GOVERNMENT OF INDIA
MINISTRY OF COMMERCE & INDUSTRY
DEPARTMENT FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE

RAJYA SABHA

UNSTARRED QUESTION NO. 349
TO BE ANSWERED ON FRIDAY, THE 4TH FEBRUARY, 2022.

GRANT OF PHARMACEUTICAL PATENTS

349 PROF. MANOJ KUMAR JHA:
SMT. VANDANA CHAVAN:

Will the Minister of **Commerce and Industry** be pleased to state:

(a) the number of patents granted towards the pharmaceutical sector/industry, total number and as a percentage of total number of patents granted, for the last five years;

(b) the details of the percentage of such patents granted to foreign entities, private entities and research institutions in India;

(c) whether there is an estimate of India's global ranking in producing pharmaceutical patents, if so, the details thereof;

(d) the details of FDI inflows that have gone towards research and development (R&D) of the pharmaceutical industry; and

(e) the measures that Government is taking to incentivise the R&D of such patents?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF COMMERCE & INDUSTRY (SHRI SOM PARKASH)

(a): Statistical information on number of patents granted towards the pharmaceutical sector in last five years is placed at **Annexure-I**.

(b): In the last five years, 6576 patents have been granted towards the pharmaceutical sector, of which 4902 were granted to foreign entities, 1143 to private entities, and 291 to research institutions in India.

(c): Currently, there is no specific global ranking focusing on pharmaceutical patents. India has, however, achieved 46th position in the Global Innovation Index (GII) in 2021 as compared to 81st position in 2015. GII is an annual ranking of countries in terms of their capacity for, and success in, innovation. It is published by the World Intellectual Property Organization (WIPO) with Cornell University and INSEAD.

Ranking is based on 81 indicators, grouped into innovation inputs and outputs, which together contains 7 pillars. Out of these 7 pillars, only 2 pillars viz. *'Business Sophistication'* and *'Knowledge and Technology outputs'* uses patents as the basis of ranking, and information relating to patents includes all

types of patents filled for various disciplines during the year under consideration.

(d): Data related to Foreign Direct Investment (FDI) inflow under 'Drugs and Pharmaceuticals' in last five years is placed at **Annexure-II**. No specific data related to FDI inflow in Research & Development (R&D) in Pharmaceutical Industry is maintained.

(e): Government is committed to promote research and innovation in the pharmaceutical sector. In this regard, various measures taken up by the Government are placed at **Annexure-III**.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF THE RAJYA SABHA UNSTARRED QUESTION NO. 349 FOR ANSWER ON 04.02.2022.

Statistical information on number of patents granted towards the pharmaceutical sector/industry in last five years

Type	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
No. of Patents granted for Pharmaceutical sector/industry	656	951	1179	1785	2005
Total No. of Patents granted	9847	13045	15283	24936	28391
Percentage of total number of patents granted	6.66%	7.29%	7.71%	7.16%	7.06%

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ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (d) OF THE RAJYA SABHA UNSTARRED QUESTION NO. 349 FOR ANSWER ON 04.02.2022.

Foreign Direct Investment inflow under 'Drugs and Pharmaceuticals' in last five years

Sl. No.	Financial Year	FDI in US$ million
1	2016-17	857.39
2	2017-18	1,009.96
3	2018-19	265.97
4	2019-20	517.79
5	2020-21	1,490.49

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ANNEXURE-III

ANNEXURE REFERRED TO IN REPLY TO PART (e) OF THE RAJYA SABHA UNSTARRED QUESTION NO. 349 FOR ANSWER ON 04.02.2022.

Various measures taken up by the Government for incentivizing research and innovation

Government has established seven National Institutes for Pharmaceutical Education and Research (NIPERs), as institutes of national importance, which provides master's, doctoral and post-doctoral courses and conduct high end research in various specializations of pharmaceuticals and medical devices. These NIPERs have signed about 188 MOUs with Industries and other academic institutions; filed more than 300 patents and published about 5,300 research papers published in various reputed journals. Since inception, more than 7,800 students have passed out from these NIPERs, who are working with industry, R&D and academic institutions. Further, in order to align research as per needs of country, all NIPERs have come together with a *Common Research Programm*e by sharing their expertise and resources.

Government has also launched a *NIPER Research Portal* to capture the research activities of all seven NIPERs. The Portal has details of research projects undertaken/ completed by NIPERs. Industry can use this portal to be abreast of research carried out at NIPERs, commercialize the patents and further collaborate with NIPERs for future research works for better health outcomes for citizens of the country.

Further, Government is providing various tax incentives for promoting R&D. These includes allowance for expenses (both revenue and capital) incurred for in-house scientific R&D where the research relates to the business of the entity undertaking such research. Deductions are also allowed for payments made to scientific research organizations, including approved research consortia, universities, colleges, or other research institutions.

Further, with patent box-regime introduced in 2016, income earned from the exploitation of patents developed and registered in the country is tax at special rate of 10% on the gross basis at the option of the taxpayer.

Under the Startup India program, startups engaged in eligible activities or with a high potential of employment generation or wealth creation are eligible for various tax exemptions and other support by the government, including a deduction of 100% of profits for three out of 10 years. Eligible activities include innovation, development, and improvement of products, processes, and services.

Aside from the income tax incentives, government also provides benefits of concessional customs duty, and goods and services tax (GST) for research purposes. For instance, registered research institutions are exempted from customs duty on the purchase of any goods (equipment, consumables, computer software, prototypes etc.) for R&D activities. Recognized in-house R&D units in the pharmaceutical/bio-technology sector are also eligible for duty-free import of specified goods based on certain conditions. Further, there are low GST rates for research institutions (other than hospitals) on the purchase of specified goods for R&D activities.

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