

Model Question Paper
p - Block Elements - -Part IV
12th Standard

Chemistry

Reg.No. :

--	--	--	--	--	--

I. Answer all the questions.
II. Use Blue pen only.

Time : 01:15:00 Hrs

Total Marks : 60

5 x 1 = 5

Section-A

- 1) Electronic configuration of 14th group element(carbon family) is
(a) ns^2np^2 (b) ns^1np^1 (c) ns^1np^2 (d) ns^2np^1
- 2) Silicones act as excellent insulators for electric motors because
(a) they can withstand high temperature (b) they can withstand pressure (c) they are water repellent (d) they are volatile
- 3) Lead is mainly extracted from
(a) PbO (b) $PbCO_3$ (c) $PbSO_4$ (d) PbS
- 4) Red lead is
(a) PbO (b) Pb_3O_4 (c) PbO_2 (d) Pb_2O_2
- 5) An additive to petrol to prevent knocking
(a) diethyl lead (b) diethyl zinc (c) diethyl lithium (d) tetraethyl lead

Section-B

- 6) Write any three uses of lead.
- 7) How is phosphorus trichloride prepared?
- 8) What is the action of PCL_3 with SO_3 ?
- 9) Complete and balance the following equations a) $PCL_3 + C_2H_5OH \rightarrow$ b) $PCL_3 + O_2 \rightarrow$

Section-C

- 10) Write notes on preparation of silicones.
- 11) Illustrate (i)tribasic nature of orthophosphoric acid. (ii) reducing property of phosphorous acid
- 12) Explain the following : i) dehydrating property of P_2O_5 . ii) oxidising power of fluorine
- 13) Discuss the structure of interhalogen compounds of AX and AX_5 type.

Section-D

- 14) a) Explain the structure of inter halogen compound of the type AX_3 .
b) Explain the structure of IF_7 .
- 15) a) What is the shape of PCL_3 ? Draw its structure and electron dot formula.
b) How is PCL_5 prepared?
