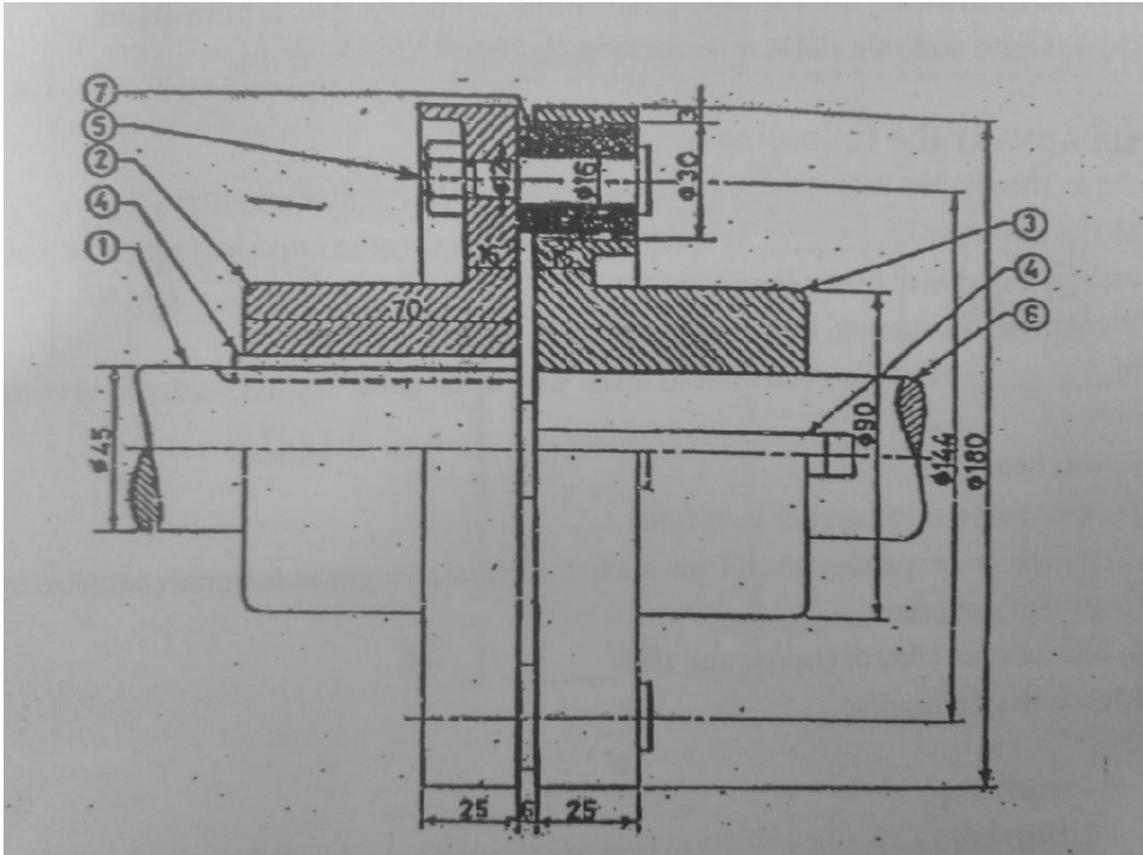


**SECOND SEMESTER EXAMINATION 2022 – 23**  
**SUBJECT :- MECHANICAL MAINTENANCE**  
**PAPER – II**  
**QUESTION BANK**  
**STD. :- XI**

**Answer the following.**

- 1. Define heat treatment.**
- 2. What is the purposes of heat treatment ?**
- 3. Explain the process of heat treatment.**
- 4. List different types of heat treatment process.**
- 5. Explain the Annealing process.**
- 6. Explain the Normalizing process.**
- 7. Explain the Hardening process.**
- 8. Explain the Tempering process.**
- 9. Explain the Case hardening process.**
- 10. Write a short note on foundation bolt.**
- 11. Explain Eye foundation bolt with neat sketch.**
- 12. Explain Rag foundation bolt with neat sketch.**
- 13. Explain Lewis foundation bolt with neat sketch.**
- 14. Explain Twisted foundation bolt with neat sketch.**
- 15. What do you mean by foundation?**
- 16. What are the functions of foundation?**
- 17. What are the different causes for setting up the vibrations in machine?**
- 18. What precautions are to be taken during foundation?**
- 19. List different types of foundation bolt.**

20. Read the Assembly drawing of Pin type flexible coupling and answer the following questions.



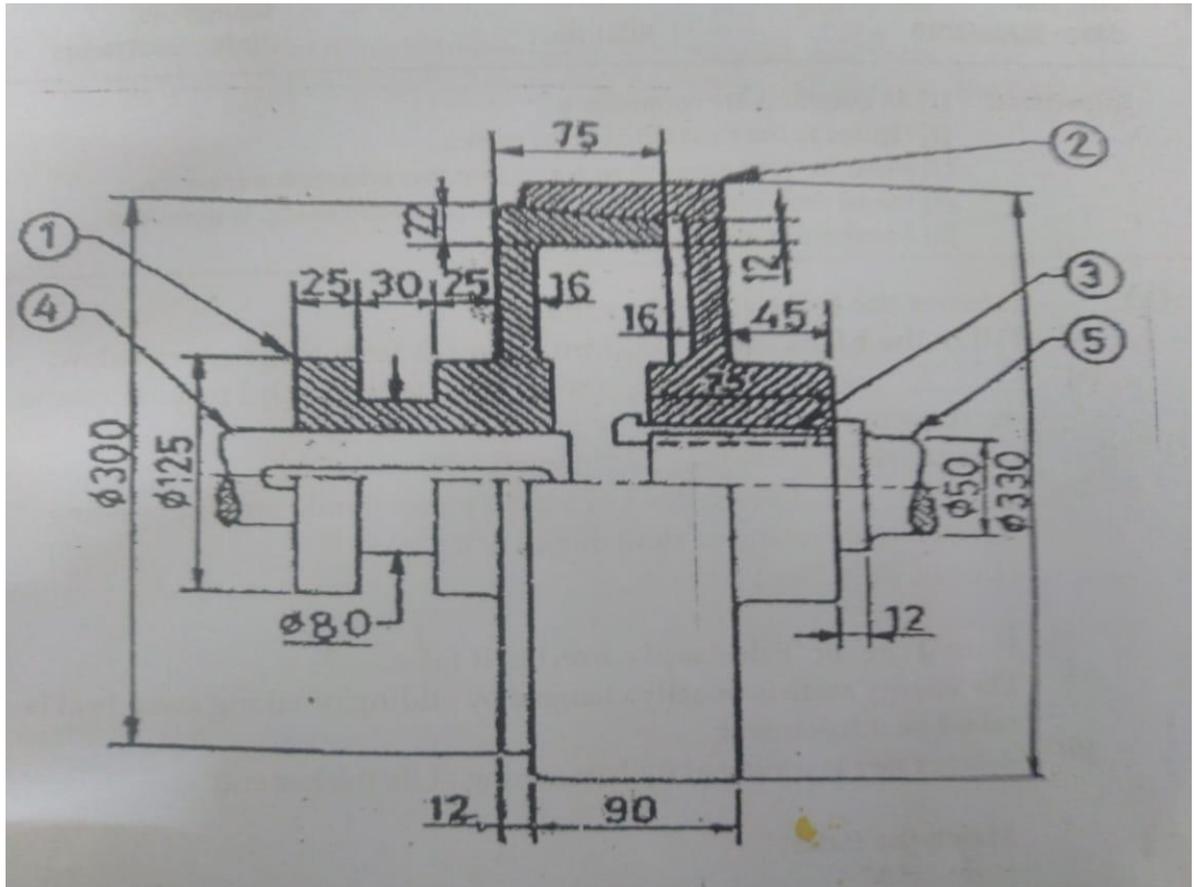
PIN - TYPE FLEXIBLE COUPLING

SR. No.	NAME OF PARTS	No. OFF	MATERIAL
1	Driving shaft	1	C - 45
2	Flange	1	C. I.
3	Flange	1	C. I.
4	Key	2	C. I.
5	Pin	4	C - 30
6	Driven shaft	1	C -45
7	Rubber washer	5	Rubber

- Which material are used for key?
- What is the diameter of rubber washer?
- How many pin can be fixed in the pin type flexible coupling?
- Which material are used for driven shaft?
- What is the length of flange?
- How many hexagonal nuts are used in the assembly?

- g) What is the diameter of the flange?
- h) How many rubber washers needed for assembly?
- i) What is the diameter of driven shaft?
- J) What is the total quantity of part used in the assembly?
- k) How many key are used in the assembly?
- l) Which material are used for flange?

21. Read the Assembly drawing of Cone friction clutch and answer the following questions.



CONE FRICTION CLUTCH

SR. No.	NAME OF PARTS	No. OFF	MATERIAL
1	Male cone	1	C. I.
2	Female cone	1	C. I.
3	Key	2	C - 30
4	Driving shaft	1	C - 45
5	Driven shaft	1	C - 45

- What is the total No. of parts used in assembly?
- Enlist the different parts used in the assembly drawing
- How many keys are used in cone friction clutch assembly?
- Which material are used for key?
- What is the diameter of the driven shaft?

- f) What is the diameter of the male cone?
- g) What is the width of female cone?
- h) How to assemble male cone flange with female cone flange?
- i) Specify total length of male cone flange.
- J) Which type of key is used for the assembly?
- k) Which material is used for driving shaft?
- l) How shaft are coupled together?