Loss of lives and property due to accidents

3007. SHRI CHUNIBHAI KANJIBHAI GOHEL: Will the Minister of RAILWAYS be pleased to state:

(a) the total number of train accidents that took place during the last two years with details of each accident;

(b) the details of loss of lives and property suffered due to each accident; and

(c) whether Government has any plan to procure anti-collision equipments to prevent such accidents and if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI RAJEN GOHAIN): (a) and (b) Details of number of consequential train accidents and number of persons lost their lives therein that took place in the last two years *i.e.* 2015-16 and 2016-17 are as under:–

Type of Accident	2015-16		2016-17	
	Number of Accidents	Number of Persons killed	Number of Accidents	Number of Persons killed
Collisions	03	01	05	05
Derailments	65	36	78	193
Manned Level Crossing Accidents	06	12	0	0
Unmanned level Crossings Accidents	29	58	20	40
Fire	0	0	01	0
Miscellaneous	04	15	0	0
TOTAL	107	122	104	238

During the last two years *i.e.* 2015-16 and 2016-17 there have been 107 and 104 consequential train accidents and in these train accidents loss to railway property were ₹ 45.24 crore in 2015-16 and ₹ 62.29 crore (approx.) in 2016-17.

(c) Train Protection Warning System (TPWS) along with the indigenously developed Train Collision Avoidance System (TCAS) are being deployed on Indian Railways to prevent collisions. The details of these are given below:–

1. **Train Protection and Warning System (TPWS)**

   Train Protection and Warning System (TPWS) proven European train protection technology has capability to control the speed of train in accordance with the sectional permitted speed and signal aspect ahead by automatic actuation of brakes, in case loco pilot fails to do so in time. Thus it mitigates safety risk of accidents/collisions due to loco pilot's error of Signal Passing at Danger or over speeding. TPWS also reduces delays during foggy weather.

TPWS based on this proven technology has been operationalized on 342 RKM's of Indian Railways.

Further TPWS works have been sanctioned on 3330 RKM. In first phase, work on suburban sections (1244 RKM) on Eastern, South Eastern, Northern, Southern and South Central Railways have been taken up for implementation.

In Phase II, implementation of the balance sanctioned works of TPWS on 2086 RKMs on HDN-1/HDN-2/HDN-3 Routes is also being taken up.

2. **Train Collision Avoidance System (TCAS)**

RDSO has taken an initiative in association with Indian Vendors and taken up a pilot project for indigenous development of a cost effective safety system called Train Collision Avoidance System (TCAS). This system is aimed at providing capability of preventing train accidents caused due to Signal Passing at Danger (SPAD) or over speeding by train drivers. The system has a feature of reflecting aspects of signal in the locomotive cab.

After successful Proof of Concept trials of TCAS, RDSO has taken up extended field trials of TCAS on a pilot section Lingamapalli-Vikarabad-Wadi-Bidar (250 Route km) section of South Central Railway. Trials on passenger carrying trains were started during the year 2016-17 leading to initial safety certification and validation by Independent Safety Assessor (ISA).

As development of TCAS is in the final stages, further new works have been sanctioned covering 1427 RKMs on South Central Railway.

Safety enhancement signaling systems as mentioned above are being progressively introduced based on availability of financial resources.

Wi-Fi Facility at railway stations

3008. SHRI M. P. VEERENDRA KUMAR: Will the Minister of RAILWAYS be pleased to state:

(a) the number of stations provided with free Wi-Fi facilities in the last two years;