



Class 12 Engineering Graphics

Chapterwise PYQs

Machine Drawing - Bearings | 2026-27 Board Revision

Chapter 2: Machine Drawing - Bearings

This chapterwise PYQ practice PDF contains NCERT-based board-style machine drawing questions for bearings. The local source set does not expose separate extractable previous-year rows for this chapter, so the questions are organised by the board pattern students practise for Engineering Graphics.

Section	Marks	Questions
A: Very Short Answer Questions	1 mark each	6
B: Short Construction Questions	2 marks each	5
C: Drawing-Sequence Questions	3 marks each	5
D: Board-Style Machine Drawing Questions	4 marks each	4
E: Long Answer Drawing Practice	5 marks each	4

Section A: Very Short Answer Questions

1 mark each

- State the main purpose of a bearing in machine drawing. [2026-27 Board-style Practice]
- Name one bearing commonly drawn in Class 12 Engineering Graphics. [2026-27 Board-style Practice]
- What is the function of a bush in a bushed bearing assembly? [2026-27 Board-style Practice]
- Why is a shaft shown passing through the bearing bore? [2026-27 Board-style Practice]
- Which view is generally drawn as the sectional front view of a bearing? [2026-27 Board-style Practice]
- Name one drawing convention used while sectioning the bearing body. [2026-27 Board-style Practice]

Section B: Short Construction Questions

2 marks each

- Differentiate between an open bearing and a bushed bearing in two points. [2026-27 Board-style Practice]

- Write two precautions for drawing the centre line and bearing bore.
- [2026-27 Board-style Practice]
- Mention two details that must remain aligned while drawing the shaft and bearing body.
- [2026-27 Board-style Practice]
- Why are adjacent parts hatched in different directions in a sectional view?
- [2026-27 Board-style Practice]
- State two checks before darkening the cap, base and bolt details of a bearing.
- [2026-27 Board-style Practice]

Section C: Drawing-Sequence Questions

3 marks each

- Explain the drawing sequence for the sectional front view of an open bearing.
- [2026-27 Board-style Practice]
- Describe how the top view of a bearing is projected from the sectional front view.
- [2026-27 Board-style Practice]
- List three checks for showing the bush, shaft and bearing body correctly.
- [2026-27 Board-style Practice]
- Explain how hatching and centre lines help in reading a bearing drawing.
- [2026-27 Board-style Practice]
- Prepare a neat labelled freehand outline of a bushed bearing arrangement.
- [2026-27 Board-style Practice]

Section D: Board-Style Machine Drawing Questions

4 marks each

- Draw the sectional front view and top view of an open bearing. Show base, bearing body, bore, shaft, centre line and hatching clearly.
- [2026-27 Board-style Practice]
- Draw a bushed bearing using proportionate dimensions. Indicate bush, body, shaft, bolt holes and sectional hatching.
- [2026-27 Board-style Practice]
- Given the shaft diameter and base length, construct the major outlines of a bearing assembly and explain the order in which views are completed.
- [2026-27 Board-style Practice]
- Draw the sectional view of a bearing body and mark the visible outlines, hidden details avoided in section and title-block notes.
- [2026-27 Board-style Practice]

Section E: Long Answer Drawing Practice

5 marks each

- Draw a complete machine drawing of an open bearing, including sectional front view, top view, centre lines, hatching and title block notes.
- [2026-27 Board-style Practice]
- Draw a complete bushed bearing assembly with shaft, bush, body, base, bolt holes, hatching and projection symbol.

- [2026-27 Board-style Practice]
- Compare open bearing and bushed bearing with reference to function, main parts, sectional view and drawing precautions.
- [2026-27 Board-style Practice]
- Explain, with a neat labelled sketch, how a bearing machine drawing question should be attempted in the board examination.
- [2026-27 Board-style Practice]