Q.1 Attempt any four of the following—
(a) Which belt consumes more power, V belt or flat belt? Explain in short.
(b) Which drive is more economical, Chain drive or Belt drive? Explain in short.
(c) Write in short the factors affecting yarn tension in ring frame.
(d) Explain in short the reasons affecting the velocity of shuttle during acceleration and retardation.
(e) What do you understand by cleaning efficiency of blowroom. Explain in brief.

Q.2 Write in detail the working principles of inverter drive in ring spinning and how the desired speeds are achieved.

Q.3 Write the different types of loading used in top arms in spinning. Give the advantages and disadvantages of one over another.

Q.4 What do you understand by yarn tension in winding? How it is maintained in autoconer and ordinary winding.

Q.5 (a) Write in brief with diagram the difference between spur gear and helical gear.
(b) Explain as how you design the shedding mechanism and picking tappets.

Q.6 What are the factors responsible for power conservations in textiles? Explain in brief.

Q.7 (a) Explain in brief the use of rotary filters in textiles and how it helps.
(b) Explain in brief the use of cams and followers giving sketches.

Q.8 Explain in short the working principle of any TWO of following drives which are being used in spinning machines.
(a) VPS drive.
(b) Dual motor drive.
(c) Flat belt drive.
(d) Inverter drive.