## **B Sc VI Sem (Physics) Quantum Mechanics**

- Q. 1. The angular momentum of the electron in the nth orbit is given by : (a) nh (b)  $\frac{h}{2\pi n}$  (c)  $n \frac{h}{2\pi}$  (d)  $n^2 \frac{h}{2\pi}$
- Q. 2. Which of the following lines of Balmer series has longest wavelength: (a)  $H_{\alpha}$  (b)  $H_{\beta}$  (c)  $H_{\gamma}$  (d) None of these

## B Sc VI Sem Mathematical Physics

- Q. 1. The square root of complex number 15-8i is equal to:

   (a) (1-4i) (b) (1+4i) (c)  $\pm (1-41)$  (d) $\pm (1+4i)$
- Q. 2. The recurrence formula  $xJ'_n = nJ_n xJ_{n+1}$  is related to:
  - (a) Legendre Functions (b) Bessel's Functions
  - (c) Hermite Functions (d) Laguerre's Functions