

**DIPLOMA IN CIVIL ENGINEERING DCLE(G) /
DIPLOMA IN MECHANICAL ENGINEERING
(DME) / DCLEVI / DMEVI / DELVI / DECVI /
DCSVI / ACCLEVI / ACMEVI / ACELVI /
ACECVI / ACCSVI**

Term-End Examination

June, 2018

00203

BET-013 : CHEMISTRY

Time : 2 hours

Maximum Marks : 70

Note : Question number 1 is compulsory. Answer any other four questions from question numbers 2 to 8. All questions carry equal marks.

1. (a) Write the electronic configuration of He and Na [Atomic number of He = 2 and Na = 11].
- (b) Name two important zones of the Atmosphere.
- (c) What is Law of Octaves ?
- (d) What is an alloy ? Give two examples.
- (e) Name four important ores of iron.
- (f) What is crude oil ?
- (g) Define Addition Polymer. 7×2=14

2. (a) Discuss in detail about Modern Periodic Table. 10
- (b) Which one is larger : Na or Na⁺ ? Explain. 4
3. (a) Write a detailed note on preparation, properties and uses of chlorine. 7
- (b) Explain the Open Hearth Process with a neat diagram. 7
4. (a) Explain the functioning of a Blast furnace with diagram. 7
- (b) What is Froth Flotation ? 4
- (c) What are Ceramics ? 3
5. (a) What do you understand by sludge and scale formation in Boilers ? 5
- (b) pH of a solution is 3. What is the pOH of the solution ? ($pK_w = 14$) 4
- (c) What is water gas ? How is it prepared ? List its uses. 5
6. (a) Write the composition and uses of following alloys : 4
- (i) Bronze
- (ii) Brass

- (b) What is desalination ? 4
- (c) How do you determine the fire and flash points of a lubricant ? 6
7. (a) Enlist four gaseous fuels. 4
- (b) Write short notes on stereochemistry of polymers. 4
- (c) Explain about any two varieties of glasses. 6
8. (a) Explain cationic polymerisation. 4
- (b) What do you understand by moulding of plastics. 4
- (c) Why is glazing of ceramics required ? List different methods of glazing. 6
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