check sizing of paper.  
 a) Cobb                                  b) Lactic acid  
 c) Klemen                              d) All of above
- Q.9 Choose name of any chemicals used to minimize crystallization  
 a) Para formaldehyde  
 b) Toluene sulphonic acid  
 c) A & B  
 d) None
- Q.10 What is the brightness of clay?  
 a) Meter                                  b) Micrometer  
 c) Candela                              d) None

### SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 What is the color of  $\text{CaCO}_3$ ?  
 Q.12 Name any two different beater additives.  
 Q.13 Expand the term CMC.  
 Q.14 Name any 2 coloring material.  
 Q.15 What is the chemical formula of direct dye?  
 Q.16 Which method is used to check a mixed dye?  
 Q.17 Name any two sizing materials?

- Q.18 Which color creates the maximum sensation to human eye?  
 Q.19 Name two sides of paper.  
 Q.20 Name the two forms of  $\text{TiO}_2$  filler.

### SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 What are optical whiteners?  
 Q.22 Discuss the significance of color kitchen.  
 Q.23 What do you mean by aging of paper? Describe the testing procedure for aging test of paper samples.  
 Q.24 Briefly explain about fiber recovery system.  
 Q.25 Explain the working process of cold process of rosin size manufacturing system with neat diagram.  
 Q.26 What do you mean by pigment colors? How the pigments are different from paper making dyes?  
 Q.27 Which filler is used to make bible paper? Explain the reason for your answer.  
 Q.28 What are various substitutes of alum?  
 Q.29 What are retention aids and their effect upon the paper quality.  
 Q.30 Explain the concept of shade matching.  
 Q.31 Discuss the role of china clay, Calcium Carbonate and Titanium Dioxide in the paper industry.  
 Q.32 How is alum solution prepared for a known concentration?