

GOVERNMENT OF INDIA  
MINISTRY OF EDUCATION  
DEPARTMENT OF HIGHER EDUCATION  
**RAJYA SABHA**  
**STARRED QUESTION No-155**  
ANSWERED ON- 21/12/2022

**SPENDING ON EDUCATIONAL RESEARCH**

\*155. DR. ASHOK KUMAR MITTAL:

Will the Minister of Education be pleased to state:

- (a) the number of students graduated from each field as provided and approved by the University Grants Commission (UGC);
- (b) the cumulative spending of all educational institutions in the country for research and development and spending on each field respectively;
- (c) the details of spending of both Government and private institutions in educational research; and
- (d) whether Government plans to promote spending and quality of research and development in the country in the context of higher education?

**ANSWER**

THE MINISTER OF EDUCATION  
(SHRI DHARMENDRA PRADHAN)

- (a) to (d): A statement is laid on the Table of the House.

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**STATEMENT REFERRED TO IN REPLY TO PARTS (a) to (d) OF RAJYA SABHA STARRED QUESTION No. 155 FOR REPLY ON 21.12.2022 ASKED BY DR. ASHOK KUMAR MITTAL, HON'BLE MEMBER OF PARLIAMENT REGARDING SPENDING ON EDUCATIONAL RESEARCH.**

(a): As per information received from the University Grants Commission (UGC), it does not provide programme wise approval to the Higher Educational Institutions (HEIs). The recognized universities are empowered to offer programmes in various fields leading to award of degrees specified u/s 22(3) of UGC Act, 1956. However, as per All India Survey on Higher Education 2020-21, out-turn / pass-outs at Under Graduate level in Major Disciplines/ subjects is available at Annexure.

(b) to (d): The Government has been putting consistent efforts to promote spending and quality of Research & Development (R&D) in the Country. The Department of Science & Technology (DST) brings out the R&D statistics. The DST has informed that as per the latest available R&D Statistics, December 2020, the national expenditure on research and development measured in terms of Gross Expenditure on Research and Development (GERD) during the years 2015-16 to 2017-18 was ₹.95452.44 crore, ₹.103099.26 crore and ₹.113825.03 crore respectively. It is estimated to be of the order of ₹.123847.71 crore for the year 2018-19. In absolute terms India's GERD has been continuously increasing over the years and has been increased by three times in last 10 years. The National expenditure on R&D in the Higher Education Sector has also increased from ₹.5512.83 crore during 2014-15 to an estimated ₹.8797.08 crore during 2018-19, thus marking an increase of 59.57%.

The Department of Higher Education and other Ministries of the Government of India like the DST, Department of Biotechnology, Council of Scientific & Industrial Research, Indian Council of Agricultural Research, Indian Council of Medical Research are implementing various schemes for promoting research and development in the Higher Educational Institutions (HEIs). Further, the HEIs are also being encouraged to collaborate with the private sector, Alumni Associations, startups and entrepreneurship to augment the research efforts.

**ANNEXURE AS REFERRED TO IN REPLY TO PART (a) OF RAJYA SABHA STARRED QUESTION No. 155 FOR REPLY ON 21.12.2022 ASKED BY DR. ASHOK KUMAR MITTAL, HON'BLE MEMBER OF PARLIAMENT REGARDING SPENDING ON EDUCATIONAL RESEARCH.**

2020-21 Out-turn/Pass-Out at Under Graduate Level in Major Disciplines/ Subjects  
(Based on Actual Response)

Discipline		Male	Female	Total
<b>Arts</b>		908169	1135968	2044137
<b>Science</b>		504531	604498	1109029
<b>Commerce</b>		496879	523734	1020613
<b>Engineering &amp; Technology</b>	Computer Engineering	121756	83874	205630
	Mechanical Engineering	153508	9439	162947
	Electronics Engineering	73672	59779	133451
	Civil Engineering	87954	26364	114318
	Electrical Engineering	59026	24576	83602
	Information Technology	28191	14276	42467
	Other Engineering & Technology	26855	12746	39601
	Architecture	6634	7705	14339
	Chemical Engineering	8870	2901	11771
	Agriculture Engineering	3087	1427	4514
	Aeronautical Engineering	3041	973	4014
	Food Technology	1782	1538	3320
	Metallurgical Engineering	1500	456	1956
	Mining Engineering	1649	36	1685
	Instrumentation Engineering	1002	639	1641
	Marine Engineering	1147	99	1246
	Dairy Technology	538	263	801
	Planning	270	192	462
	Automotive Studies	328	9	337
	Urban Planning	12	6	18
<b>Education</b>		<b>230318</b>	<b>425157</b>	<b>655475</b>
<b>Medical Science</b>	Nursing	15844	63083	78927
	Pharmacy	31590	24386	55976
	General Medicine	12899	13983	26882
	Medical Science	10148	15451	25599
	Dentistry	4410	13483	17893
	Physiotherapy	3488	8676	12164
	Ayurveda	3946	6256	10202
	Homeopathy	2657	4912	7569
	Other Medical Science	1943	2517	4460
	Indian Medicine	696	1132	1828
	Unani	610	854	1464
	Bio-Technology	494	873	1367
	Ophthalmology	484	794	1278
	Medical Management	683	399	1082
	Occupational Therapy	269	648	917
	Microbiology	250	667	917
	Bio-Chemistry	215	417	632
	Pathology	158	416	574

	General Surgery	81	128	209
	Radiology	103	91	194
	Physiology	54	78	132
	ENT	55	48	103
	Anatomy	46	52	98
	Public Health	54	42	96
	Gynaecology	50	46	96
	Pediatrics	50	46	96
	Forensic Medicine/ Toxicology	32	48	80
	Lab Medicine	44	34	78
	Anesthesiology	21	20	41
	Nephrology	10	14	24
	Nuclear Medicine	10	9	19
	Cardiology	4	5	9
	Neurology	2	3	5
	Radiotherapy	2	2	4
<b>Social Science</b>		107678	114456	222134
<b>IT &amp; Computer</b>		<b>117985</b>	<b>92512</b>	<b>210497</b>
<b>Management</b>		108622	72064	180686
<b>Law</b>		61125	30103	91228
<b>Indian Language</b>		22685	43553	66238
<b>Agriculture</b>		38212	15387	53599
<b>Foreign Language</b>		14508	19475	33983
<b>Library &amp; Information Science</b>		10377	10646	21023
<b>Physical Education</b>		13926	6481	20407
<b>Oriental Learning</b>		10910	9290	20200
<b>Home Science</b>		1729	14629	16358
<b>Fine Arts</b>		4620	5322	9942
<b>Journalism &amp; Mass Communication</b>		4209	4091	8300
<b>Area Studies</b>		3108	4711	7819
<b>Social Work</b>		2982	3358	6340
<b>Design</b>		1776	4506	6282
<b>Paramedical Science</b>		2955	2845	5800
<b>Fashion Technology</b>		901	3469	4370
<b>Hospitality and Tourism</b>		3299	879	4178
<b>Veterinary &amp; Animal Sciences</b>		2437	1413	3850
<b>Linguistics</b>		858	1976	2834
<b>Fisheries Science</b>		756	750	1506
<b>Cultural Studies</b>		461	889	1350
<b>Religious Studies</b>		647	646	1293
<b>Marine Science / Oceanography</b>		346	24	370
<b>Defence Studies</b>		124	166	290
<b>Women Studies</b>		0	276	276
<b>Gandhian Studies</b>		100	11	111
<b>Criminology &amp; Forensic Science</b>		32	67	99
<b>Footwear Design</b>		60	34	94
<b>All India</b>		<b>3349549</b>	<b>3560297</b>	<b>6909846</b>

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