

# **Guard**

# Mentor's Q&A

(Generic Version)

**Version 1** 

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### IMPORTANT NOTICE

This booklet is one of a series of generic training and assessment templates developed by the Association of Tourist & Heritage Rail Australia Inc (ATHRA) as guides for heritage railway operators seeking to develop or upgrade their local training and assessment resources.

This booklet and others in the series are not intended to be training resources in their own right but rather to be suitably customised, embellished and adapted by railway operators to match the specific context of their own railway, e.g. types of locomotives, rollingstock and associated equipment, the track layout and infrastructure, the local standard procedures and rules, the safety management and safeworking systems, the railway organisational structure, and the roles and functions of personnel in the railway, etc.

Railway operators seeking to use this booklet and others in the series should initially refer to the *ATHRA Customisation Guidelines Booklet* which provides important information on how the generic templates should be used.

#### **Disclaimer**

The information contained herein is made available by the Association of Tourist & Heritage Rail Australia Inc (ATHRA) as part of a set of **generic training and assessment templates** for use by individual heritage railway operators.

It is intended that heritage railway operators will be able to create their own local training resources by suitably modifying, embellishing and customising the generic templates to meet their own requirements.

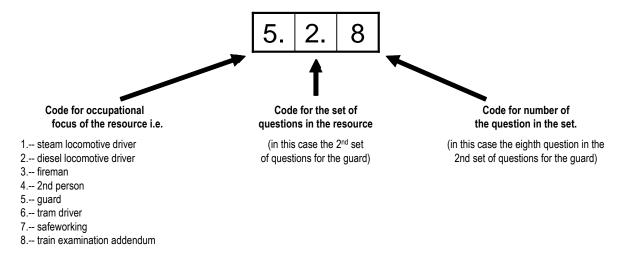
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### **NOTES**

#### **CODING SCHEME FOR THE ATHRA RESOURCES**

The coding scheme for the ATHRA Resources is as follows:



# CUSTOMISATION OF QUESTIONS AND ANSWERS IN THE 'MENTOR'S Q&A"

As explained in the ATHRA Customisation Guidelines, this *Knowledge Checklist* and related *Mentors Q&A* are generic documents designed to be customized and adapted, if necessary, by local heritage railways to match their own railway configuration, equipment, procedures, safety management systems, etc. Questions in the booklet and related sample responses in the *Mentor's Q&A* may be modified by updating the content of the existing templates to incorporate appropriate information about the railway's own operating system, equipment, road, procedures, safety management system, etc. This may involve appropriate alteration to existing questions or the insertion of additional suitable questions.

To aid in the addition of questions, if needed, a blank row has been provided at the end of each set of questions in the generic checklist and Q&A. The following is a step-by-step process to incorporate any additional questions:

- 1. Using the mouse, select the blank row
- 2. In the 'TABLE' drop down menu at the top of the document select 'Insert'
- 3. Click on 'Insert rows below'
- 4. Repeat as many times as necessary until you have sufficient rows for the additional questions (including the original blank row in the generic document)
- 5. Insert the text for each of the additional questions
- 6. Insert the codes of the additional questions as per the coding scheme for the ATHRA training and assessment resources
- 7. Make sure there are matching questions and sample responses with the same code in both the Knowledge Checklist and the Mentor's Q&A Booklet

### Question Set 5.1 Role and responsibilities of a guard on a train

'		SAMPLE RESPONSE
Q5.1.1	What are the <b>key tasks</b> performed by a guard on a train?	<ul> <li>Signing on</li> <li>Checking roster, notice boards, operational instructions, locomotive availability and other information needed to work as a guard on a train</li> <li>Obtaining and checking all required documentation prior to train departure</li> <li>Checking that all required equipment is available on the train and is functioning correctly</li> <li>Carrying out or confirming that a train examination has been completed</li> <li>Reporting to train control</li> <li>Conducting required brake tests</li> <li>Reporting and remedying identified defects as per standard procedures</li> <li>Obtaining or ensuring that authority to proceed has been issued</li> <li>Signalling driver to start a train</li> <li>Caring for the welfare of passengers</li> <li>Communicating with others using appropriate methods and communication devices</li> <li>Making announcements to passengers</li> <li>Checking that passengers are clear of the doors and the doors are shut prior to departure or shunting</li> <li>Checking the trains in and out of platforms and indicating to the driver if there is a situation which requires the train to stop</li> <li>Remaining vigilant throughout the journey but particularly at or near stations or fixed signals</li> <li>Assisting train crew with fault finding on a train</li> <li>Flagging defective level crossings</li> <li>Detecting an emergency situation during operation of the train and pulling the emergency brake valve</li> <li>Assisting the driver during emergency situations, including</li> </ul>
		<ul> <li>Assisting the driver during emergency stituations, including the emergency evacuation of passengers if required</li> <li>Applying the brake</li> <li>Applying the handbrake on the brake van and other vehicles if required and securing with chain and padlock</li> <li>Locking doors of brake van and other vehicles as required</li> </ul>

Q5.1.1	What are the <b>key tasks</b> performed by a guard on a train? (continued)	<ul> <li>Coordinating shunting operations including:         <ul> <li>giving hand signals directly to the driver</li> <li>confirming brakes are operational on vehicles being shunted</li> <li>coupling and uncoupling locomotives to and from trains</li> <li>confirming that hand brake on leading vehicle is applied if locomotive is detached</li> <li>ensuring that all required safeworking equipment is correctly set and secured during shunting operations</li> </ul> </li> <li>Completing all required documentation at the completion of a journey</li> </ul>
Q5.1.2	Describe the <b>key safeworking rules</b> that apply to you as a train guard?	Candidate's response should paraphrase the rail operator's safeworking rules as they apply to train guards on the railway concerned.
Q5.1.3	What are the <b>potential consequences</b> of not following safeworking rules and other regulations applicable to a train guard's role on your railway?	<ul> <li>A serious accident possibly involving fatalities</li> <li>Possible injury to self colleagues or the public.</li> <li>Possible damage to locomotive, rollingstock or railway facilities.</li> </ul>
Q5.1.4	What <b>action</b> must you take if you find a defect during a shift as a train guard?	<ul> <li>The candidate should outline the rail operator's standard procedures for the action, recording and reporting that needs to be taken by a locomotive crew in the event of an identified defect.</li> <li>Advise the driver immediately</li> </ul>
Q5.1.5	What <b>action</b> must you take if you are involved in a safety incident during a shift as a train guard?	<ul> <li>Candidate should outline the rail operator's standard procedures for the action, recording and reporting that needs to be taken by a locomotive crew in the event of a safety incident.</li> <li>Ensure that the train is secured,.</li> <li>If emergency services are in attendance, observe the requirements of the senior combatant agency on site.</li> </ul>

Q5.1.6	What <b>action</b> must you in the case of a limit of authority	<ul> <li>Candidate should outline the rail operator's standard procedures for the action, recording and reporting that needs to be undertaken in the event of a limit of authority overrun.</li> <li>Immediately it is recognised that a limit of authority overrun has occurred draw this to the driver's attention and ensure that the movement is brought to an immediate that a limit of authority overrun has occurred draw this to the driver's attention and ensure that the movement is brought to an</li> </ul>
	overrun during a shift as a train guard?	<ul> <li>immediate stop.</li> <li>Take action to provide protection against any approaching train</li> </ul>
		Work under the direction of train control to clear the section
		In all instances a written report must be furnished.
		Coordinating shunting operations for the train,
	What are the guard's duties during train shunting activities?	Giving and/ or relaying hand signals directly to the driver,
Q5.1.7		Coupling and uncoupling locomotives to and from trains,
<b>Q</b> 0		Confirming brakes are operational on vehicles being shunted, and
		Ensuring that all required safeworking equipment is correctly set and secured.
Q5.1.8	Where can you obtain a <b>copy</b> of the duties of a guard, the safeworking rules applicable to a guard and other key reference documents a guard needs on your railway?	Candidate should indicate the ways in which the rail operator concerned makes available second persons the safeworking rules and other key reference documents they need to understand and fulfil their roles and responsibilities.
Q5.1.9	Give three examples of hazards that exist when working as a guard.	Dependent on the railway concerned, examples of possible responses include:         — Falling from heights         — Working in confined spaces         — Working under wires         — Chemicals and fuel         — Hot surfaces         — Moving work platform         — Oil spills on floors         — Dehydration and fatigue         — Noise         — Working with electric lights and power

Q5,1,10	What personal protective equipment (PPE) must be used by guards when carrying out their duties and functions?	Candidate will describe the personal protective equipment (PPE) that must be used by guards when carrying out their duties and functions as per the safety management plan and standard operating procedures of the rail operator concerned.
Q5.1.11	Give two examples of <b>risk management strategies</b> to control hazards when working as a guard.	Dependent on the railway concerned, examples of possible responses include:     Taking required precautions when using oil as the locomotive fuel     Ensuring public safety     Using personal protective equipment (PPE)     Using fire extinguishers and water hoses to control fire emergencies     Following the railway's established risk management procedures
Q5.1.12	Blank for additional question	•

### **Question Set 5.2** Preparing for train operations

QUESTION		SAMPLE RESPONSE
Q5.2.1	What <b>paperwork</b> must a guard obtain and check when preparing a train for operations?	Candidate should outline a guard's responsibilities for obtaining and checking paperwork when preparing a train for operations as per the rail operator's standard operating procedures. This will probably include such documents as:

Q5.2.2	What checks do guards need to make that they have all the <b>equipment</b> they need for a train journey?	Candidate should describe the rail operator's standard operating procedures for checking that all required equipment is available for the guard's use on a train journey. This will probably include equipment such as:  a fixed or portable radio or mobile phone  a watch,  a pea whistle,  a carriage key,  one red and one green flag,  a hand signal lamp during hours of darkness,  a portable tail disc or triangle where required by the railway,  a set of side and tail lamps or marker lights,  a breakdown kit or 6 detonators  a fire extinguisher,  a first aid kit and associated burns units, etc., and  a point clip if required by the railway.
Q5.2.3	What action must guards take concerning their <b>watch</b> ?	<ul> <li>An important performance indicator of all railways is on-time running.</li> <li>A key instrument in making sure that trains run on time is a watch. It is important that the guard on a train has a well functioning watch and that it is set to the correct time. This includes checking time with train control on commencing duty</li> <li>When preparing for journeys, guards must check that their watch is operating correctly and set it by the correct time as per the railway's standard operating procedures.</li> <li>The guard should also synchronise watches with the driver, fireman or second person, and other persons involved in making sure that the train runs on time.</li> </ul>
Q5.2.4	What action must guards take concerning the checking of communication equipment?	Candidate should describe the rail operator's standard operating procedures for checking all of the communication equipment they will be required to use during a train journey. This will probably include such communication equipment as:  train communication devices (e.g. bell, buzzer, intercom, gong, etc.),  mobile phone,  fixed or portable radio,  signal telephone,  whistle,  flags and  lights.

Q5.2.5	What action must guards take concerning a <b>train examination</b> ?	<ul> <li>Prior to a train commencing a journey, it is a legal requirement that a train examination is undertaken. In some railways and circumstances, this may be a designated train examiner. In others, it may be the train driver or guard or other qualified person. (See Train Examination Addendum in Attachment 3 of the Guards Lesson Plan and Workbook)</li> <li>Regardless of who conducts it, it is the guard's responsibility to confirm that the train examination has been completed and that any issues arising from the examination have been dealt with as per the railway's standard operating procedures.</li> </ul>
Q5.2.6	How does a guard conduct brake tests on a train?	Candidate will describe the standard operating procedures the rail operator for carrying out brake tests of for the type of train concerned.
Q5.2.7	What action should be taken by the guard if <b>defects or deficiencies</b> are identified during checks or during operations?	<ul> <li>The standard operating procedures for taking action on identified defects and deficiencies may vary from one rail operator to another. The candidate will describe the standard operating procedures for the rail operator concerned. At the least, the defects and deficiencies must be recorded and reported.</li> <li>Depending on the rail operator's policies and procedures, the guard may also be required to         <ul> <li>rectify the defects and deficiencies, if possible,</li> <li>isolate them, and/or</li> <li>tag them.</li> </ul> </li> </ul>
Q5.2.8	Blank for additional question	•

# Question Set 5.3 Conducting train operations

QUESTION		SAMPLE RESPONSE
Q5.3.1	How does a guard <b>signal the driver to start</b> a train?	Candidate should describe the rail operator's standard operating procedures for signalling the driver to start a train.

- Candidate should describe the rail operator's policies and standard operating procedures for the guard's role in caring for the welfare of passengers on a train. This may include:
  - Obtaining right of way from station master
  - Checking that any side doors and gates of the train's vehicles are properly secured before the train leaves a station or commences shunting operations.
  - Outward swinging doors on carriages must be closed with care so as to avoid injuring passengers.
  - Ensuring that passengers do not lean out of doorways or windows while the train is moving.
  - Recognising passengers who may be ill or injured and making sure that they are provided with appropriate first aid and required action is taken to obtain medical assistance.
  - Assisting passengers during emergencies and various abnormal situations including evacuation of the train if required.
  - Providing information to passengers regarding the train's journey
  - Responding to questions raised by passengers concerning either the normal operations of the train or abnormal situations that may arise.
  - Making safety announcements on public Address as determined by the rail operator

What is the guard's role in caring for the **welfare of passengers** on a train?

Q5.3.3	How do guards <b>communicate</b> with the driver, other train crew and railway staff and passengers via the various communication systems and devices available on the train?	<ul> <li>Candidate should describe the rail operator's policies and standard operating procedures for communicating with the driver, other train crew and railway staff and passengers via the various communication systems and devices available on the train. This may include:         <ul> <li>train communication devices (e.g. bell, buzzer, intercom, gong, etc.),</li> <li>mobile phone,</li> <li>fixed or portable radio,</li> <li>signal telephone,</li> <li>whistle,</li> <li>flags,</li> <li>lights, and</li> <li>hand signals</li> <li>written communication (documents, forms, checklists, etc.).</li> </ul> </li> <li>In all communication, it is important that the guards present the information clearly and that they check, as far as possible, that they gain the attention of the person(s) with whom they are trying to communicate.</li> <li>Where feasible, they should also make sure that the person(s) with whom they are communicating have correctly interpreted and understood the information they have provided (i.e. closed loop communication).</li> </ul>
Q5.3.4	What are the procedures for making <b>announcements</b> to passengers?	<ul> <li>Candidate should describe the rail operator's policies and standard operating procedures for making announcements to passengers either on the train or on a platform. Announcements may be made by guards either with the unaided spoken voice or using a public address system on the train. Such announcements should be clearly and slowly presented with clear articulation.</li> <li>If making announcements without the aid of public address equipment, it is important for guards to project their voice strongly and with authority as per their railway's standard procedures. Guards can learn or read the script of the announcements and practice them well before having to make them on the train or platform.</li> </ul>

Q5.3.5	In railways where there are side- loading carriages, why must guards check that passengers are clear of the doors and the doors are shut prior to departure or shunting?	<ul> <li>A key element of responsibilities of train guards is the welfare of the passengers on the train. Serious injuries can occur if passengers are not clear of doors in such trains or the doors are not shut prior to the starting of the train.</li> <li>Guards must therefore pay particular attention to checking that all passengers are clear of the doors before a train starts and the all of the train doors are shut prior to departure or shunting.</li> </ul>
Q5.3.6	Why is it important for guards to check the movements of other trains when their train is approaching or leaving a station?	<ul> <li>Train drivers and other locomotive crew are often not able to observe all of the movements of other trains moving in and out of the platform.</li> <li>Guards therefore act as an extra pair of eyes by leaning out of the guard's cab or brake van and looking carefully and vigilantly so as to watch the trains moving in and out of the platform.</li> <li>The guard is then able to identify any situation which requires the train to stop and communicate with the driver accordingly.</li> <li>Guards need to be aware of the types of situations that can occur at stations on their railway that may warrant the stopping of the train.</li> </ul>
Q5.3.7	Why is it important for guards to remain <b>vigilant</b> throughout the journey but particularly at or near stations, fixed signals or level crossings as applicable?	<ul> <li>During a train journey it is vital that the guard remains vigilant at all times to identify any situation that may potentially be unsafe or cause a problem in the safe and efficient running of the train.</li> <li>This may include problems on the road ahead, on the train itself or the in the immediate operating environment of the train. It is particularly critical to be alert at or near stations and when approaching or stopping at fixed signals.</li> <li>The guard should also monitor and record the train's 'on-time' running performance against the railway timetable and schedule and alert the driver where the train is running out of schedule.</li> <li>Where a train has traversed a level crossing involving lights and bells, the guard should check that the lights and bells have deactivated once the train has passed. If the lights and bells have not deactivated, the guard must alert the driver to stop the train so that the problem can be investigated and appropriate action initiated.</li> </ul>

Q5.3.8	What is the guard's role in <b>fault finding</b> on the train?	Candidate should describe the rail operator's policies and standard operating procedures for assisting the driver and other train crew in the identification of faults and defects on the train and its associated equipment and related trouble-shooting activities. Guards need therefore to be familiar with the types of faults and defects that could occur on the train concerned and the trouble shooting processes typically used by rain crew.
Q5.3.9	What is the guard's role if it is found that a level crossing is defective?	In circumstances where train drivers have identified that a level crossing ahead is defective (e.g. lights and bells fail to operate), they will stop the train to allow the guard to flag the crossing while the train passes.
		Where a test switch is fitted it is to be operated and should the crossing then ring flag the train to proceed after the bells have been working for a minimum of 30 seconds. When the train has cleared the island ensure that the bells have ceased to ring if the bells cannot be operated then flag road traffic to a stand.
		Once the driver has stopped the train, he/she will call the guard forward. Subject to the roads and traffic regulations in the State/Territory concerned, the guard will stop any road traffic at the crossing with a red flag until the train has fully traversed it. Once the train has passed and stopped, the guard will rejoin the train.

	What are five examples of abnormal situations that may occur during a train journey and what is the role of the second person in responding to these abnormal situations?	<ul> <li>Candidate will describe the action to be taken by a guard in the event of five different types of abnormal situation as per the rail operator's emergency and standard operating procedures. This may include assisting the driver and train crew in the stopping and securing of the train, undertaking required emergency procedures including communication, and assisting passengers and train crew in an orderly evacuation of the train as per the rail operator's emergency procedures.</li> </ul>
		<ul> <li>Where guards become aware of an emergency that warrants the stopping of the train, they must pull the emergency brake valve as per their railway's standard operating procedures and emergency procedures</li> </ul>
Q5.3.10		<ul> <li>The Guard must ensure information about these abnormal situations is given to train control as soon as possible.</li> </ul>
		<ul> <li>Examples of the types of abnormal situations that could be included are:         <ul> <li>a track obstruction</li> <li>trespassers crossing the track</li> <li>equipment failure</li> <li>signals in stop mode</li> <li>incorrect information or failure in communications</li> <li>a passenger emergency (e.g. illness or injury)</li> <li>an ill crew member</li> <li>a passenger initiated alarm</li> <li>a false alarm</li> <li>a collision</li> <li>a chemical spill</li> <li>a fire and explosion on the locomotive or train</li> <li>a bomb threat</li> <li>failure of head or maker lights</li> </ul> </li> </ul>
		<ul> <li>Candidate will describe the evacuation processes to be followed by a guard as per the rail operator's emergency procedures.</li> </ul>
Q5.3.11	What must a guard do during an emergency evacuation of a train?	<ul> <li>In the event of an emergency that requires the evacuation of the train, the guard will usually work with other crew members to guide and direct passengers as per the railway's emergency procedures.</li> </ul>
		<ul> <li>A guard needs to be thoroughly familiar with these procedures and will usually have practised them through emergency evacuation drills that periodically organised by the railway's operator under its safety management system.</li> </ul>
		Report to train control

	What <b>paperwork</b> must be completed by guards at the end of a train journey?	•	Candidate should outline the rail operator's requirements and standard procedures for the paperwork that needs to be completed by a guard at the end of a train journey. This may include	
			<ul> <li>time sheet,</li> </ul>	
			<ul> <li>log or record of train operations,</li> </ul>	
Q5.3.12			<ul> <li>reports of operational problems with train and/or any defective equipment identified and details of any action taken or required,</li> </ul>	
			<ul> <li>reports of any safety incidents on the train as per rail operator's procedures and regulatory requirements, and</li> </ul>	
			<ul> <li>paper work related to the return of the guard's kit to store.</li> </ul>	
Q5.3.11.	Describe the method of safe working on your railway and what actions you as guard need to take in relation to the authority to enter a section	•	The candidate will describe the method of safe working on the railway concerned and will specifically describe the action a guard must take in relation to the authority to enter a section.(for that railway).	
Q5.3.12.	Blank for additional question	•		

## Question Set 5.4 Securing a stationary train

	QUESTION	SAMPLE RESPONSE	
Q5.4.1	What must a guard do if a train is to <b>remain stationary</b> for a period of time?	If a train is to be stationary for a period of time, it is the guard's responsibility in conjunction with the train driver to apply the hand brake on the train as per the railway's standard operating procedures.	
Q5.4.2	Describe the duties of a guard if	Should the locomotive be detached from the train (e.g. changing locomotives or if a locomotive is running around at a terminating station), the guard must confirm that the hand brake on the leading vehicle has been applied.	
	a <b>locomotive is detached</b> from the vehicles on the train?	The locomotive is usually uncoupled by qualified person and it is their responsibility to actually apply the handbrake on the leading vehicle as part of that operation. I	
		It is the guard's duty however to confirm that the handbrake has actually been applied.	

Q5.4.3	What action should a guard take if the train is to remain stationary and unattended for an extended period of time?	<ul> <li>If a train is to remain stationary and unattended for an extended period of time (e.g. after service), the handbrake must be applied on the brake van and other vehicles on the train if required and the handbrakes secured with chain and padlock as per the railway's standard operating procedures.</li> <li>Once all brakes have been applied, the guard must lock the doors of brake van and other vehicles as per the railway's standard operating procedures.</li> </ul>
Q5.4.4	Blank for additional question	•

# Question Set 5.5 Assisting in the shunting of a train

QUESTION		SAMPLE RESPONSE	
Q5.5.1	Who usually <b>coordinates</b> the shunting of a train?	<ul> <li>The key person in charge of the shunting of a train is usually the train's guard. If shunting is to be performed and the guard has not yet commenced duty, another person who is qualified to work as a shunter must take charge.</li> <li>Shunting operations must be coordinated strictly in accordance with the railway's standard operating procedures and safety management system.</li> </ul>	

	Describe how the shunter communicates with the driver during shunting operations?	Candidate should outline the rail operator's requirements and standard procedures for communication between the guard and train driver during shunting operations of a train.		
		An example of such procedures is provided below:		
Q5.5.2		<ul> <li>A driver <u>must not move</u> a locomotive during shunting operations without a hand signal to do so from the shunter, even though fixed signals may be exhibited.</li> </ul>		
		<ul> <li>The shunter must therefore give clear and explicit hand signals directly to the driver when coordinating shunting operations.</li> </ul>		
		<ul> <li>Loose shunting of vehicles by locomotive power (i.e. not attached to the locomotive by normal means) is prohibited but vehicles may be moved by hand when necessary. It is important to check and implement the railway's standard operating procedures and safeworking requirements for shunting operations.</li> </ul>		
		<ul> <li>When vehicles are shunted towards others, shunter must give timely Hand Signals to the train driver so as to prevent striking the stationary vehicles with undue force.</li> </ul>		
		Candidate should outline the rail operator's requirements and standard procedures for the roles of the guard and other train crew in various types of shunting activities. For example, in some railways:		
Q5.5.3	Who is responsible for <b>coupling and uncoupling</b> of locomotives to and from trains?	<ul> <li>the coupling and uncoupling of locomotives to and from trains and vehicles <u>during train shunting</u> <u>operations</u> must be performed by the person in charge of the shunting (i.e. the guard)</li> </ul>		
		<ul> <li>at other times (e.g. during a locomotive run around at a terminus), it is the responsibility of the fireman or second person.</li> </ul>		
Q5.5.4	What action must the guard take concerning <b>brakes on vehicles</b> during train shunting operations?	During shunting operations, the guard must confirm that the brake is in operation on the vehicles being shunted except where this is not possible due to a defect.		

		<ul> <li>Candidate should outline the rail operator's safeworking procedures for ensuring that during and at the end of shunting operations all required safeworking equipment is correctly set and secured.</li> <li>For example, this may include such actions as:</li> </ul>		
Q5.5.5	What are the safeworking procedures for ensuring that during and at the end of shunting operations all required safeworking equipment is correctly set and secured?	ensucate oper posi sign     Whe shur so, to th  - After shu     rest bars     sec sco     ensurunn insid	uring that vehicles are clear of any points, the points or derail devices before they are rated and that they are in the correct ition for an intended movement before halling the driver to move.  The points require to be held during and there is no other person to do the fireman or second person must assist the extent necessary.  The points and locking all points, hand locking so, plunger pocks and derail devices the fireman devices and the blocks  The points are clear of any hing line and clear of any derail device or defoul points.	
Q5.5.6	Blank for additional question		-	