



नाम

Name : _____

अनुक्रमांक

Roll No : _____

पाठ्यक्रम

Course : _____

दिनांक

Date : _____

प्राप्तांक

Marks Awarded : _____

अनुदेशक के आदयक्षर

Instructor Initial : _____

RACK AND PINION LEVER

INTRODUCTION TO RACK AND PINION LEVER:

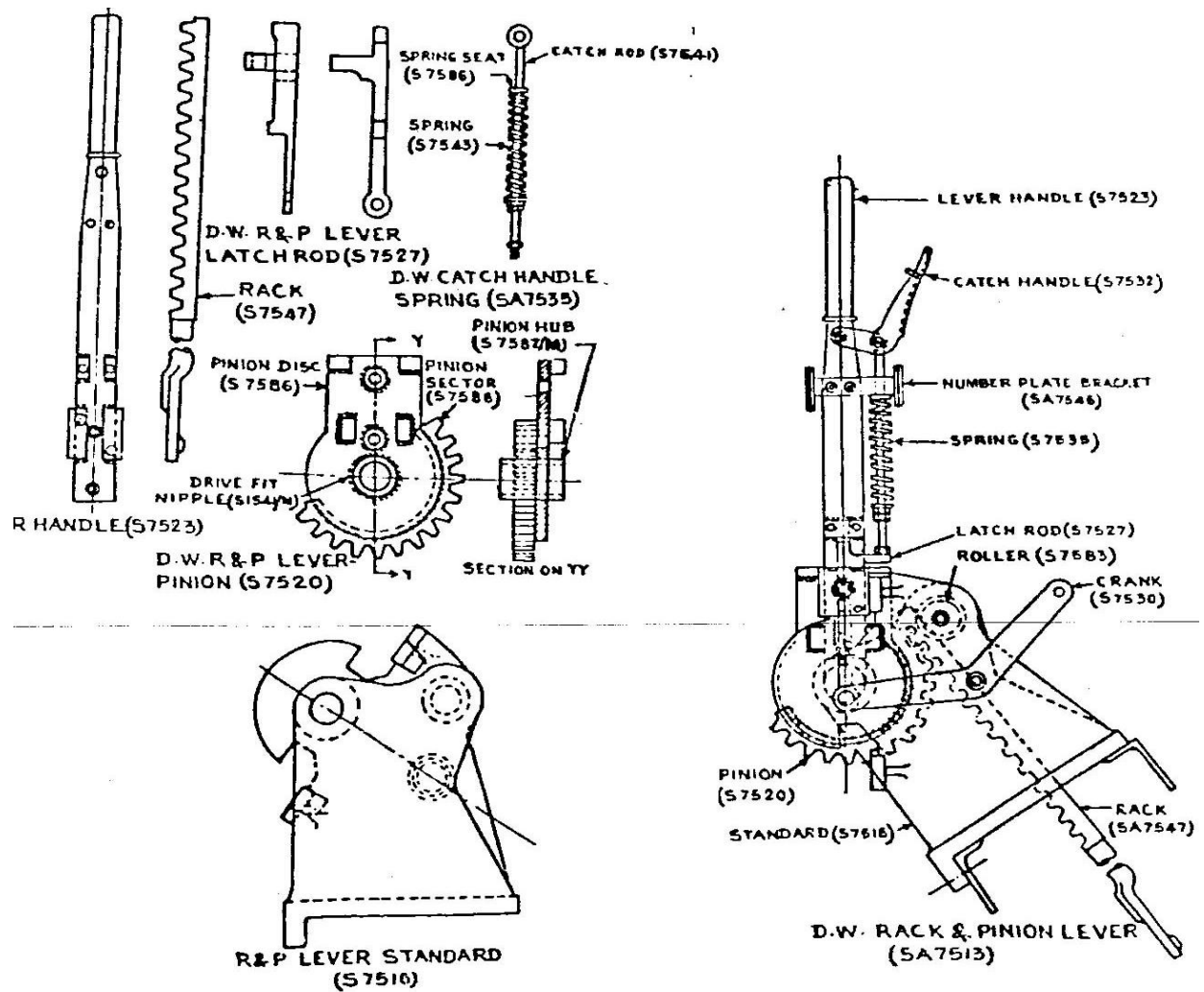
A lever designed to be erected on a double wire installation (LEVER FRAME) But required to work functions like points, lock bar, facing point lock etc, by a rodding transmission.

A lever handle is bolted to the pinion, intermeshed with the teeth of the lever, the rack gets a linear stroke. The down rod is connected to the free end of the rack and the other end to the vertical crank.

Rack and pinion lever is available with 200mm stroke. Horizontal cranks (300*300mm) And IRS rodding compensator (406*253mm) used for the transmission of rodding. If the IRS D.W. point Mechanism used in the event of a wire breakage, where the point is not provided unit wire detector, there is a possibility of the point going to the other position, the point is rod operated by employing rack and pinion lever from D.W.

Lever frame. In a marshalling or other yard, where numerous shunting movement takes place, there is a possibility of bursting of points either the point mechanism requires constant replacement or suspension of point operation. To overcome this R&P Lever is used. Even if the rod damage due to burst point, the replacement of rodding is easier and less time consuming, thereby increases the train operation.

1. Indicate the parts in the sketch attached.
2. Rack & pinion levers are used when FPL & EPL are to be worked by _____.
3. Points of FPLs are worked by rod transmission and rack and pinion lever when:
 - a. The point is not detected.
 - b. Points are to be worked in a big yard where bursting of points is frequent.
4. The stroke imparted to the Rack & pinion by the pinion in IRS type D.W. lever is _____.
5. No. of teeth in pinion _____.
6. No. of teeth in rack _____.
7. Catch spring is terminated in the projection in _____ in IRS.
8. The link is IRS is _____ by spring.
9. The stroke required for point operation is _____.
10. The stroke available at the rack _____.
11. The stroke of the tappet _____ MM.
12. The size of the cranks and compensator used _____.



Date;

Signature of trainee