Total Pages—3

MSC-2

QM-II

Set-1

QUANTUM MECHANICS-II

Full Marks : 70

Time : 3 hours

Q. No. 1 is compulsory and answer any **five** from the rest

The figures in the right-hand margin indicate marks

1. Answer the following : 2×10

(*a*) Distinguish between normal Zeeman effect and anomalous Zeeman effect.

(*b*) Explain why in case of electric-dipole transition the initial and final states have 'l' differing by 1.

(*c*) What do you mean spontaneous and stimulated emission ?

(*d*) Discuss the validity of WKB approximation.

(*Turn Over*)