84	Written Answers to	[RAJYA SABHA]		Starred Questions	
1	2	3	4	5	6
25.	Punjab	4617.17	2316.84	911	7288
26.	Rajasthan	7743.65	3701.09	1202	9616
27.	Sikkim	188.64	42.94	25	200
28.	Tamil Nadu	7438.88	6757.82	2543	20344
29.	Telangana	7250.96	3148.38	930	7440
30.	Tripura	1965.99	777.43	363	2904
31.	UT Chandigarh	94.32	39.74	16	128
32.	Uttar Pradesh	19171.59	11675.2	3236	25888
33.	Uttarakhand	2975.4	2196.67	1155	9240
34.	West Bengal	6423.74	3866.92	1316	10528
\$0	Total	166064	100129.8	35607	284856

<sup>#</sup> including un-utilized balance funds of previous year.

## Research and development in Indian Ordnance Factories

- \*89. SHRI SAMBHAJI CHHATRAPATI: Will the Minister of DEFENCE be pleased to state:
- (a) whether Indian Ordnance Factories (IOFs) have any dedicated wing for Research and Development of defence equipment;
  - (b) if so, the details thereof;
- (c) whether IOFs produce defence equipment only under the license obtained by other agencies or against obsolete technology transfer basis; and
- (d) if so, the details thereof and reasons as to why IOFs do not obtain license for production of state-of-the art technology-based equipment?

THE MINISTER OF DEFENCE (SHRIMATI NIRMALA SITHARAMAN): (a) and (b) Yes, Sir. Ordnance Factories have 15 Ordnance Development Centres (ODCs) for Research and Development of defence equipment for Ordnance Factories. These ODCs are set up with the main objective of development of new products/product upgrades, development of new processes/improvements in the existing process, technological support for absorption of Transfer of Technology (TOT) by Ordnance Factories. The list of ODCs and their dedicated technological areas is given in the Statement (See below).

<sup>\*</sup> including Daman and Diu.

<sup>\*\*</sup> including Dadra and Nagar Haveli.

(c) and (d) Ordnance Factory Board (OFB) is provided TOT for the equipment accepted for induction by Armed Forces. Indian Armed Forces accept defence equipment for induction only after worldwide technological scan, exhaustive trials and evaluation. OFB is also producing various equipment developed through in-house Research and Development within Ordnance Factories and products developed by Defence Research and Development Organisation (DRDO).

Statement

The list of ODCs and their dedicated technological areas

Sl.No.	Name of the Ordnance Development Centres	Dedicated Technology Areas
1.	Ordnance Development Centre at Rifle Factory, Ishapur (West Bengal)	Small Arms
2.	Ordnance Development Centre at Ammunition Factory Khadki, Pune, (Maharashtra)	Ammunition
3.	Ordnance Development Centre at Gun Carriage Factory, Jabalpur (Madhya Pradesh)	Weapon
4.	Ordnance Development Centre at Ordnance Factory, Kanpur (Uttar Pradesh)	Combat Clothing
5.	Ordnance Development Centre at Ordnance Factory Project, Medak (Telangana)	Armoured Vehicle
6.	Ordnance Development Centre at Ordnance Factory, Bhandara (Maharashtra)	Explosive and Propellant
7.	Ordnance Development Centre at Metal and Steel Factory, Ishapur (West Bengal)	Advanced Material
8.	Ordnance Development Centre at Ordnance Factory, Ambajhari (Maharashtra)	Rocket and Mechanical Fuzes, Ammunition Hardware and Non-ferrous Alloys
9.	Ordnance Development Centre at Vehicle Factory, Jabalpur (Madhya Pradesh)	'B' Vehicles
10.	Ordnance Development Centre at Opto Electronics Factory, Dehradun (Uttarakhand)	Optronics
11.	Ordnance Development Centre at Machine Tool Prototype Factory, Ambarnath (Maharashtra)	Electronic Fuzes and Guidance
12.	Ordnance Development Centre at Ordnance Factory, Chanda (Maharashtra)	Filling Technologies and Initiatory Compositions

Sl.No.	Name of the Ordnance Development Centres	Dedicated Technology Areas	
13.	Ordnance Development Centre at Ordnance Parachute Factory, Kanpur (Uttar Pradesh)	State-of-the-art Parachutes, equipment and technologies	
14.	Ordnance Development Centre at Heavy Vehicles Factory, Avadi, Chennai (Tamil Nadu)	Futuristic Infantry Combat Vehicles (FICVs) and to subsequently develop other variants on this platform	
15.	Ordnance Development Centre at Ordnance Factory, Khamaria, Jabalpur (Madhya Pradesh)	Development of Tank Ammunition Variants for 30 mm Ammunition and Ammunition for Air Defence Gun	

## Worsening air quality in cities

\*90. SHRIMATI SAROJINI HEMBRAM: Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether the pollution level of various cities of the country has reached severe levels and the air quality is dangerous for living beings; and
- (b) if so, the details thereof, city-wise and State-wise, and the steps taken by Government in coordination with the concerned State Governments to curb the situation?

THE MINISTER OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (DR. HARSH VARDHAN): (a) and (b) Ambient air quality is monitored at 731 locations covering 312 cities/towns in 29 States and 6 Union Territories across the country under National Air Quality Monitoring Programme (NAMP). The ambient air quality data for million plus cities during 2015-2017 is given in the Statement (See below). Analysis of data revealed that SO<sub>2</sub> levels were within the National Ambient Air Quality Standard (NAAQS) in all 43 cities during 2015-17. With respect to NO<sub>2</sub>, 9 cities showed an increasing trend, 10 cities showed a decreasing concentration and 24 cities showed a fluctuating trend. With respect to PM<sub>10</sub>, 9 cities showed an increasing trend, 5 cities showed a decreasing concentration and 29 cities showed a fluctuating trend. With respect to PM<sub>2,5</sub>, trends are available for 15 cities and out of 15 cities, 05 cities showed an increasing trend, 03 cities showed a decreasing concentration, 07 cities showed a fluctuating trend.

A Comprehensive Action Plan (CAP) for prevention, control and mitigation of air pollution in Delhi and NCR has been notified. The Central Government has also