

## **SECTION-D**

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 List various Electrical properties of paper. Explain application of electrical paper.
- Q.24 Explain in detail density of paper. What are the relation of density with their sheet properties?
- Q.25 Write short note on any two of the following .

- a) Cross direction & machine direction
- b) Curl & cockling
- c) Air knife coater
- d) Packaging papers

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Roll No. ....

220651

**5th Sem / Chemical ( Pulp & Paper)**

**Subject : Paper Properties**

Time : 3 Hrs.

M.M. : 60

## **SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 Which side of paper is smooth?
- a) Wire side
  - b) Felt side
  - c) Machine side
  - d) Cross side
- Q.2 What is the unit of basis weight of paper?
- a) Meter
  - b) Centimeter
  - c) gm/m<sup>2</sup>
  - d) Kg/m<sup>2</sup>
- Q.3 What is the wavelength of white light?
- a) 400-500 milimicron
  - b) 400-600 milimicron
  - c) 400-700 milimicron
  - d) 400-800 milimicron

Q.4 How much temperature is maintained in oven during measurement of moisture content of paper?

- a) 90°C
- b) 95°C
- c) 100°C
- d) 105 °C

Q.5 Which type of paper have maximum folding endurance?

- a) currency paper
- b) Tissue paper
- c) kraft paper
- d) News paper

Q.6 In which year the first paper coated on two sides was made?

- a) 1875
- b) 1885
- c) 1895
- d) 1900

## SECTION-B

**Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Which property of paper is affected by the orientation of fiber in paper machine?

Q.8 Write unit caliper of paper

Q.9 Name any one fibrous material which affect the density of paper?

Q.10 Expand the term AD.

Q.11 Name the instrument used for measuring the tearing resistance of paper.

Q.12 Name any one pigment used in coating?

## SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Draw neat sketch of Elmendorf tear tester.

Q.14 Define PH.

Q.15 Differentiate on machine & off machine coating.

Q.16 Define TEA.

Q.17 Explain basis weight of paper.

Q.18 Define orientation of fiber.

Q.19 Differentiate wire side & felt side of paper.

Q.20 Briefly explain opacity of paper.

Q.21 What is the significance of moisture content?

Q.22 Give any two applications of wax paper.