## **SECTION-C**

**Note:**Long answer type questions. Attempt any three questions. 3x10=30

- Q.3 Write a flow chart which helps in manufacture of cement. Also discuss the Hydration of Portland cement.
- Q.4 Describe the determination of final setting time of portland cement.
- Q.5 Describe the Raw materials which are used in manufacturing of cement and also about their selection and proportionality which effects the properties of cement.
- Q.6 Describe the determination of fineness of cement is detail.
- Q.7 Write a short note on any two of the followings:
  - i) Setting and Hardening of Portland cement.
  - ii) Sequence of reaction.
  - ii) Types of cement.

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3rd Sem. / Ceramic Tech.

Subject : Cement Tech.

Time: 3 Hrs. M.M.: 100

## **SECTION-A**

**Note:** Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

- Q.1 a) What is Portland Cement?
  - b) Write the percentage of gypsum used in cement.
  - c) What is clinker?
  - d) Write different phases of cement.
  - e) What is calcination of line stone?
  - f) Write the formula of Magnesia.
  - g) What is Plaster of Paris?
  - h) Write the class of line.

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- i) Write the formula of Dicalcium Silicate.
- j) What is tensile strength?
- k) What is slag cement?
- I) What is fineness?
- m) What is soundness?
- n) Write two properties of cement.
- o) Write two uses of cement.
- p) What is Hydration?
- q) Define Additives.
- r) Which Kiln is used to make cement.

## **SECTION-B**

**Note:** Short answer type questions. Attempt any ten parts 10x4=40

- Q.2 i) Define Acid Proof cement and Water proof cement.
  - ii) Explain Argillacious materials.
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- iii) Explain calculation of raw mix of cement.
- iv) Explain chemical composition of portland cement.
- V) What is Heat of Hydration?
- vi) Explain setting and Hardening of Plaster of Paris.
- vii) Write the uses of plaster of paris.
- wili) Write compound composition of Portland cement.
- ix) What is Le-chatelier's apparatus?
- x) What are the factors affecting setting time?
- xi) What is strength of cement?
- xii) What is initial setting time of portland cement?
- xiii) Explain white portland cement.
- xiv) Explain other building materials.
- xv) Explain classification of cement.

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