

Total Pages—3

(Set-1)

M.Sc.-4th(AP)
Crystallography

Full Marks : 70

Time : 3 hours

Answer Q.No.1 and any five from the rest

The figures in the right-hand margin indicate marks

1. Answer all questions : 2 × 10

(i) Why filters are used in X-ray studies ?

(ii) Which element has a K_{α} X-ray line whose wavelength 1.785 \AA ?

(iii) Deduce the resolving power of Debye-Camera.

(iv) How does Ewald construction help to interpret X-ray diffraction photographs ?

(v) Determine the K excitation voltage of copper where λ_{α} for copper is 1.38043 \AA .

(Turn Over)