

- Q.31 What are the uses of specialty paper?
- Q.32 How formation of paper is judged?
- Q.33 Differentiate on machine & off machine coating.
- Q.34 Why the porosity is important in gas mask filter?
- Q.35 Write a note on sheet strength.

#### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain in detail stress strain curve of paper.
- Q.37 List various Electrical properties of paper. Explain any two
- Q.38 Write short note on any two of the following.
- Burst & Bursting strength
  - Tearing resistance
  - Moisture content
  - Coating of paper

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#### 6th Sem / Branch : Chemical ( P & P ) Subject:- Paper Properties & Conversion

Time : 3Hrs.

M.M. : 100

#### SECTION-A

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

- Q.1 Which direction of paper have maximum orientation of fiber length wise?
- Wire side
  - Felt side
  - Machine direction
  - Cross direction
- Q.2 Which direction of paper have more tearing strength
- Wire side
  - Felt side
  - Machine direction
  - Cross direction
- Q.3 What is the unit of basis weight ?
- Kg/m<sup>2</sup>
  - Cm/Kg
  - Gm/m<sup>2</sup>
  - Kg/cm<sup>2</sup>
- Q.4 In Gurley tester which property of paper is measured?
- Thickness
  - Porosity
  - Stiffness
  - Dirt content
- Q.5 What is stress ?
- Force/area
  - Mass / Area
  - Strain / area
  - force / area

- Q.6 Select any one optical property of paper .  
 a) Thickness                      b) Hardness  
 c) Smoothness                      d) Gloss
- Q.7 What is ash ?  
 a) Adhesive                      b) Pigment  
 c) Organic                      d) Inorganic
- Q.8 How much time is needed for determining the moisture content of paper in oven ?  
 a) 30 min                      b) 60 min  
 c) 90 min                      d) 120 min
- Q.9 Choose the year when 1st paper coated on two sides was made.  
 a) 1775                      b) 1875  
 c) 1975                      d) None
- Q.10 What makes toilet paper special ?  
 a) Shorter fiber  
 b) Longer fiber  
 c) Artificial Fiber  
 d) None

### SECTION-B

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

- Q.11 Expand the term AD & OD.
- Q.12 Give any one effect of felt side of paper on paper properties.

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- Q.13 Which apparatus is used for measuring the basis weight of paper?
- Q.14 What is the unit of brightness?
- Q.15 Which paper have maximum folding endurance?
- Q.16 Which property is important in bag filter?
- Q.17 Write any one effect of dye stuff on opacity of paper.
- Q.18 What is the source of ash in paper?
- Q.19 Name any one electrical properties of paper.
- Q.20 What is the property of toilet paper?

### SECTION-C

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

- Q.21 Define orientation of fiber.
- Q.22 Differentiate machine direction & cross direction.
- Q.23 Describe basis weight of paper.
- Q.24 What is breaking length?
- Q.25 Draw neat sketch of stiffness tester.
- Q.26 Explain TEA.
- Q.27 Define brightness.
- Q.28 What is the effect of opacity on paper properties?
- Q.29 List various types of coater.
- Q.30 Write any two application of photographic paper.

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