



The Profile

1. Name and Address of the University:

Name & Address	HOMI BHABHA NATIONAL INSTITUTE TRAINING SCHOOL COMPLEX ANUSHAKTI NAGAR	
City : Mumbai	Pin : 400 094	State: Maharashtra
Website: www.hbni.ac.in		

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3. Status of the University:

University Under section-3 of UGC (Deemed University)

**4. Type of University**

Unitary

**5. Source of funding**

Central Government





- 6. a. Date of establishment of the university: 03/06/2005 (dd/mm/yyyy)**
- b. Prior to the establishment of the university, was it a / an
- i. PG Centre Yes No
- ii. Affiliated College Yes No
- iii. Constituent College Yes No
- iv. Autonomous College Yes No
- v. Any other (please specify): The Institute has 10 Constituent Institutions. Prior to accreditation of HBNI as a deemed to be university, each Constituent Institution was a recognized center for academic research and teaching by some university as follows:-

Sr. No.	Constituent Institution	University Name	Date of Establishment
1.	BHABHA ATOMIC RESEARCH CENTRE (BARC), MUMBAI*	Mumbai	1957
2.	INDIRA GANDHI CENTRE FOR ATOMIC RESEARCH (IGCAR), KALPAKKAM	Madras	1969
3.	RAJA RAMANNA CENTRE FOR ADVANCED TECHNOLOGY (RRCAT), INDORE	Devi Ahilya	1984
4.	VARIABLE ENERGY CYCLOTRON CENTRE (VECC), KOLKATA	Calcutta and Jadavpur	1977
5.	SAHA INSTITUTE OF NUCLEAR PHYSICS (SINP), KOLKATA	Calcutta and Jadavpur	1950
6.	INSTITUTE FOR PLASMA RESEARCH (IPR)**, GANDHI NAGAR	Devi Ahilya	1986
7.	INSTITUTE OF MATHEMATICAL SCIENCES (IMSC), CHENNAI	Madras	1962
8.	HARISH CHANDRA RESEARCH INSTITUTE (HRI), ALLAHABAD	Allahabad/ IGNOU	1965
9.	TATA MEMORIAL CENTRE (TMC)***, MUMBAI	Maharashtra University Of Health Science	1941
10.	INSTITUTE OF PHYSICS (IOP), BHUBANESWAR, IoP (NISER)****	Utkal HBNI	1972 2006

Notes: * The main campus of BARC is in Mumbai. It has campuses at other places including Kalpakkam, Tarapur and Mysore, and field laboratories at all



nuclear power stations, Gauribidanur, New Delhi, high background radiation areas in Kerala, high altitude laboratories in Gulmarg, gamma ray telescope at Mount Abu etc. and BARC Training Schools at Mumbai, Indore, Kalpakkam and Hyderabad.

** Centre of Plasma Physics (CPP) located in Sonapur, near Guwahati was merged with IPR wef 29th May 2009.

***TMC is now setting up additional centres in Vizag and Mullanpur, SAS District, Punjab, near Chandigarh.

**** IoP(NISER) was set up as a project of IoP and thereby became a part of HBNI. It is functioning from the campus of IoP. Since eventually NISER will move out of IoP campus, request for making NISER an independent CI of HBNI is pending with UGC. Prior to considering request by HBNI, UGC desires that HBNI should be accredited by NAAC.

7. Date of recognition as a university by UGC or any other national agency

Under Section	dd	mm	yyyy	Remarks
i. 2f of UGC				
ii. 12B of UGC				
iii. 3 of UGC #	03	06	2005	
iv. Any other (specify)				

Notifications MHRD and UGC are enclosed.

8. Has the university been recognized

a. By UGC as a University with Potential for Excellence?

Yes No

b. For its performance by any other governmental agency?

Yes No

9. Does the University have off-campus centre?

Yes No

10. Does the university have off-shore campuses?

Yes No

11. **Location of the campus and area:** The University has a distributed structure, is a multi-campus university with all campuses having equal status. Its Central Office is in Mumbai and its ten Constitution Institutions are located at various locations in the country. Details are as follows.



	Location: Urban	Campus area in thousand m ²	Built up area in m ²
i and ii:Main Campuses. in the Country	Bhabha Atomic Research Centre, Mumbai	8500	30,00,000
	Indira Gandhi Centre For Atomic Research, Kalpakkam	5600	66,000
	Raja Ramanna Centre For Advanced Technology, Indore	7160	1,00,000
	Variable Energy Cyclotron Centre, Kolkata	60 (Salt lake) 21(Chakgaria) 101(Rajarhat)	31,337 7394 -----
	Saha Institute Of Nuclear Physics, Kolkata	54	12,933
	Institute For Plasma Research, Gandhinagar	200	24,000
	Harish Chandra Research Institute, Allahabad	267	20,000
	Institute Of Mathematical Sciences, Chennai	28	13,806
	Tata Memorial Centre , Mumbai (Parel + Khargar)	15 + 240 (Additional 20234 m ² of land has been procured at Parel)	69,525 + 35,113
	Institute Of Physics, Bhubaneswar	227	27,470
IOP-NISER (New Campus)	1209	1,15,050	
iii.Campuses abroad	NIL		

HBNI has ten Constituent institutions thereby it has ten campuses. This is a consolidated self-study report reflecting the activities of all the campuses. In case of BARC, area of the main campus only is given. NISER is operating from IoP campus and its new campus is under construction. Areas given in the table are for the campus under construction.

**12. Campus-wise information about physical infrastructure.****A. BHABHA ATOMIC RESEARCH CENTRE (BARC), MUMBAI**

(Details of Trombay campus only are given here. Details of other campuses mentioned in the Profile are not included.)

- Auditorium / seminar complex with infrastructural facilities: A large auditorium having a capacity of 845, four mid size auditoria and several seminar rooms are available inside the security boundary of BARC. A multi-purpose hall is available outside the security boundary. A large convention centre is nearing completion outside the security boundary. The convention centre will have a large auditorium having a capacity of 900 persons, several meeting rooms, exhibition hall (300 M²), office space for offices of professional societies, 40 suites for guests and several other facilities.)
- Sports facilities
 - Playground: In the residential complex, there are sports facilities for students, faculty and other staff. Facilities include a cricket ground, lawn tennis courts, basket ball courts, indoor and outdoor badminton courts, football ground etc.
 - Swimming pool: A full Olympic size swimming pool is available.
 - Gymnasium: Yes
 - Any other (please specify)
- Hostel: BARC does not conduct any undergraduate programmes and so hostel for boys and girls is a common hostel. In addition Guest Houses are available for guests.

Details of present hostel facilities for students is as follows.

Sr. No.	Hostel	Number of students
1.	Training School Hostel	154
2.	New Bachelor Hostel	08
3.	Nine flats for Ph.D. students on sharing basis with five students in a flat	44

All facilities such as mess, library, lounge, a multi-purpose hall, a sports hall for indoor sports etc. are also available.

Additional hostel facility is under construction. Phase 1 of additional hostel is nearing completion and has 336 bachelor accommodations



and 132 married accommodations. Hostel to be constructed under phase 2 will have the same size. Common facilities like mess etc. are being constructed under phase 1 itself.

- Residential facilities for faculty and non-teaching: Since BARC is an institution under Central Government, residential facilities as per the norms of Central Government are provided and level of satisfaction is about 73%.
- Cafeteria: There are six large canteens and several small tea pantries.
- Health centre: A dispensary with a few beds is available inside of BARC campus and a full fledged hospital (400 beds) is available in the residential complex. The hospital has all facilities including ambulance and emergency care.
- Facilities like banking, post office, book shops, etc YES
- Transport facilities to cater to the needs of the students and staff: YES
- Facilities for persons with disabilities YES
- Animal house YES
- Incinerator for laboratories YES
- Sub-stations YES
- Waste management facility YES

Note: BARC has campuses at other places including Tarapur, Mysore and Kalpakkam. Employees working at those locations do enroll for academic programmes of HBNI and all facilities as per the norms of Central Government are available at those locations. A new campus of BARC is coming up at Vizag and all facilities will be provided there as well. Transit facilities have already been constructed or rented.

B. INDIRA GANDHI CENTRE FOR ATOMIC RESEARCH (IGCAR), KALPAKKAM

- Auditorium / seminar complex with infrastructural facilities: One large auditoria (340 seats), 11 auditoria/seminar halls/ lecture halls having sitting capacity between 60 to 110 are available within the IGCAR security boundary.
- A convention centre (SRI) is outside the security boundary is also available. The convention centre is having an auditorium of seating capacity for 206 persons, meeting rooms, exhibition hall, office space for offices of professional societies, 32 rooms for guests and other facilities.
- Sports facilities



- Playground: In the residential complex, there are sports facilities for students, faculty and other staff. Facilities include a cricket ground, lawn tennis courts, basket ball courts, indoor and outdoor badminton courts, football ground etc.
- Swimming pool: Yes.
- Gymnasium: Yes
- Hostel: IGCAR does not conduct any undergraduate programmes and so there is common hostel for boys and girls. In addition Guest Houses are available for guests.

Details of present hostel facilities for students is as follows.

No.	Hostel	Number of students
1.	Training School Hostel	60
2.	JRF Enclave	200

All facilities such as mess, library, TV room, computer room, sports hall for indoor sports etc. are also available.

- Residential facilities for faculty and non-teaching: Since IGCAR is an institution under Central Government, residential facilities as per the norms of Central Government are provided and level of satisfaction is about 80%.
- Cafeteria: There are three canteens and several small tea pantries.
- Health centre: A First Aid Centre is available inside IGCAR campus. A full-fledged hospital is available in the residential complex. The hospitals have all facilities including ambulance, emergency care and dispensary.

- Facilities like banking, post office, book shops, etc. YES
- Transport facilities to cater to the needs of the students and staff: YES

- Facilities for persons with disabilities YES
- Animal house YES
- Incinerator for laboratories YES
- Sub-stations YES
- Waste management facility YES

C. RAJA RAMANNA CENTRE FOR ADVANCED TECHNOLOGY (RRCAT), INDORE

- Auditorium / seminar complex with infrastructural facilities:



1. Main auditorium with seating capacity of about 472 and with PC controlled projector and speaker system
 2. Two smaller lecture halls each with a seating capacity of 112 and PC controlled projector and speaker system
 3. Auditorium in the training school complex seating capacity of 120
 4. A large convention centre will come up within the next 3-5 years. The convention centre will have a large auditorium having a capacity of 700 persons, two smaller auditoria with capacity of 150 each, a exhibition hall, a poster display hall, and food court.
- Sports facilities: Sports room with indoor game facilities like table tennis, carom, chess; 2 Badminton courts; one Basketball court; a playground for cricket and a gymnasium (Multi station, motorized treadmill, exercise bicycle, weight training benches and weights, single bar and double bar) and a yoga centre.
 - Hostel : RRCAT has two hostels for the students namely, Training School Hostel (TSH) and Post Graduate (PG) hostel. One wing of the PG Hostel has been exclusively reserved for female students. In addition Guest Houses are available for academic visitors from other Institutions/Universities. Details of present hostel facilities for the students are as follows:

Sr. No.	Hostel	Number of rooms
1.	Training School Hostel	24 single occupancy and 11 double occupancy
2.	PG Hostel	23 single occupancy and 23 double occupancy

At present there are 48 students occupying these rooms. TSH and PG hostel also house various other facilities such as mess, library, computer room, sports room for indoor sports, lounge, a pantry room etc

- Residential facilities for faculty and non-teaching: Residential facilities as per the norms of Central Government are provided and level of satisfaction is about 70%.
- Cafeteria :
 1. One cafeteria in the technical premises, two small tea pantries
 2. One small eatery in the residential campus with a few confectionery and snacks shop.



- Health centre – Day care –four beds; Ambulance; Consultant doctors and a Pharmacy. Additionally tied up with renowned city hospitals for in-patient treatments
- Other Facilities : State bank of India branch and a Post office
- Transport facilities to cater to the needs of the students and staff are available.
- Animal house is available.
- Incinerator for laboratories is available
- A 132 kV sub-station is available
- A Waste management facility “Nisargaruna” is coming up.

D. VARIABLE ENERGY CYCLOTRON CENTRE (VECC), KOLKATA

- **Auditorium / seminar complex with infrastructural facilities:** A large auditorium having about 500 seats in the VECC-SINP campus, a lecture hall with about 120 seats, two lecture halls with about 50 and 40 capacities are available in the Salt lake campus of VECC. A dedicated wing has been constructed to provide office space to students and post doctoral fellows, a large room with required facilities is available in this wing for academic discussions.
Sports facilities: Have facilities for various indoor games within the campus.
- **Gymnasium:** Gymnasium is available in the Saltlake residential complex of VECC.
- **Any other (please specify):** Library and lounge facilities are available.
- **Hostel:** Hostel facilities for Ph D students and Post Doctoral Fellows and a separate guest house for visitors are available within the Salt Lake Campus of the Centre. Construction of hostel facilities is planned at the new Rajarhat Campus of the Centre.
Residential facilities for faculty and non-teaching: VECC is having residential facilities for its staff members at three different locations in Kolkata viz Anushakti Abasan, Salt Lake; HUDOCo Housing Estate Ultadanga; and Purbasha Housing Estate at Kankurgachi. A total number of 253 residential flats of various categories (type A to E) are available for the faculties and staff members of VECC.
- **Cafeteria:** Breakfast, Lunch and Dinner are served in the canteen located in the hostel building. Tea/coffee/snacks are available from the tea pantry located in the main building of VECC.



- **Health centre – Nature of facilities available – inpatient, outpatient:** Staff members and students are provided with medical facilities under the Contributory Health Service Scheme (CHSS). Three medical doctors are available in the campus/saltlake residential campus throughout the day from Monday to Friday. One medical doctor is available in the campus/saltlake residential complex on Saturday. Students and staff members can avail inpatient and outpatient medical facilities from several designated hospitals in and around Kolkata on credit basis.
- **Ambulance, emergency care facility, etc. Facilities like banking, post office, book shops, etc:** One ambulance is always available in the campus. Bank and post office are within half a km distance from the campus.
- **Transport facilities to cater to the needs of the students and staff:** Transport facilities for the staffs, faculties and students are available.
- **Power house:** VECC has a 33 kV/433 volt substation and 2250 KVA DG facilities.

F. INSTITUTE FOR PLASMA RESEARCH (IPR), GANDHI NAGAR

- Auditorium / seminar complex with infrastructural facilities
Seminar Hall with capacity to accommodate around 100 people with facilities like multimedia projector, etc. exist. Committee rooms' total 4 which can accommodate 18 to 20 persons and a video conference room is also available at IPR Campus at Bhat village.
- Sports facilities: IPR has facilities for badminton, volley ball, carom and table tennis.
- Gymnasium: IPR has gymnasium wherein exercise facility is available including weight lifting, tread mill, exercise cycle and many other fitness equipments are available.
- Crèche is available for children of staff.
- Hostel: IPR has hostel facility and in the same building mess, library, lounge, a multi-purpose hall, a sports hall for indoor sports etc. is there. All the 44 research scholars and PDFs stay in the hostel provided in campus.
- Residential facilities for faculty and non-teaching: IPR has in-house married quarters for Married Research Scholars and also has residential houses – total 9 houses, in the Ahmedabad City area for PDFs. Also Scientists and Engineers in the grade of PB-3, Grade pay – 6600, Pay scale – 15600-39100 and above are provided housing by IPR by hiring appropriate flats/apartments etc. such that the staff



members have to bear 5% of their basic salary towards rent and the difference is paid by IPR. In no case the total rent shall exceed 35% of basic salary.

- Cafeteria: IPR has full-fledged Cafeteria in the campus for staff members.
- Health centre: IPR has in-house dispensary and Authorised Medical Officer is available during the working hours. Adjutant to IPR, Kanoria hospital and Apollo hospital are there wherein both the hospital are on panel of IPR and arrangements have been made with both hospital during any emergency to send ambulance and treat IPR patients. IPR has an extension counter of SBI bank in the campus.
- Transport facilities to cater to the needs of the students and staff are available through a contractor.

G. HARISH CHANDRA RESEARCH INSTITUTE (HRI), ALLAHABAD

- Auditorium / seminar complex with infrastructural facilities:

Auditorium with seating capacity of around 200 persons is available in the campus with facilities for organizing seminars, conferences, talks, on-line programs with the entire relevant infrastructure. Auditorium is equipped with electronic dais, mike system, projector facility, big screen and also movable boards (for explaining). There are two seminar rooms in the Institute with 20-25 seating capacity.

- Sports facilities

HRI has a fully air-conditioned “Community Center” in the heart of the campus which caters to the Indoor sports requirement of all age groups. It caters to the indoor games which are mentioned below.

- Badminton Court (Indoor)
- Table Tennis facility(Indoor)
- Gymnasium (Indoor)
- Track and Field (400 metres)
- Football ground
- Cricket Ground
- Volley Ball
- Swimming pool (Outdoor)
- Hostel:
There are no separate hostels for Boys and Girls. For all the students, there are two hostels at present namely Hostel -1 (Ganga) and Hostel -2 (Yamuna).



New hostel-3 is on the verge of completion. Besides hostels, students are given accommodation in the off campus locations at Jhunsi and Trivenipuram. All the hostels, both in-campus and off-campus are equipped with basic amenities and facilities including air coolers, water-purifiers, reading room, common room with Television with cable, high-speed Internet facility etc.

S. No	Name of the Hostel	Inmates
1	Hostel 1 Ganga	20
2	Hostel 2 Yamuna	24
3	Trivenipuram Hostel (off campus)	02
4	Jhunsi Hostel (off campus)	13
5	Flat Accommodation (Students)	36
6	Flat accommodation (Post-Docs)	22
7	Trivenipuram Hostel (Post-Docs)	03

For Guests and Academic visitors: To accommodate such visitors, we have two guest houses. City guest house is located in the heart of the city to provide accommodation in case of emergency, whereas the other Guest House (*Pratisthanpur*) is located within the campus. The guest house rooms have attached washrooms and are well furnished with air conditioners, heating systems, geysers, television etc. They have boarding arrangements as well. The kitchen at *Pratisthanpur* is fully equipped with latest gadgets and RO system.

- Residential facilities for faculty and non-teaching
HRI provides residential facilities to both its teaching (Faculty) and Non-teaching (Administrative) staff in the campus itself which are allotted by the Housing Committee according to the rules and policies. A total of 88 residential units of various categories are available for staff and post-doctoral fellows.

HRI provides close to 100% accommodation facility to its faculty and non-teaching staff who wish to reside on the campus. The flats which are vacant are utilized by the students (Ph.D., Visiting, and for conference participants).

- Cafeteria: HRI has well-furnished pantry/cafeteria facility with modular kitchen in the main institute's building which caters to the need of all the HRI members - students, faculty, administrative staff,



guests etc. It is open almost 365 days in a year. It is also equipped with Wi-Fi network and black-board facility.

- Health centre – The Institute has a small Health Centre (Jeevak), which provides healthcare facility to the Institute’s community comprising of staff and students. The Health Centre has two wards - one male (with 2 beds) and one female ward, one ECG room/Medicine room, one room for doctor’s OPD, one room for physiotherapy and one room for pharmacists. The health center provides first-aid and emergency services round the clock 24x7 in a year. The Health Centre is equipped to undertake a number of clinical investigations (blood pressure, blood sugar, ECG etc.) and offers outpatient care as well as provides in-patient treatment for small problems. The Health Centre also keeps stock of essential/emergency medicines. Essential medicines are provided to meet the immediate needs. The Health Centre also has nebulizers, oxygen cylinders for emergency. A pharmacist is available at the health center between 6:00 am and 10:00 pm and is supported by an attendant. A doctor is available between 10:00 pm and 6:00 am to take care of the emergencies during night.

A doctor / specialist doctor / homeopathy doctor visit for an hour every day of the week. A physiotherapist also visits the health center every alternate day. An ambulance equipped with stretcher and oxygen cylinder is available at the health center 24 hours to rush the patient to the city hospital in case of emergency.

- Transport facilities to cater to the needs of the students and staff: HRI provides excellent transport facilities for the students and the staff (residing both inside and outside HRI). We have 3 buses, one regular car, and one auto besides ambulance facility in the emergency cases. These buses ply regularly at intervals and cover major areas of the Allahabad city. They follow strict bus schedule facilitating the needs of the staff and residents. Transport facility for picking and dropping the kids residing in campus to the schools is also undertaken by the transport committee.
- Facilities for persons with disabilities: The campus and the built up areas are made according to the needs of differently-abled students. Wheelchairs are available for persons with disabilities. Also the main institute’s building and health center have provision ramps for



moving the wheelchairs. An 8-passenger hydraulic lift is also available in the main institute's building.

- Transformer: There is a dedicated 33 KVA line taken from UPPCL. Two units of 500 KVA generator sets are installed on 17/3/2011 at HRI to cater the needs of the HRI campus.
- Waste management facility: HRI has its own sewage treatment plant, where after treatment, the water is used for horticultural purposes. For disposal of garbage, HRI has contracted it to an outside agency, which sends its garbage truck/tractor thrice a week to collect all the disposed material (from the residential area as well as from the Institute).
- Facilities like Banking, Post Office, Book Shop, etc.

Bank of Baroda has opened its fully computerized branch in the campus of HRI itself to cater the needs of the personnel residing in the campus. An ATM branch of Bank of Baroda is also available. Facility for post office is also available inside the campus. It opens at around 11:00 AM and closes down at 2:30 PM every day.

H. TATA MEMORIAL CENTRE (TMC), MUMBAI

Tata Memorial Hospital (TMH), Parel Campus

- TMH has a large auditorium (seating capacity 250), two small auditoria (seating capacity 90 and 55), five lecturehalls and four round table conference halls and all associated infrastructural facilities.
- All facilities such as mess, Cafeteria, library, lounge, a multi-purpose hall, a sports hall for indoor sports etc.
- Hostel for all students are available. Hostels are located at TMH campus, Anushakti Nagar, Mandala and Chembur. A Guest House is available at Parel and another in Anushakti Nagar. Transport facility from different locations to TMH and ACTREC is available round the clock.
- Limited residential facilities for faculty and non-teaching are also available.
- Health centre – TMC itself is a hospital.
- TMC is located in the heart of the city and so municipal transport facilities to cater to the needs of the students and staff are available.
- Buildings are friendly for persons with disabilities
- Incinerator for laboratories, transformer and a waste management facility are available.

Advanced Centre for Treatment Research & Education (ACTREC), Kharghar, Campus



- It has two auditoria having capacity of 272 persons and 100 persons and one seminar room with a seating capacity of 50 persons.
- It has a large playground, gymnasium and indoor games like carom and table tennis.
- For hostel, it has 24 flats of 2BHK and a guest house having 16 rooms.
- It has 24 residential units for staff and a dormitory for patients.
- It has electric sub-station and emergency power supply.
- Since it is located away from the city regular shuttle service from nearby local train stations and TMC Parel campus are also available.
- The campus is designed to be friendly for persons with disabilities.
- ACTREC has a state-of-the-art animal facility for breeding and maintenance of laboratory rodents, an incinerator for laboratories and a waste management facility.
- Conveniences like banks, post-office, book shops are easily accessible.

I. INSTITUTE OF MATHEMATICAL SCIENCES (IMSC), CHENNAI

- Auditorium / seminar complex with infrastructural facilities
A large Auditorium having a capacity to accommodate 190 participants (ground floor 140 + first floor 50) is available in the campus itself for organizing conferences at National/ International level. The Auditorium is equipped with audio/ video/ projector/ wi-fi facilities. Besides these, several seminar rooms are available for organizing conferences/ workshops with smaller number of participants (around 60), weekly seminars and colloquias and regular classes for Doctoral Students at IMSc.
- Sports facilities
IMSc has an exclusive Tennis court, three Table Tennis tables and a gymnasium. A separate multi storied sports complex building is under construction to house indoor Badminton court, gymnasium, Table Tennis tables, Yoga room with wash rooms and other common facilities. This will be ready by March 2015.
- Hostel
IMSc has the following Hostel/ Guest House facilities to accommodate Research Scholars/ PDFs/ Visitors.
Hostel (34 single rooms)
Guest House (old) (24 flats) – for long term academic visitors.
Guest House (new) (23 flats) – for short term academic visitors & transit stay of DAE guests.
Dormitory (1) = (10 beds)
Besides the above there are a few off campus hostels at 9 places to accommodate Research Scholars, Post Docs & Visitors. All the off



campus hostels are connected by shuttle vans operated as per schedule on all days.

- Residential facilities for faculty and non-teaching
The Institute has staff quarters to provide residential accommodation for academic staff. A total number of 24 flats in two blocks with 12 flats in each block
- Cafeteria
There are two large canteens and one large tea/ coffee pantry.
- Health centre
Our Institute members/ PDFs/ Research Scholars are covered under Contributory Health Service Scheme (CHSS) of the Department of Atomic Energy. Besides this, a Medical Consultant visits (twice a week) to provide medical advice to all the members of the Institute including Research Scholars, PDFs & Visitors.
- Facilities for persons with disabilities
All facilities of the Institute are accessible by wheel chairs

J. INSTITUTE OF PHYSICS (IoP), BHUBANESWAR

- Auditorium / seminar complex with infrastructural facilities:

The main Auditorium at IOP has a seating capacity of around 300 persons. It is equipped with audio-visual facilities for organizing seminars, conferences, talks, on-line programs, etc. The Auditorium is also equipped with other infrastructure to enable holding of public events, cultural programs etc. In addition to this auditorium, there is one lecture hall with seating capacity of about 150, and another seminar room with seating capacity of about 40.

- Sports facilities

A general play ground which is used for playing cricket, football etc. Lawn Tennis court with lighting facility for night play, Table tennis (indoor), Volley Ball court, Badminton court (outdoor), Gymnasium .

- Hostel:
There is a New Scholars Hostel for the students with 52 number of single seated rooms. This includes 9 rooms for women students in the women wing of the hostel. There are 12 rooms in another Old hostel. The main hostel has 13 rooms with attached bathroom. These are given to post doctoral fellows, or married students.
- For Guests and Academic visitors:
Short term visitors:



To accommodate such visitors, IOP has a guest houses with 15 room capacity. There are 13 AC Rooms and 2 non-AC rooms. The guest house rooms have attached bathrooms and are furnished with geyser, television etc. Guest house has dining facility available for all meals for the inmates.

Long term visitors:

For long term visitors IOP has 16 efficiency apartments. Out of these, there are 8 two-bedroom apartments and 8 one-bedroom apartments. These are also utilized on need base by post doctoral fellows and by married students.

- Residential facilities for faculty and non-teaching:
IOP provides residential facilities to both its teaching (Faculty) and non-teaching (Administrative) staff and a total of 118 residential units are available for this purpose. .
- **Canteen** : IOP has a canteen which is open during the working hours. Tea, snacks, and lunch are available at the canteen
- **Health centre** – The Institute has a Health Centre, which provides healthcare facility to the Institute’s community. A Nurse is available on campus, and a doctor visits the health center for two hours every day. Facilities for carrying out tests such as ECG, Blood pressure, Blood sugar, Urine analysis, are available at the Health Centre.
- **Bank**: Indian Overseas bank has a branch at IOP which caters to IOP community as well as its outside customers.
- **Substation**:
There are two 33 KV power supply lines from Mancheswar Grid substation and from Chandaka Grid substation. There are two transformers of 33/0.433 KV, 1 MVA, and 33/0.433 KV, 750 KVA capacity. There are two Diesel Generator sets. One is 300 KVA and the other is 100 KVA capacity.
- **IOP(NISER)**
IoP(NISER) is presently functioning from IoP campus. Its own campus is under construction.

13. Number of institutions affiliated to the university : NIL

14. Does the University Act provide for conferment of autonomy (as recognized by the UGC) to its affiliated institutions? If yes, give the number of autonomous colleges under the jurisdiction of the University

Yes No Number

15. Furnish the following information (As on 1st January 2014): HBNI has ten CIs and disciplines being pursued at various CIs are as follows.



S. No.	CI	Disciplines being pursued	No. of Students	
			Post Graduate	Research
1	BARC	Chemical sciences	08	155
		Engineering sciences	647	241
		Health sciences	53	--
		Life sciences	08	51
		Mathematical sciences	--	--
		Physical sciences	06	168
		Strategic studies	--	02
2.	IGCAR	Chemical sciences	18	63
		Engineering sciences	158	200
		Physical sciences	04	72
		Strategic studies	--	01
3.	RRCAT	Chemical sciences	--	04
		Engineering sciences	31	09
		Life sciences	--	05
		Physical sciences	--	89
4.	VECC	Engineering sciences	06*	15
		Physical sciences	--	53
5.	SINP	Chemical sciences	--	--
		Life sciences	--	03
		Physical sciences	--	35
6.	IPR	Engineering sciences	--	06
		Physical sciences	--	54
7.	HRI	Mathematical sciences	--	30**
		Physical sciences	--	57**
8.	IMSc	Life sciences	--	03**
		Mathematical sciences	--	15**
		Physical sciences	--	79**
		Theoretical comp science	--	21**
9.	TMC	Health sciences	326	19
		Life sciences	--	112
10	IoP(NISER)	Physical sciences	--	48
		Chemical sciences	70***	37
		Life sciences	46***	30
		Mathematical sciences	38***	02
		Physical sciences	130***	14

Total = 3242

Notes: IoP(NISER) was set up as a project of IOP and thereby became a part of



HBNI. Request for making NISER an independent CI of HBNI is pending with UGC.

* Only project work for M.Tech.

**Including students pursuing integrated Ph.D.

***Students pursuing integrated masters

16. Does the university conform to the specification of Degrees as enlisted by the UGC? Yes No

If the university uses any other nomenclatures, please specify

17. Academic programmes offered by the CIs at present, under the following categories: (Appendix 1 lists details)

Programme	Number
UG	Nil
PG	06
Integrated Masters	01
M.Phil.	01
Ph.D.	01
Integrated Ph.D.	01
Certificate	01
Diploma	-
PG Diploma	04
Any other (please specify)	-
Total	15

18. Number of working days during the last academic year (From 1st August 2013 to 31st July 2014).

All CIs follow holidays as applicable to Government Institutions in the state in which they are located. Number of working days varies from state to state. During the above period, working days were about 246.

19. Number of teaching days during the past four academic years.

For Ph.D. students, considerable flexibility is given with regard to teaching days. For post-graduate and super-specialty medical programmes at TMC and DRM in BARC, guidelines of Medical council are followed. For M.Sc.(Nursing) at TMC, guidelines of Nursing Council are followed.

For course based programmes at BARC Training Schools, for Integrated Masters programme at IoP (NISER), and M.Sc. part of integrated doctoral



programme at HRI and IMSc teaching days were as in the table below.

S. No	CI	Teaching days in previous four years (1 st August to 31 st July)			
		2013-14	2012-13	2011-12	2010-11
1.	BARC	176	177	175	174
2.	IGCAR	189	187	186	188
3.	RRCAT	179	168	168	174
4.	HRI	170	167	166	163
5.	IMSc	155	155	150	150
6.	IoP(NISER)	157	144	146	147

(“Teaching days means days on which classes were engaged. Examination days, weekends and days spent on mini-project work are not to be included. It is clarified that for M.Tech. programme at BARC, IGCAR and RRCAT, number of working days are more than 140 as the programme includes a short summer semester in addition to two main semesters.)

20. Does the university have a department of Teacher Education?

Yes No

21. Does the university have a teaching department of Physical Education?

Yes No

22. In the case of Private and Deemed Universities, please indicate whether professional programmes are being offered?

Yes No

If yes, please enclose approval / recognition details issued by the statutory body governing the programme:

- (i) HBNI offers medical programmes with the approvals of MCI and relevant certificates were provided at the time of application to NAAC for accreditation.
- (ii) HBNI offers M.Sc. in Nursing and relevant approvals from nursing council were provided at the time of application to NAAC for accreditation.
- (iii) HBNI offers M.Tech., and follows standards and norms specified by AICTE

23. Has the university been reviewed by any regulatory authority? If so, furnish a copy of the report and action taken there upon.



Review by UGC

HBNI was reviewed by UGC in 2010 by a committee chaired by Prof J V Narlikar, Prof Rajaram Nityananda, Prof N Mukunda, Prof N M Chitre, and Prof G D Yadav. The committee met twice at HBNI Central office in Mumbai and members visited individual CIs. The page giving observations is placed as appendix 2. The compliance report as submitted is placed as appendix 3.

Reviews for implementation of Performance Related Incentive Scheme

A Performance Related Incentive Scheme (PRIS) is being operated in the DAE for providing incentive to employees. This scheme has three components: at the level of organization as a whole called PRIS-O, at the level of groups called PRIS-G and at individual level called PRIS-I. PRIS-O is decided based on a review of performance of DAE as a whole and the review is carried out by Atomic Energy Commission. It is carried out twice during five years and is based on accomplishment of overall targets set for the five year plan. Employees are at presently getting maximum permissible PRIS-O. PRIS-G is available to R&D centres and for this purpose performance of groups is assessed by an external peer group against set targets. Various groups are getting near maximum admissible PRIS-O.

In addition, some of the CIs have gone in for **external peer reviews** of their programmes. Here individuals CIs and disciplines within CIs have independence with regard to review process. Details are as follows.

BARC

Chemical sciences: Reviews have been regularly conducted and the last review of the Chemical Sciences was in 2013. Reviewers were Prof. Anunay Samanta (University of Hyderabad), Prof Tapas Chakraborty (IACS, Kolkata), and Prof T Aravindkumar (Mahatma Gandhi University, Kottayam), Prof. N.S. Gakbhiye (VC, Sagar University), Dr. Vijay Mohan Pillay (Director, Electrochemical Research Centre, Karaikudi), Prof. H.B. Singh (IIT Bombay), Prof. S.R. Kotha (IIT Bombay), Prof. S. Majumdar (Calcutta University), Prof. H.B. Gupta (IIT Bombay), Prof. B.L. Tembe (IIT Bombay), Prof. B.M. Deb (IISER Kolkata) and Prof. S.P. Bhattacharyya (IIT Bombay).

Physical Sciences: Programmes of Physical Sciences are reviewed periodically through external as well as internal experts. The motivation for these reviews is to improve the R&D performance as well as to reorient and



reformulate the programmes. The last review was conducted in 2012. Reviewers included Prof. R. Chidambaram (Principal Scientific Advisor, GOI), Dr. S.K. Sikka (PSA's Office, New Delhi), Prof. R.C. Budhani (Director, NPL, New Delhi), Prof. A.K. Singh (NAL, Bangalore), Prof. E.V. Sampathkumaran (TIFR, Mumbai), Prof. S. Wategaonkar (TIFR, Mumbai), Prof. B.P. Singh (IIT Bombay), Prof. Major (IIT Bombay), Prof. S.M. Chitre (TIFR and CBS, Mumbai University), Prof. A.K. Raychaudhury, (SNBNCBS, Kolkata), Prof. P.C. Agarwal (TIFR, Mumbai), and Prof. Amit Roy (Director, IUAC, New Delhi).

Life Sciences: Activity-wise reviews have been conducted periodically (every 5-6 years) in different divisions of the Bio-Science Group. The last review of molecular biology and agriculture related research activities was held in 2008. The reviewers were Dr. Amit Ghosh, IMTECH, Chandigarh, Prof. P. K. Gupta, University of Meerut and Prof. B. B. Chattoo, University of Baroda.

IGCAR

In the last decade, a peer review programme was introduced at IGCAR, for reviewing its activities by national experts, to have an independent assessment of the quality of the research programme, its relevance to DAE's mission and to examine if the research is at the leading edge by international benchmarking. The recommendations of the two earlier peer review committees, chaired by Dr. K.Kasturirangan and Prof. S.P. Sukhatme, has greatly helped the centre in shaping the emphasis on engineering research and development activities. Since the previous review, the breadth of activities in each engineering discipline has increased many fold, necessitating peer review to be conducted in each segment of activity in engineering discipline. In the current year the centre has been reviewed by four peer review committees to assess its progress and to identify directions for future development. One peer review committee under the chairmanship of Prof.J.B. Joshi, DAE-Homi-Bhabha Distinguished Chair Professor & J. C. Bose Fellow Homi Bhabha National Institute, Mumbai assessed Fast Reactor Technology Group (FRTG) of IGCAR. The second per review committee under the chairmanship of Dr. R. Krishnan, Former Director GTRE, Bangalore assessed Materials & Metallurgy Group (MMG) of IGCAR. The third committee under the chairmanship of Prof. S.K. Joshi Former Director, CSIR assessed Materials Science Group (MSG) and the fourth committee under the chairmanship of Professor K J Rao, Emeritus Professor and Ramanna Fellow (Senior) Solid State and Structural



Chemistry Unit of Indian Institute of Science, Bengaluru reviewed Chemistry Group (CG).

HRI:

The Institute has been reviewed by an **External Peer Review** to assess its progress and to identify directions for future development. The Review Panel consisted of Professors M.S. Narasimhan (TIFR, Bangalore, Chair), Jean-Marc Deshouillers (Bordeaux, France), John Ellis (CERN, Switzerland), Jainendra K. Jain (Penn State, USA), Rajaram Nityananda (NCRA, Pune), and Joseph Oesterle (Paris, France). This Review took place in two sittings: one in February 2007 and again in November 2007. The Report has been submitted to the HRI Governing Council. It suggests directions for the Institute to focus on in the future and possible areas of expansion. In March 2010, there was a review of HBNI by a committee constituted especially by the UGC. As a part of this, on behalf of the committee Professor N. Mukunda, IISc Bangalore visited the Institute for two days and reported his observations.

IOP:

A review of IOP was conducted by an External Review Committee (ERC) in April 2005. ERC was appointed by the Governing Council of IOP with Prof. S.K. Joshi as its Chairman. The other members of ERC were, Prof. Dipan Ghosh (I.I.T. Bombay, Mumbai), Prof. Amitava Raychaudhuri (University of Calcutta), Dr. Amit Roy (Nuclear Science Centre, New Delhi), and Prof. A.K. Sood (I.I.Sc. Bangalore).

ERC reviewed the past academic performance and achievements of the Institute in the context of its mandate and suggested future directions and areas of research. It also suggested ways to strengthen those existing areas of research which should be continued in future. The Committee also examined and made recommendations about the existing infrastructure, the working and management of the administrative support staff and overall general decision making setup of the Institute.

TMC

The International Peer Review was conducted from 22nd October 2010 to 24th October 2010 under the chairman ship of Prof. A.D. Purushotham at Tata Memorial Centre. The review panel committee consists of faculties from Abroad and from India.



International peer review provides a ready mechanism by which the Tata Memorial Centre is able to demonstrate that its cancer service, research, education and training are exemplary in domains of clinical effectiveness, governance, patient focus, research infrastructure, breadth and depth of science, and teaching, training and development.

The purpose of the review was:

- To benchmark the quality of clinical service, research and education programmes of the Tata Memorial Centre nationally and internationally.
- To identify gaps between capacity and utilization and recognize potential for sustainable enhancement in output.
- To identify strategies for feasible augmentation of programmes in clinical service, research and education.
- To assess the Tata Memorial Centre's clinical Disease Management Group's operational policies towards multidisciplinary decision-making and care pathways.
- To review that mechanisms and methodology are in place to ensure that the efforts and performance of the clinicians and scientists are in tandem to achieve the mission of the organization.
- To review the educational programmes and capacity building to ensure that they are concordant with local, national and global standards.

The use of an international review faculty enables the Tata Memorial Centre to be benchmarked against leading global cancer centers. In the course of developing this review the cancer centre has worked to establish a programme for the visiting team that showcases all aspects of the centre including a forward-looking strategy.

Executive summary & Key Recommendations

The peer review panels were deeply impressed by the breadth and quality of the activities presented to them by the TMC faculty. The commitment to patients as a public good was outstanding. The TMC is the premier comprehensive cancer centre in India that has the potential to be in the top five centers globally. We strongly recommend that this report be collectively owned and auctioned by all stakeholders and funders. The panel were mindful of the unique healthcare and social issues affecting India when making their recommendations.



IMSc

A review of IMSc was done in January 2009 and a copy of review report will be made available during the visit to IMSc. The review committee consisted of the following.

Srinivasa Varadhan, Chairman New York University, USA.

V. Singh, TIFR, Mumbai.

N. Kumar, Raman Res. Institute, Bangalore.

Joel Lebowitz, Rutgers Univ, USA.

Kumar Murty, Univ. of Toronto, Canada.

Mike Fellows, The Univ. of Newcastle, Australia.

Eric Allender, Rutgers Univ, USA.

P. S. Thiagarajan, National Univ. of Singapore, Singapore.

R. Balasubramanian, Director, IMSc, Chennai

IPR

The International Peer Review was conducted from 15th January to 19th January 2007 by an expert peer review committee comprising of Dr. Paul Vandenas (Belgium), Dr William L Kruer (USA), Dr. Xavier Garbet (France).

The committee's final report containing a critical assessment of the Institutes scientific performance has been placed before the Governing Council.

The expert committee appreciated the research and development work done in the institute. They recommended to protect and promote the excellent basic research being done at the Institute by giving it a distinct identity by the formation of a Centre for Nonlinear Studies within the overall Institute framework. The research work on Aditya and SST1 was highly appreciated by the committee.

24. Number of positions in the university

HBNI has ten CIs. In some of the CIs, scientists and engineers are recruited as faculty, while in others they are recruited as Scientific Officers. Wherever, recruitment is as scientific officers, a fraction of scientific



officers chosen in accordance with a given criteria are recognized as faculty. To be qualified as faculty, an individual should have a Ph.D., and sufficient number of publications in peer reviewed research journals. Percentage of scientific officers recognized as faculty is less than 10. In addition, a few individuals, because of their knowledge of the subject have been recognized as PG teachers for teaching in BARC Training Schools at various centres. Additionally, a few individuals having M.Tech. and long research experience have been recognized as M.Tech. guides. To take advantage of research experience of senior scientific officers, a provision has been made to induct them as technology advisers in student-specific doctoral committees and M.Tech. monitoring committees. In case of R&D centres, the table below gives number of individuals recognized as faculty and doesn't give any information about sanctioned posts. In case of aided institutions, sanctioned posts are also given.

Medical doctors in TMC (79) and BARC (2) have been designated as faculty for teaching and guiding PG and super-specialty medical courses. Their academic designations and promotions are based on MCI norms.

No member of the faculty is on contract. R&D centres also have a large number of non-teaching staff and technical staff. While total numbers are given in the table, only about 10% may be engaged in activities related to human resource development.



Positions		Teaching faculty			Non-teaching staff		Technical staff
		Prof/Sr. Prof	Associate Prof	Assistant Prof+ Reader(F)	Administrative	Auxiliary	
Sanctioned by Central Govt.	BARC	Not applicable; please see explanation above			1314	3368	8446
	IGCAR	Not applicable; please see explanation above			141	166	1225
	RRCAT	Not applicable; please see explanation above			87	146	697
	VECC	Not applicable; please see explanation above			37	92	384
	SINP	135			85	118	173
	IPR	Not applicable			60		51
	IMSc	61			39	20	07
	HRI	40			27	10	09
	TMC	Not applicable			466		820
	IoP+IoP(NI SER)	31+263			122+81		54+417
In position	BARC	135*	89	115	1167	2820	6764
	IGCAR	45	22	17	126	125	1017
	RRCAT	14	19	18	74	141	578
	VECC	15	04	18	28	64	315
	SINP	27	37	29	74	91	151
	IPR	05	08	27	56		485
	IMSc	26	13	16	34	11	07
	HRI	14	14	08	17	07	06
	TMC	61*	55*	73*	424		789
IOP+IOP(NI SER)	05+04	07+02	05+52	104+34		47+41	
Total in position		351	270	378	5397		10200

* Medical doctors in TMC and BARC have been designated as faculty for teaching and guiding PG and super-specialty medical courses. Their academic designations and academic promotions are based on MCI norms.

Grand total = 999.

25. Qualification of the teaching staff

CIs of the Institute have permanent faculty and every member of the faculty in



disciplines other than health Sciences have a Ph.D or a D.Sc. Faculty in health sciences working as PG teachers in TMC and BARC for teaching and guiding PG and super-specialty medical courses satisfies norms of Medical Council of India.

In addition to faculty, several scientific officers have been recognized as PG teachers because of their long experience in a subject, but have not been given any faculty designation. A few scientific officers having M.Tech. and long research experience have been recognized as M.Tech. guides without designating them as faculty. To take advantage of research experience of senior scientific officers, a provision has been made to induct them as technology advisers in student-specific doctoral committees and M.Tech. monitoring committees.

26. Emeritus, Adjunct and Visiting Professors.

S. No.	CI	Number of		
		Emeritus	Adjunct	Visiting
1.	BARC	-	19	-
2.	IGCAR			
3.	RRCAT	-	-	1
4.	VECC			
5.	SINP			
6.	IPR	0	0	0
7.	HRI	0	06	02
8.	IMSc	-	02	-
9.	TMC	4+1	1	1-
10.	IoP	-	-	2

27. Chairs hosted by the university:

CI	Chairs	Number
BARC	1. Homi Bhabha Chairs	04
	2. INSA Honorary Scientist	01
	3. M N Saha Distinguished Fellow	01
	4. Raja Ramanna Fellows	08
IGCAR	1. Raja Ramanna Fellow	02
	2. Ramanujam Fellow	02
IPR	1. DST Year of Professorship	01
	2. S. Chandrasekhar chair	01
	3. Raja Ramanna Fellow	01
VECC	1. Raja Ramanna Fellow	01



IoP	1. Raja Ramanna Fellow	01
TMC – ACTREC	1. Dr. Ernest Borges Chair in Translational Research 2. Raja Ramanna Fellow	01 01

28. Students enrolled in the CIs during the current academic year, with following details:

The data is provided in three tables: first for disciplines other than health sciences, second for health sciences at TMC and the third for health sciences at BARC.

Enrolment in disciplines other than health sciences

Sr. No.	CI Name	No. of Students														
		M.Sc.		Total	Integrated Master		Total	Ph.D.		Total	Integrated Ph.D.		Total	PG Diploma / M.Tech / M.Phil		Total
		*M	*F		*M	*F		*M	*F		*M	*F		*M	*F	
1	BARC	10	1	11	-	-	-	65	26	91	-	-	-	134	29	163
	BARCTS-NFC, HYD. BARCTS-AMD, HYD	-	-	-	-	-	-	-	-	-	-	-	-	54	5	59
2	IGCAR	6	-	6	-	-	-	31	8	39	-	-	-	48	6	54
3	RRCAT	-	-	-	-	-	-	10	3	13	-	-	-	13	5	18
4	VECC	-	-	-	-	-	-	13	1	14	-	-	-	-	-	-
5	SINP	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-
6	IPR	-	-	-	-	-	-	9	3	12	-	-	-	-	-	-
7	IOP*	-	-	-	48	12	60	19	6	25	-	-	-	-	-	-
8	HRI	-	-	-	-	-	-	11	1	12	8	0	8	-	-	-
9	TMC	-	-	-	-	-	-	9	15	24	-	-	-	-	-	-
10	IMSc	-	-	-	-	-	-	16	1	17	9	1	10	-	-	-
TOTAL		16	1	17	48	12	60	183	64	247	17	1	18	249	45	294
Sub Total		636														

*Includes IoP(NISER).



Enrolment in health science programmes at TMC

Sr. No.	CI Name	MD		Total	DM/ M.Ch.		Total	M.Sc. (Nursing)		Total	Certified Fellowship		Total
		*M	*F		*M	*F		*M	*F		*M	*F	
1	TMC	41	25	66	33	10	43	2	4	6	11	4	15
Sub Total		130											

Enrolment in health science programmes at BARC

Sr. No.	CI Name	DRM		Total	DMRIT		Total	Dip. R.P.		Total
		*M	*F		*M	*F		*M	*F	
1	BARC	4	-	4	3	1	4	14	11	25
Sub Total		33								

Grand Total (Table1+Table2+Table3) 636 + 130 + 33 = 799



29. Calculation of unit cost of education

Assumption: It is assumed that 10% of revenue budget of BARC, IGCAR, RRCAT and VECC is used for education, while 100% of revenue budget of SINP, HRI, IMSc and IoP (including NISER) is towards education. The reason for this selection is the fact that less than 10% of Scientific Officers of R&D centres are recognized as faculty. For TMC, 100% budget has been taken for estimates as a functioning hospital is a requirement for a medical college. For IPR, ITER expenditure has been excluded.

Total students on the rolls of HBNI during the academic year 2013-14= 3242

S. No.	Unit	Revenue budget in Crores		Revenue budget without salaries* in crores	
		Total	Component towards education	Total	Component towards education
1	BARC	1006	101	116	11.6
2	IGCAR	275	28	84	8.4
3	RRCAT	145	14	48	4.8
4	VECC	72	7	29	2.9
5	SINP	61	61	13	13
6	IPR	59	59	19	19
7	IoP	17	17	8	8
8	HRI	18	18	10	10
9	TMC**	183	183	19	19
10	IMSc	29	29	15	15
11	IoP(NISER)* **	~40	~20	~20	~20
Total		-----	537	-----	131.7
Unit cost of education in Lakhs		16.56		4.06	

Notes

* Part of the salaries are from capital budget. Therefore, for calculating revenue budget without salaries, only 90% of salary budget has been deducted.

** Receipts from patients are in addition to this amount.

*** Provision for non-plan expenditure has been made for the first time in FY 14-



15. Until FY 13-14, salaries were absorbed under plan schemes. Figures above are estimates.

30. Academic Staff College

NOT APPLICABLE

31. Does the university offer Distance Education Programmes (DEP)?

Yes No

32. Does the university have provision for external registration of students?

Yes No

This provision is only for employees of DAE units which are not CIs of HBNI (such as NPCIL, NFC, HWB, BRIT and AMD). At present at BARC four and at IGCAR two students are pursuing Ph.D. under this provision.

33. Is the university applying for Accreditation or Re-Assessment? If Accreditation, name the cycle

Accreditation : Cycle 1 Cycle 2 Cycle 3 Cycle 4

34. Date of accreditation* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)

NOT APPLICABLE

35. Does the university provide the list of accredited institutions under its jurisdiction on its website?

(NOT APPLICABLE)

36. Date of establishment of Internal Quality Assurance Cell: 09/ 07/ 2014

37. Any other relevant data, the university would like to include (not exceeding one page)



Appendix 1: Details for section 17

Details of academic programmes offered by the CIs at present, under the following categories.

Programmes	Name of the Programme	CI	Area of Specialisation	No.
PG	1. M.Tech in following Disciplines: i) Mechanical Engineering ii) Chemical Engineering iii) Computer Engineering iv) Electronics Engineering v) Electrical Engineering vi) Instrumentation vii) Radiological Safety Engineering viii) Metallurgical Engineering ix) Civil Engineering	BARC Mumbai*	Nuclear Engineering	6
	1. M.Tech in following Disciplines: i) Mechanical Engineering ii) Chemical Engineering iv) Electronics & Instrumentation Engineering v) Material Science	IGCAR Kalpakkam	Fast Breeder Reactor and Recycle Science & Technology	
	1. M.Tech in following Discipline: i) Engineering Physics	RRCAT Indore	Accelerators and Lasers	
	1. M.Tech in following Disciplines: i) Mechanical Engineering ii) Chemical Engineering iii) Electronics Engineering iv) Electrical Engineering	BARC Hyderabad	Design, Operation and Maintenance of Nuclear Fuel Cycle Facilities	
	1. M.Tech in following Disciplines: i) Exploration Geosciences	BARC Hyderabad	-	
	2. M.Sc. (Engineering)	BARC, IGCAR, VECC, RRCAT	-	
	3. M.Sc (Nursing)	TMC	Oncology	
	4. M.D. in following Disciplines: i) Anaesthesia ii) Radiotherapy iii) Pathology iv) Radio-Diagnosis v) Microbiology vi) Immuno Haematology & Blood Transfusion vii) Nuclear Medicine viii) Palliative Medicine	TMC	-	



PG	5. D. M. in following Disciplines: i) Medical Oncology ii) Gastroenterology iii) Paediatric Oncology iv) Critical Care	TMC		
	6. M. Ch in following Disciplines: i) Gynaecological Oncology ii) Surgical Oncology iii) Head & Neck Oncology	TMC		

*Note: A hospital is a part of BARC and conducts DNB programme. It is proposed to convert the DNB programme to MD/MS under the umbrella of HBNI after obtaining all regulatory approvals.

Integrated Masters	1. Integrated M.Sc. in following disciplines: i) Physical Sciences ii) Chemical sciences iii) Mathematical Sciences iv) Life Sciences	IOP-NISER		1
M.Phil.	1. M.Phil. in following disciplines: i) Physical Sciences ii) Chemical Sciences iii) life sciences iv) mathematical sciences	BARC, IGCAR, VECC, RRCAT		1
Ph.D.	Ph.D. in following disciplines: : 1. Physical Sciences 2. Chemical Sciences 3. Engineering Sciences 4. Life Sciences 5. Health Sciences 6. Strategic Studies 7. Mathematical Sciences	BARC		1
	Ph.D. in following disciplines: : 1. Physical Sciences 2. Chemical Sciences 3. Engineering Sciences 4. Strategic studies	IGCAR		
	Ph.D. in following disciplines: 1. Physical Sciences 2. Engineering Sciences	IPR		
	Ph.D. in following discipline: 1. Physical Sciences	IOP		



	Ph.D. in following disciplines: : 1. Physical Sciences 2. Life Sciences 3. Engineering Sciences 4. Chemical Sciences	RRCAT	-	
	Ph.D. in following disciplines: : 1. Physical Sciences 2. Mathematical Sciences	HRI	-	
	Ph.D. in following disciplines: : 1. Life Sciences	TMC (ACTREC)	-	
	Ph.D. in following disciplines: : 1. Physical Sciences 2. Mathematical Sciences 3. Life Sciences	IMSc.	-	
	Ph.D. in following disciplines: : 1. Physical Sciences 2. Engineering Sciences	VECC	-	
	Ph.D. in following disciplines: 1. Physical Sciences 2. Chemical Sciences 3. Life Sciences	SINP	-	
	Ph.D in following disciplines: : 1. Physical Sciences 2. Chemical Sciences 3 Life Sciences 4. Mathematical Sciences	IOP-NISER*	-	
Integrated Ph.D.	Integrated Ph.D in following disciplines : 1. Physical sciences 2. Mathematical sciences	HRI		1
	1. Physical sciences 2. Mathematical sciences 3. Life Sciences	IMSc		
Certificate	1. Certified Fellowship programme in 23 different disciplines related to Oncology	TMC		1

*Note: NISER is also pursuing research in humanities, but that programme is not part of HBNI.



PG Diploma	1. Post Graduate Diploma in the following disciplines: i) Mechanical Engineering ii) Chemical Engineering iii) Computer Science iv) Electronics Engineering v) Electrical Engineering vi) Instrumentation Engineering vii) Radiological Safety Engineering viii) Metallurgical engineering ix) Civil Engineering x) Physical Sciences xi) Chemical Sciences xii) Life Sciences	BARC	Nuclear Engineering	4
	2. Diploma in Radiation Medicine 3. Diploma in Radiological Physics 4. Diploma in Medical Radio Isotopes Techniques	BARC		
	1. Post Graduate Diploma in the following disciplines: i) Mechanical Engineering ii) Chemical Engineering iii) Electronics & Instrumentation Engineering iv) Material Science v) Nuclear Fuel Cycle Chemistry vi) Nuclear Reactor Physics	IGCAR	Fast Breeder Reactor and Recycle Science & Technology	
	1. Post Graduate Diploma in Nuclear Engineering & Science in the following discipline: i) Engineering Physics	RRCAT	Accelerators and Lasers	
	1. Post Graduate Diploma in the following disciplines: i) Mechanical Engineering ii) Chemical Engineering iii) Electronics iv) Electrical Engineering	BARC Hyderabad	Design, Operation and Maintenance of Nuclear Fuel Cycle Facilities	
	1. Post Graduate Diploma in Nuclear Engineering & Science in the following disciplines: i) Exploration Geosciences	BARC Hyderabad		
Total			15	



Appendix 2: Observations of the Review Committee appointed by the UGC to review the functioning at the HBNI and its 10 Constituent Institutions.

The Committee had met for the first time at Mumbai on 12.01.2010. At that time it had been decided that its members will visit the various constituent units of HBNI and gather Information needed to review the system. However, the second meeting of the Committee was advanced at short notice because of Instructions from the UGC and therefore, not all the planned visits could be undertaken. The committee in its second meeting on April 1st & 2nd 2010 in Mumbai met the representatives of the various constituent units and had detailed discussions about each unit. The committee also met the students of the Training School at BARC to get their feedback on how the HBNI system is working. Additionally, the Committee also sought comments from some faculty members of HBNI who teach courses.

The Committee finds that HBNI has excellent experimental facilities in areas like materials, reactor design and operations, and lasers, which are unique in the country. These facilities are accessible to the students for doing experiments for their training and research. The Committee also finds that where theoretical research is being done, for instance, in plasma, reactor, accelerator and high energy physics and pure mathematics, it is of very high quality when judged against the national background. The Committee noted that in some cases the Ph.D. theses coming out of constituent units may contain classified material and under these circumstances it may not be possible for the work to be published or to be displayed in the archives of the university.

HBNI is a unique research-oriented university and therefore it should not be viewed in the same way as a standard teaching cum Research University. The publications coming out of HBNI are large in number. There are some significant publications in international journals with good citations, in particular areas in basic science like atomic and molecular physics, condensed matter, nuclear physics and mathematics. The research work related to technological aspects is of high quality. The Committee notes that part of the technological work has resulted in important applications in the power sector but because of its classified nature is not reflected in publications. In both cases the Committee appreciates the joint involvement of students and staff scientists in carrying out the research projects.

The Committee feels that the HBNI could contribute to the overall university system by providing a one year diploma to young university/college teachers in the Training school. It also recommends that constituent units should take advantage of faculty members outside the unit who reside in their local area, where they could be available for teaching courses. In response to the feedback



received from students, the Committee feels that the present Intensive course work in the Training School may be extended by a few months to make it more easy to assimilate.

The Committee is impressed by the expeditious evaluation of theses and the efficiency of the general administration. In general, the Committee is entirely satisfied that the HBNI is serving its purpose as a deemed to be university very well. Its students have the benefit of working in an environment unique in the country with experimental facilities not found elsewhere. It is well equipped so far as infrastructure and staff are concerned, many faculty members are very distinguished in their respective field and recognized by the national academics. HBNI is well expected to fulfill its vision of carrying cutting edge science and technology to large numbers of students.

Sd
(Prof.J.V.Narlikar)
Chairman

Sd
(Prof. Rajaram Nityananda)
Member

Sd
(Prof.N.Mukunda)
Member

Sd
(Prof.S.M.Chitre)
Member

Sd
(Prof. G. D. Yadav)
Member

Sd
(M. S. Yadav)
Member Secretary

Mumbai
April 02, 2010

**Appendix 3: Compliance Report dated July 4, 2013 submitted to UGC**

S. No.	Observations by the UGC Expert committee	Compliance by HBNI
1	In response to the feedback received from the students, the Committee feels that the present intensive course work in the Training School may be extended by a few more months to make it more easy to assimilate	<p>In response to the comments received from the students, syllabi of various disciplines were examined by the Expert Committees. The following steps were taken to diminish the intensity of the course work.</p> <ol style="list-style-type: none">1. The training School programme has two components, course work and research leading to a thesis. The course work is spread over one year. It has been restructured and now consists of two semesters (of 17 weeks including examinations) and a summer semester (of 11 weeks including examinations).2. Advanced elective courses are undertaken during the summer semester along with a mini project. The student is encouraged to select advanced courses to be in alignment with his/her research profile. This scheme harmonises advanced courses chosen by a student with his/her mini project and the research profile and provides a support system to the student from the project guide.3. Total contact hours have been reduced to about 450 hours for all disciplines <p>By taking the above steps, we have addressed the concerns raised by review committee.</p>
2.	Accreditation by NAAC	Before approaching NAAC, it was necessary for us to approach task force set up MHRD for recategorisation of HBNI. This has been done and task force set up by MHRD has now placed HBNI in category 'A'. We are now working towards amending MoA and rules to comply with UGC (Institutions deemed to be universities Regulations, 2010 and in parallel drafting a self study report for submission to NAAC