



**GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF SCIENCE & TECHNOLOGY
NEW DELHI-110016**

**NATIONAL SURVEY ON RESOURCES DEVOTED TO SCIENTIFIC
AND TECHNOLOGICAL (S&T) ACTIVITIES**

2005-06

QUESTIONNAIRE – II

(For the In-House Research and Development (R&D) Units of the productive enterprises both
in Public and Private Sectors)

Please read the instructions before filling the questionnaire

(Please don't detach this page)

**INSTRUCTIONS FOR FILLING UP VARIOUS QUESTIONS OF THE
QUESTIONNAIRE - II**

- (i) The questionnaire contains **4** sections marked as **A, B, C** and **D**.
- (ii) Please ensure that the number of characters/alphabets does not exceed the number of boxes given. Wherever necessary, abbreviations may be used.
- (iii) All alphabets should be filled in **BLOCK LETTERS**.
- (iv) Please fill complete information for the items applicable to your institution. **IN CASE EXACT DATA ARE NOT AVAILABLE, USE ESTIMATES**.
- (v) Please stick to the units in which figures are asked e.g. **Rs. lakhs** should be given in Rs. lakhs only and not in Rs. thousands or crores.
- (vi) Please ensure that in each case the numeric values are filled up-to two decimal places in proper unit (leaving aside Section - C) e.g. Rs. 20.434 lakhs should be written as Rs. 20.43 lakhs.
- (vii) List of different Scientific Agencies/Departments, Ministries/Departments and State Governments with appropriate code numbers is given in **ANNEXURE - A**. If yours is a Public/Joint Sector company consult this list before filling the information in the boxes against **Q. III in Section - A**.
- (viii) The information regarding expenditure on new plant and machinery asked in **Q.IX in Section - A** is for whole company and so, it should include plant and machinery for production purpose as well as for R&D acquired during the year.
- (ix) Please indicate the location of Research and Development (R&D) unit with the help of State code given in **ANNEXURE -A** for **Q.II** of **SECTION -B**.
- (x) **Please seek any clarification on the questionnaire from Dr. Laxman Prasad/ Sh. Rakesh Chetal/ Shri Parveen Arora/ Mrs. Namita Gupta / Dr. A. N. Rai.**

The completed Questionnaire should be returned to:

Mr. Rakesh chetal
Scientist – G /Adviser
NSTMIS Division
Department of Science & Technology
Technology Bhawan
New Mehrauli Road
New Delhi - 110 016

Telephone : 2651 0686, 2652 5541, 2652 3432, 2659 0371, 2659 0372
Fax : 011-2651 0686, 2652 5541
E. Mail : rchetal@nic.in

SECTION -A

GENERAL INFORMATION

Q.I Name of the Company : _____

Postal Address: _____

State Code :

Pin Code:

Web address:

Phone number with code

FAX number with code

Q.II Month and year of set up of the Company:

MONTH

YEAR

Q.III Is yours a Public Sector or Joint Sector Company? If yes, fill in the appropriate code number as given in the **ANNEXURE -A**. (Choose the code depending on whether the controlling authority is either a **Central Ministry/ Department/Agency or a State Government/UT**.)

Q.IV Category of the firm. Please tick (✓) the appropriate Box against each item.

	Yes	NO
A. Small Scale Unit	<input type="checkbox"/>	<input type="checkbox"/>
B. Registered with DSIR	<input type="checkbox"/>	<input type="checkbox"/>
C. Covered under IDR Act	<input type="checkbox"/>	<input type="checkbox"/>
D. Joint Sector Company	<input type="checkbox"/>	<input type="checkbox"/>
E. Subsidiary of a Foreign Company	<input type="checkbox"/>	<input type="checkbox"/>
F. Has Foreign collaboration	<input type="checkbox"/>	<input type="checkbox"/>
G. Foreigner or NRI Own Share	<input type="checkbox"/>	<input type="checkbox"/>
H. Multinational Company	<input type="checkbox"/>	<input type="checkbox"/>

Q.V Major products manufactured (Give name(s) of only one or two Products).

1. _____
 2. _____

Q.VI Major product(s) manufactured which best describe the objective of your company's R&D activities. (See **ANNEXURE –B** for codes)

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Q.VII Industry group to which your company/enterprise could be best classified? (See **ANNEXURE-C** for codes)

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Q.VIII Gross Turnover

GROSS TURNOVER (IN RUPEES CRORES UPTO TWO DECIMAL PLACES)

2002-03	2003-04	2004-05	2005-06

Q.IX. Expenditure on advertisement and new plant and machinery for the whole company including R&D in Rs. Lakhs. Please fill as indicated in the example e.g. Rs. 28.466 lakhs should be written as Rs. 28.47 Lakhs.

Year	Expenditure on Advertising (Rs. Lakhs)	* Expenditure on new plant and machinery (Rs. Lakhs)																				
2002-03	<table border="1"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>											<table border="1"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>										
2003-04	<table border="1"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>											<table border="1"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>										
2004-05	<table border="1"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>											<table border="1"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>										
2005-06	<table border="1"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>											<table border="1"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>										

* See GENERAL INSTRUCTIONS (viii)

Q.X Estimated Percentage of Time/Resources devoted to the following activities For example 25% may be indicated in the boxes as

0	2	5
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1. Basic Research	<input type="text"/>	<input type="text"/>	<input type="text"/>
2. Applied Research	<input type="text"/>	<input type="text"/>	<input type="text"/>
3. Experimental Development	<input type="text"/>	<input type="text"/>	<input type="text"/>
4. Other Activities	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total (1+2+3+4).....	<input type="text"/>	<input type="text"/>	<input type="text"/>

1	0	0
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DEFINITIONS

1. BASIC RESEARCH

Basic research may be defined as any experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular or specific application or use in view.

2. APPLIED RESEARCH

Applied Research may be defined as any original investigation undertaken in order to acquire new knowledge. It is, however, directed primarily towards a specific practical aim or objective.

3. EXPERIMENTAL DEVELOPMENT

Experimental development may be defined as any systematic work, drawing on existing knowledge gained from research and/or practical experience that is directed to produce new materials, products and devices, to install new processes, systems and services, and to improve substantially those already produced or installed.

4. OTHER ACTIVITIES

Other activities would include S&T services provided by libraries, information and documentation centres, data banks and information processing departments.

SECTION -B

INFORMATION ON RESEARCH AND DEVELOPMENT (R&D) EXPENDITURE

Q.I* Month and year of set up of R&D unit **MONTH** **YEAR**

Q.II* Location of R&D Unit (pl. see **ANNEXURE –A** for State code) **STATE**

Q.III* Expenditure on R&D (e.g. Rs. 19.345 lakhs should be written as Rs. 19.35 lakhs).

EXPENDITURE (IN RUPEES LAKHS)

Year	Actual 2002-03	Actual 2003-04	Actual 2004-05	BE or RE or Actual [@] 2005-06
Revenue/Recurring Expenditure				
Capital/Non-Recurring Expenditure				
Total Expenditure				
Foreign Exchange Component in Total R&D expenditure				

NOTE : * If you have more than one **R&D** unit please fill the **Q. I** to **Q. III** above separately for each of such R&D unit

@ In the absence of actual expenditure, provide estimated expenditure.

DEFINITIONS

1. REVENUE/RECURRING EXPENDITURE

Revenue/recurring expenditure includes the cost of wages salaries and all related labour costs, minor equipment, expendable supplies, expenditure on office and labour supplies, materials, books, journals, rent of buildings, travel and postal services.

2. CAPITAL/NON-RECURRING EXPENDITURE

Expenditure on purchase of major installation, machinery and equipment, land for building, new buildings or large scale improvements, modifications and repair to buildings and fixed installations, land improvement work and other expenditure are included under capital/nonrecurring expenditure.

SECTION - C

INFORMATION ON MANPOWER EMPLOYED

Q. I Give details of **FULL TIME** personnel employed in your company (**As on 1st April, 2006**).

GENDER	*Total number of employees on the pay roll of the company (I)	**No. of scientific & technical (S&T) personnel employed (II)	***S&T personnel employed on R&D activities Only (III)	***Personnel employed on auxiliary activities in R&D unit (IV)	***Personnel employed for administrative activities in R&D unit (V)
MALE (M)					
FEMALE (F)					
TOTAL (T)					

* This will include all category of personnel employed viz. those employed in Finance, Production, Marketing, Sales, R&D etc.

** This will refer to all Scientific and Technical Personnel working in all department of organisation i.e. in Finance, Production, Marketing, Sales, R&D etc.

*** If you have more than one R&D unit, fill the columns (III), (IV) and (V) with total for all the R&D units.

Q.II Give the following information on annual gross emoluments for **FULL TIME R&D personnel** given in **Column (III)** in **Q. I** of this section.

Annual Gross Emoluments (in Rupees)	Number of Personnel		
	Male	Female	Total
Less than 2,00,000			
2,00,000 - 2,99,000			
3,00,000 - 3,99,000			
4,00,000 – 4,99,000			
5,00,000 and above			
Total			

DEFINITIONS

1. R&D ACTIVITIES

Research and experimental development(R&D) activities can be defined as any systematic and creative work undertaken in order to increase the stock of knowledge and the use of this knowledge to devise new applications. R&D activities include any one or more of the categories of research such as basic research, applied research and experimental development.

2. AUXILIARY ACTIVITIES

Auxiliary activities refer to those tasks such as maintenance and operation of specialised R&D (or S&T) equipment and machinery, preparing materials and equipment and carrying out experiments, tests and analyses. For example the activities carried out by medical assistants, computer programmers, surveyors, draughtsmen, survey interviewers and investigators can be classified as auxiliary activities.

3. ADMINISTRATIVE ACTIVITIES

Administrative activities refer to those tasks which are clerical, secretarial and administrative in character. For example, personnel providing services such as security, janitorial and maintenance can be classified as administrative activities.

Q. III Please give the academic background of **FULL TIME** personnel employed on R&D (given in **Column (III)** of **Q.I** in **Section-C**) as per their field.

Natural Sciences

	Ph. D.	Post Graduate	Graduate	Diploma	Others	Total
Male						
Female						
Total						

Agricultural Sciences

Male						
Female						
Total						

Engineering & Technology

Male						
Female						
Total						

Medical Sciences

Male						
Female						
Total						

Social Sciences

Male						
Female						
Total						

SECTION - D

INFORMATION ON R&D OUTPUT

Q.I Give information on the number of each item completed during the financial years **2003-04** and **2004-05**:

		Number	
Code	Items completed	2003-04	2004-05
01	Patents filed		
02	Patents sealed		
03	Copy rights obtained		
04	New products developed		
05	New processes developed		
06	Import substitutes developed		
07	Design prototypes developed		
08	Consultancy services rendered		
09	Papers published in International Journals		
10	Papers published in National Journals		
11	Books Published		
12	Technical Reports published		
13	Non-Technical reports published		
14	Papers presented in National conferences/ Seminars/Symposia etc.		
15	Papers presented in International Conferences/seminars/symposia etc.		
16	S&T Personnel deputed for National conferences/seminars/symposia etc.		
17	S&T Personnel deputed for International conferences/seminars/symposia etc.		
18	S&T Personnel deputed for National Training Programmes		
19	S&T Personnel deputed for International Training Programmes		
20	Any other items (Please specify)		

ANNEXURE - A

Agency/Ministry/Department/States and Code numbers

Name of Major Central Scientific Agency/Department	Code	Name of Other Central Ministry/Departments	Code
Council of Scientific and Industrial Research	101	Steel	231
Defence Research and Development Organisation	102	Supply	232
Department of Atomic Energy	103	Surface Transport	233
Department of Biotechnology	104	Telecommunications	234
Department of Electronics	105	Textile	235
Ministry of Non Conventional Energy Sources	106	Urban Development	236
Department of Ocean Development	107	Water Resources	237
Department of Science & Technology	108	Welfare	238
Department of Scientific and Industrial Research	109		
Department of Space	110		
Indian Council of Agricultural Research	111		
Indian Council of Medical Research	112		
Ministry of Environment, Forest and wild life	113		
Name of Other Central Ministry/Department	Code	Name of State Government/UT Code	Code
Agricultural and Co-operation	201	Andaman & Nicobar Islands	301
Animal Husbandry & Dairying	202	Andhra Pradesh	302
Chemicals & Petrochemicals	203	Arunachal Pradesh	303
Civil Aviation	204	Assam	304
Civil Supplies & Public Distribution	205	Bihar	305
Coal	206	Chandigarh	306
Commerce	207	Chhattisgarh	307
Culture	208	Delhi	308
Defence	209	Dadra & Nagar Haveli	309
Defence Production & Supplies	210	Daman & Diu	310
Education	211	Goa	311
Family Welfare	212	Gujarat	312
Fertilizers	213	Haryana	313
Food	214	Himachal Pradesh	314
Food Processing Industries	215	Jammu & Kashmir	315
Health	216	Jharkhand	316
Heavy Industry	217	Karnataka	317
Home	218	Kerala	318
Industrial Development	219	Lakshadweep	319
Information & Broadcasting	220	Madhya Pradesh	320
Labour	221	Maharashtra	321
Mines	222	Manipur	322
Petroleum & Natural Gas	223	Meghalaya	323
Posts	224	Mizoram	324
Power	225	Nagaland	325
Public Enterprises	226	Orissa	326
Railways	227	Pondicherry	327
Rural Development	228	Punjab	328
Small Scale Industries Agro & Rural Industries	229	Rajasthan	329
Statistics	230	Sikkim	330
		Tamil Nadu	331
		Tripura	332
		Uttar Pradesh	333
		Uttaranchal	334
		West Bengal	335

ANNEXURE - B

OBJECTIVES AND CODE NUMBERS

Objective	Code
Defence	01
Development of Agriculture, Forestry and Fishing	02
Development of Health Services	03
Development of Transport and Telecommunications	04
Exploration and Assessment of Earth, Seas and Atmosphere	05
General Advancement of Knowledge including development of education	06
Promotion of Industrial Development	07
Production, Conservation and Distribution of Energy	08
Protection of the Environment	09
Social Development and Other Socio-Economic Services	10
Space	11
Urban and Rural Planning	12
Other Aims	13

ANNEXURE-C

INDUSTRY GROUPS AND CODE NUMBERS

Industry Group	Code
1. Metallurgical Industries	01
2. Fuels	02
3. Boilers & Steam Generating Plants	03
4. Prime Movers	04
5. Electricals & Electronics	05
6. Telecommunication	06
7. Transportation	07
8. Industrial Machinery	08
9. Machine Tools	09
10. Agricultural Machinery	10
11. Earth Moving Machinery	11
12. Misc. Mechanical Engineering Industries	12
13. Commercial, Office, Household Equipment	13
14. Medical & Surgical Equipment	14
15. Industrial Equipment	15
16. Scientific Instruments	16
17. Math. Surveying & Drawing Instrument	17
18. Fertilizers	18
19. Chemicals (other than fertilizers)	19
20. Photographic Raw Film & Paper	20
21. Dyestuffs	21
22. Drugs & Pharmaceuticals	22
23. Textiles (Dyed, Printed, Processed)	23
24. Paper & Pulp	24
25. Sugar	25
26. Fermentation Industries	26
27. Food Processing Industries	27
28. Vegetable Oil & Vanaspati	28
29. Soaps, Cosmetics, Toilet Preparations	29
30. Rubber Goods	30
31. Leather, Leather goods & Pickers	31
32. Glue & Gelatine	32
33. Glass	33
34. Ceramics	34
35. Cement & Gypsum	35
36. Timber Products	36
37. Defence Industries	37
38. Information Technology	38
39. Bio-technology	39
40. Consultancy services	40
41. Miscellaneous Industries	41