



Maharshi Dayanand University, Rohtak

Maharshi Dayanand University, ab initio established as Rohtak University, Rohtak, came into existence by an ACT No. 25 of the Haryana Legislative Assembly in 1976 with the objective to promote inter-disciplinary higher education and research in the fields of environmental, ecological and life sciences. It was renamed as Maharshi Dayanand University in 1977 after the name of great visionary and social reformer, Maharshi Dayanand. The University is located at Rohtak in the state of Haryana--about 75 kms from Delhi on Delhi-Hisar National Highway (NH-10). The sprawling University campus, spread over an area of 665.44 acres, is well laid with state-of-the-art buildings and magnificent road network. Educational and research programmes are offered through its 38 departments. More than 250 institutions/colleges of General education, Law, Engineering, Technology, Computer Sciences and Management Sciences located in 10 districts of the State are affiliated to this University.

The University has established Sir Chhotu Ram Chair, Dr B.R. Ambedkar Chair, Jawahar Lal Nehru Chair, Maharshi Dayanand Chair, Maharshi Balmiki Chair, Surya Kavi Pt. Lakhmi Chand Chair, Ch. Ranbir Singh Chair, Sant Kabir Chair and Dr Mangal Sen Chair to conduct research on the life and contribution of these eminent and illustrious Indians in their respective spheres.

There are as many as 12 teaching blocks, 18 hostels, an elegant Central Library, majestic Tagore Auditorium equipped with modern gadgetry and amenities, modern Radhakrishnan Auditorium, Students' activity centre, Campus School, Health Centre, Faculty House, Sports Stadium, Swimming Pool, Dr Mangal Sen Multipurpose Gymnasium Hall, Community Centre, Printing Press, Canteens, Shopping Complex and an Administrative Block. About 550 residential units are available for the teaching and non-teaching staff. There is a very robust Campus Wide Network-an amalgam of cable and wi-fi technologies. A serene 'Yajanshala' addresses the spiritual needs of the campus community.

The University Library has a rich collection of knowledge resources-3,45, 629 volumes of books including 15,679 thesis, and 50,800 bound volumes of Journals. Besides, online access is provided to various e-Books and e-Journals.

Excellent standards of teaching and research, well qualified faculty members, effective administrative functioning, congenial academic environment, pulsating campus life, national and international linkages, timely holding of examinations and time-bound declaration of results, ample avenues for holistic development of personality of students, a community-service approach, administrative mechanism based on e-governance etc. are the salient features of this University.

The University has many other facilities/services such as computing and internet facilities, University Centre for Competitive Examinations, National Service Scheme, SC/ST cell, Foreign Students' Cell, Career Counseling and Placement Cell, Guidance and Counseling Cell, Internal Quality Assurance Cell and Students' welfare services

The overall developmental strides of the University culminated in '**A**' grade accreditation from NAAC in July 2013. Further, the University has got **44th ranking** in the National University rankings conducted by National Institutional Ranking System, Ministry of HRD, Govt of India. Maharshi Dayanand University is a pioneer University with overall excellence, global outlook, deep commitment towards social & community causes and work of nation-building.

For more information, you may visit to the website: www.mdurohtak.ac.in.



Kurukshetra University, Kurukshetra

Kurukshetra University is a premier institution of higher learning Established on 11th January, 1957 as a Sanskrit University, now it offers education and research programmes in diverse areas of science, business studies, social sciences, performing arts and sports. Located on the southern bank of famed Brahm Sarovar, the University has a sprawling campus spread over 473 areas.

In addition to providing quality education to the students, Kurukshetra University embodies the values of *Yogastha Kuru Karmani*, enshrined in Bhagwadgita, which embodies performing activities while remaining in Yoga. Those passing out of the precincts of the University imbibe the social, moral and ethical values. The University equips the students with skills, insights, attitudes and practical experiences to carve out discerning citizens out of them.

The University programmes combine the enduring value of a liberal arts education with the skills and experience offered by professional departments. The University offers 175 programmes on the campus in 47 Departments/ Institutes through a highly qualified faculty of 425 members. The University also has 369 affiliated colleges and institutes in the districts of Ambala, Fatehabad, Hisar, Jind, Kaithal, Kurukshetra, Panipat, Panchkula and Yamuna Nagar.

The campus of the University has often been rated as one of the most beautiful campuses in India. It resembles a large, self-contained village with lecture theaters, smart class rooms, Wi-fi campus, libraries, laboratories, on campus hostel accommodation, cafeterias, canteens, market, swimming pool, gymnasium, banks, ATM's, post office and world class sports facilities. The most remarkable feature of the campus is a seamless interconnection of nature and the built environment. There are a number of lush green gardens, water fountains and sidewalks which provide an ideal environment on the campus for study and leisure.

In its commitment to facilitating the experiences of the students, the University has opened online platforms for payment of fees. Digitalization of the University functioning is in process and on the occasion of Swarna Jayanti Year of Haryana, the University aspires to give the gift of being an efficient, transparent and digital centre for higher learning.

For more information, you may visit to the website: www.kuk.ac.in



Chaudhary Devi Lal University, Sirsa

Established on 2nd April, 2003, Chaudhary Devi Lal University, Sirsa is named after Jan Nayak Chaudhary Devi Lal, the former Deputy Prime Minister of India and the former Chief Minister of Haryana. This University, set up by the Government of Haryana under Act 9 of 2003 passed by the State Legislature, has a sprawling campus of 213 Acres 4 Kanal 12 Marlas at Barnala Road, Sirsa. The main objective of the University is to facilitate, promote and excel in Higher Education, Research and Consultancy in the contemporary as well as emerging areas of knowledge. The inception of high-tech culture involving computer-based facilities, internet connectivity and modern administrative techniques are integral characteristics of this University. To enhance the standard of higher education and increase the research activities the University has been connected to National Knowledge Network (NKN). This connectivity has been provided through one GBPS (optical fiber) dedicated line under NMEICT project of Ministry of HRD India. Wi-Fi facility has also been provided in the University campus. Affiliation of colleges situated in Sirsa and Fatehabad districts in 2011 has been another milestone for this University.

There are 16 Teaching Departments offering 54 programmes in the University. Well-known, reputed and experienced academicians and professionals have been associated in preparing the academic curriculum of different programmes. It is important to mention here that special attention has been given to follow the guidelines of the UGC and other regulatory bodies in preparing the programme curriculum. The university also offers various programmes through the University Centre for Distance Learning. The emphasis is to impart quality education by providing congenial and liberal atmosphere in the campus through the promotion of extracurricular activities. Sports events of North Zone and All India Intervarsity level and University Youth Festival were successfully organized in addition to encouraging students to participate in such activities and events outside the campus to enable them achieve overall growth of their personality.

The University has three Teaching Blocks, Guest House, Vice Chancellor's residence and 116 houses for the teaching and non-teaching staff and five well-furnished hostels for boys and girls. The silent Generator Sets are also available in the university to meet out the requirement of power during power failure. Approximately 16500 plants/trees of various types have been planted in the university campus.

The University has developed its own Media Centre equipped with hi-tech gadgets. The University has well-equipped laboratories. The University has a majestic building housing Vivekananda Library. There is a good stock of books and study material of high standard in the University library. Research Journals of National and International repute are being subscribed. The construction of Multipurpose Hall has been completed. 11 KVA sub-station is under construction and the 12 Super H Type Houses, Day Care Center, Solar Water Heater Systems and raising of boundary wall are in pipeline.

The University has ATM facility of Oriental Bank of Commerce and State Bank of India. A branch of Oriental Bank of Commerce started functioning in the year 2011. The branch is located in the University Shopping Complex which also houses the University Health Centre. Medical facilities have been made available to the students through a regular appointed Medical Officer and technical staff.

The University has adopted innovative methods in conducting University examinations. The University has also made a distinction in timely declaration of results. The students of this university have shown commendable results in academics as well as co-curricular activities. With the present pace of progress already acquired, the university looks forward to having a promising future.

For more information, you may visit to our website: www.cdlu.ac.in



Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan

“Steeped in the ancient *Gurukul* system of India and equipped with the latest teaching aids efficiently handled by highly qualified faculty” defines BPS Mahila Vishwavidyalaya. Established as a *Kanya Gurukul* by legendary Bhagat Phool Singh Ji in 1936, the institution took off with just three girls amidst severe social opposition but strong support of the villagers who graciously donated their land for the purpose.

The nascent idea of girls’ education was watered and nurtured into a young plant by his daughter Subhashini Ji who started constituent institutions like BPS Memorial Girls’ College (1967), BPS College of Education (1968), MSM Ayurvedic College (1973), BPS Mahila Polytechnic (1984), TIG Bhainswal Kalan (1999) and PSD Girls’ Law College (2003). The fragrance of the growing plant spread further and in 2006, the Government of Haryana, upgraded it into Bhagat Phool Singh Mahila Vishwavidyalaya, the first state University for women in North India.

The University is spread over 500 acres of land in the Rural Heartland of Haryana. The Campus, sprawling with greenery, is pollution-free and offers a perfect ambience for academic pursuits. In March 2017, the university was awarded the Green Campus Award by the Women Agency for Generating Employment. The ambience is furthered by the *Mantras* that are recited during the *havan* organized twice every day. The students have access to free wi-fi on Campus. In addition, the university has a hospital, an ambulance, a post office, two banks, ATMs and a Mini-Market for purchasing items of daily need. To make the students feel completely at home, hostels with spacious rooms and basic amenities have been constructed.

The University has high standards of teaching and focus is primarily on a “holistic development” of the personality of each student. More than 7000 students are enrolled in various programmes, including Ph.D. In addition, the university has non-conventional programmes on its roster. The students can pursue Programmes in Herbal Medicine, Integrated Energy Resource Management and Micro Finance in the Centre for Society-University Interface & Research (CSUIR). The students are offered mandatory Programmes in a Foreign Language and Communication Skills training in the Learning Resource Centre (LRC) to further enhance their employability skills. To ensure global exposure to the students, the university has signed MoUs with various International Universities and Institutions.

The university also encourages the students to participate in co-curricular and extra-curricular activities. There are facilities for various games on Campus and a Football Academy for girls shall soon become functional. A Career Counselling Cell has been established, in collaboration with United Nations Development Programme (UNDP). Moreover, to boost employability, the university intends to launch a Two-wheeler Driving Training Facility for students on Campus. The University is also engaged in social activities, especially in the ten villages that have been adopted by the university. An Apparel Skill Development Centre, on Campus, imparts free of cost training to village women.

For more information, you may visit to our website: www.bpsmv.digitaluniversity.in



Indira Gandhi University, Meerpur

Indira Gandhi University, Meerpur, Rewari was established on September 07, 2013 by an Act of the Legislative of the State of Haryana with the objectives 'to facilitate and promote higher education with special emphasis in emerging areas of Information Technology and Computer Education, Commerce, Humanities, Management Studies and also to achieve excellence in these connected fields. It is named after Smt. Indira Gandhi, the first woman Prime Minister of India. The University is being recognized by the University Grants Commission under Section 2(f) for recognition of degrees.

The University is located in village Meerpur of district Rewari in the State of Haryana. It is well connected to road and rail network. The International Airport, New Delhi is located at a distance of about 80 kms away from the campus. The Rewari Railway Station is about 13 kms away from the campus. The City Bus Service for the University Campus is easily available from the Bus Stand, Rewari.

The University has been running about 39 programmes/programmes in the University Teaching Department. Further, the university is planning to introduce many more programmes/programmes from the current academic session. It is pertinent to mention here that this University has been doing efforts for changing its status from residential to an affiliating University.

The University is situated over a sprawling area of about 100 acres. The campus is laid out with picturesque landscape, numerous state of art buildings of various designs and wide road network. It presents a manifestation of harmony in architecture and natural beauty. The University has three Teaching Blocks, University Library and separate Block for University Institute of Engineering & Technology. There are two separate spacious hostels for boys and girls furnished with all modern facilities. There are residential houses of different types for various categories of employees. The University has a branch of a nationalized bank **O.B.C.** with ATM facilities. There is healthy and pollution free environment in the campus. The University has also running its cafeteria. There is a hightech University Campus with campus-wide-network – an amalgam of cable and Wi-fi technologies, with 1GBPS internet connectivity.

For more information, you may visit to our website: www.igu.ac.in



Chaudhary Ranbir Singh University, Jind

The CRS University was established by State Legislator Act 28 of 2014. The University is affiliated U/s 2 (f) of UGC Act 1956 also a member of Association of Indian University. The University with the vision of imparting quality education by creating most conducive ambience for the creation and dissemination of knowledge guided by innovative thinking, scientific enquiry, sublime human values, sustainable ecology, democratic ethos and well wing of society.

The University has an alluring campus of 75 acre on RohtakByepass Road, Jind. It has a newly constructed Academic Block, Girls Hostel, Boys Hostel with ultramodern facilities. The whole campus has internet connectivity and free WiFi access for all the students, teachers and staff members. The University has a Central Library with modern 20,000 books.

Department of Physical Education was established in the year 2014. The department is having MPed, BPED, PG Diploma in Yoga, MA Yoga, MPhil and Ph.D. in Physical Education. From the inception, the department brought the name of the university on the top. During the session 2014-15 Ms. Jyoti got 1st position in National Taekwondo championship, Mr. Mahesh Kumar got 1st position in National Netball championship and Ms. Kavita got 3rd position in All India Inter University Wrestling championship. During the session 2015-16 University organised North Zone Inter University Handball championship and got 1st position in both men and women sections. University teams in both sections secured bronze medal in All India Inter University Handball championships. The university also organised All India Inter University Yoga championship and secured Individual 3rd position in both men and women sections. During the session 2016-17 University organised All India Inter University Circle Style Kabaddi and secured 3rd position in men section and 4th position in this tournament. University secured 3rd position in All India Inter University Wushu championship. University team got 1 silver medal and 2 bronze medals in All India Inter University Wrestling championship. University Handball Players Kumari Ritu, Gurmail receive Honour of BHIM Award (5 Lac Rs, BHIM Partima, Blazer, Scroll, Tai) from Hon'ble Governor of Haryana Prof. Kaptan Singh Solanki at Rajbhavan on 19th February, 2017.

The University has an impressive Language Lab which is open for all students of the University to help them to improve their communication skills and achievement of the goal of overall personality development of the students. The classrooms are equipped with smart boards. The University posses multiple compute labs well equipped with latest softwares, optical fibre based networking and high speed network. The Psychology lab of the University is fully equipped with latest psychological apparatus and tests. It also provides the students the Research space to conduct experiments.

NSS Unit of the Unit was established with the objective of providing the youth with an opportunity to develop their overall personality by taking part in various social services schemes. NSS Unit of the university was started in March 2015 with the objective of "Personality development through social service" and having motto "Not me but you". NSS unit has got 100 dedicated volunteers with one NSS Coordinator and one programme officer. NSS unit has organized three Annual camps on different themes and one special camp was organized themed on "Digital Financial Literacy" and for the imitative university got 14th position out of more than 4500 institutes of India. Hon'ble MHRD minister Shri Prakash Javadekar and IT minister Shri Ravi Shankar Prashad himself given the award to university at Vigyan Bhawan, New Delhi on 8th March 2017 and Four NSS Volunteers and NSS Programme officer also received the award for their outstanding performance in "VISAKA" mission of MHRD. Apart from this NSS Volunteers have taken part in one day workshop on financial literacy at KUK.

The University has Guidance and counselling cell to assist the students in career opportunities in various fields and to improve their personal trades.

For more information, you may visit to our website: www.crsu.ac.in



Chaudhary Bansi Lal University, Bhiwani

Chaudhary Bansi Lal University, Bhiwani is a state university established by the government of Haryana under Act No. 25 of 2014. It has been recognized by the University Grants Commission under 2F. The university is a boon for the academically rather deprived region of Haryana, and holds great promise for the intellectual and academic boom for the people of Bhiwani, a city located to the west of Delhi and south of Chandigarh at a distance of 125 kilometres and 285 kilometres respectively. The University has been established as a teaching-cum-affiliating University to facilitate higher education in multi-disciplines with special emphasis on sports and physical education and to achieve excellence in these and connected fields. The university has taken adequate measures to conduct its examinations under zero tolerance policy against the use of unfair means. The overall thrust is on producing a competent and socially aware generation of students who are not merely degree-holders. For all the branches of study in the faculties of various Sciences, the students are given every opportunity to have a scientific inquisitiveness and enhance their experimental skills through their access to high-tech laboratories in all faculties and departments like Bio-tech, Zoology, Chemistry, Computers, etc. The university now boasts of a high-quality Bio-tech lab affording the students an opportunity to make advanced experiments. University advanced quality instruments are used to carry out the experiments. Other labs are also fully furnished with latest equipment and apparatuses.

The university has made vigorous efforts to create an educational ambience in the campus by improvising a well-accommodating and amply-stocked library. Besides, since the very inception of the university, we are taking measures to build a library which would be housing not only good quality text books and subject related books, but also a large number of dictionaries and other reference books besides some high quality journals including print and RFID journals to encourage research programmes.

With a wide range of traditional, professional and job-oriented academic programmes, the university is committed to impart quality education to its students to empower them to cope with the global challenges—present and future—and to keep pace with the march of time. It offers to its students a vibrant learning ambience and acquaints them with the multiple concerns and techniques and fresh perceptions of the society undergoing rapid and, sometimes, tumultuous changes. From the very beginning, the university has striven to impart quality education coupled with technical development. A kind of virtual learning environment is envisaged for the emerging e-learning community and the university has made itself a commitment that it will make all its students computer-savvy keeping in view the mounting pre-requisitions of the global requirements. And here comes the requirement of the use of English which has become almost a lingua-franca for the educational, business and professional world. In this context, it is imperative on the part of the university to take care of the inadequacies and challenges of the underprivileged youth of the region whose potentials have remained unharnessed and untapped. To overcome the communicative malnourishment, learning of computers and interactive whetting is to be ensured through adequate smart classes, language labs and computer application based programmes. Above all, our constant endeavour is, and will be, focused on shaping our young boys and girls into worthy sons and daughters of Mother India.

For more information, you may visit to our website: www.cblu.ac.in

Programmes Offered, Duration and Eligibility

Following are the programmes offered by the seven state universities. Six groups have been formed for these subjects. Different entrance tests will be conducted for the different groups as mentioned below from A to F. Candidate willing to appear in different entrance test will have to deposit additional fee as mentioned in point 3 of General Instructions.

Group	Name of the Programme	Minimum Duration (Years)	Eligibility	
A	Life Sciences	M.Sc. (Biochemistry)	2	B.Sc/B.Sc (Hons.) in Biochemistry/Biotechnology, or, Bachelor degree in Pharmacy, or B.Sc. (Pass) with any of three subjects, viz. Botany, Zoology, Chemistry, Microbiology, Genetics, Medical Biochemistry, Biotechnology, Biochemical Engineering (out of the three subjects, at least two should be related to Biology) with atleast 50% marks in aggregate, or, any other examination recognized by State Universities of Haryana as equivalent thereto.
	M.Sc. (Biotechnology)	2	Bachelor degree in Biological Sciences with Chemistry as a subsidiary subject/ Agriculture Science/ Fisheries/ Horticulture/ B.Tech. (Food Technology)/ B.Tech. (Biotechnology)/ B.Sc. (Biotechnology)/ B.Sc. (Microbiology)/B.Sc. (Environmental Science)/ B.Sc. (Biomedical Engineering)/ B.Sc. (Biochemistry)/ B.V. Sc./ B.E. (Technology)/ B.Pharma/ MBBS/ B.Sc. (Bioinformatics)/ B.Tech. or B.E. (Bioinformatics)/ B.D.S. with atleast 50% marks or any other examination recognized by State Universities of Haryana as equivalent thereto.	
	M.Sc. (Agricultural Biotechnology)	2		
	M.Sc. (Bioinformatics)	2		
	M.Sc. (Medical Biotechnology)	2		
	M.Sc. (Botany)	2		
	M.Sc. (Environmental Sciences)	2		
	M.Sc. (Energy and Environmental Science)	2		-do-
	M.Sc. (Environmental Biotechnology)	2		-do-
	M.Sc. (Food Technology)	2		B.Sc.(Pass) degree in Medical or Non-Medical Sciences or B.Sc. (Hons.) with any of the subjects of

				medical or non-medical sciences or B.Sc.(Hons) or B.Sc. (Pass) degree in subjects of applied sciences including Agriculture/ Fisheries/ Horticulture/ Food Science/Food Processing Technology/Home Science (10+2 with Science subjects only)) or B.E./B.Tech Food Technology/ Sugar Technology/Agriculture Processing Engineering. / Post Harvest Technology with at least 50% marks in aggregate in above all the degrees/programmes or any other equivalent examination recognized by State Universities of Haryana as equivalent thereto.
		M.Sc. (Food Science & Technology)	2	-do-
		M.Sc. (Genetics)	2	B.Sc. (Hons.) in any of the subjects, viz., Biochemistry, Botany, Environmental Sciences, Genetics, Microbiology or Zoology/ B.Sc. (Pass) with any three of the subjects, viz., Anthropology, Biomedical Engineering, Biotechnology, Botany, Chemistry Fisheries, Genetics, Haematology, Immunology, Industrial Microbiology, Medical Biochemistry, and Zoology / Bachelor Degree in Pharmacy /Home Science /Agriculture Science /Veterinary Science /B.E. / B.Tech. (Biotechnology /Bioinformatics) with atleast 50% marks in aggregate or any other examination recognized by State Universities of Haryana as equivalent thereto.
		M.Sc. (Microbial Biotechnology)	2	B.Sc. (Hons) in any of the subjects viz. Biochemistry, Biotechnology, Botany, Genetics, Industrial Microbiology, Microbiology, Medical Biochemistry or Zoology/B.Sc. (Pass) with any three of the subjects viz. Biochemistry, Environmental Science, Biotechnology, Botany, Chemistry, Genetics, Industrial Microbiology, Microbiology, Microbiology and Zoology/Bachelor degree in Pharmacy/Agriculture Science/Veterinary Science with at least 50% marks in aggregate or any other examination recognized by State Universities of Haryana as equivalent thereto.
		M.Sc. (Microbiology)	2	-do-
		M.Sc. (Zoology)	2	B.Sc. (Hons.) in Zoology/ B.Sc. (Pass) with any three of the subjects, viz., Anthropology, Biochemistry, Biotechnology, Botany, Chemistry, Environmental Science, Fisheries, Genetics, Geology, Microbiology, and Zoology with atleast 50% marks in aggregate or any other examination recognized by State Universities of Haryana as equivalent thereto.
B	Forensic Science	M.Sc.(Forensic Science)	2	B.Sc. (Forensic Science)/B.Sc. (Pass) with any of the two subjects viz. Botany, Biotechnology, Chemistry, Mathematics, Physics and Zoology or BDS with at least 50% marks in aggregate or any other examination recognized by State Universities of Haryana as equivalent thereto.
C	Pharmaceutical Sciences	M. Pharm. (Industrial Pharmacy)	2	B. Pharma. with at least 50% marks in aggregate or any other examination recognized by M.D. University, Rohtak as equivalent thereto, and must possess a valid GPAT score. In case GPAT qualified students are not available and the seats

				remain vacant then the seats will be filled up on the basis of merit in the Common Entrance Examination
		M. Pharm. (Pharmaceutics) (Drug Regulatory Affairs)	2	-do-
		M. Pharm. (Pharmaceutics)	2	-do-
		M. Pharm. (Drug Regulatory Affairs)	2	-do-
		M. Pharm. (Pharmaceutical Chemistry)	2	-do-
		M. Pharm. (Pharmacognosy)	2	-do-
		M. Pharm. (Pharmacology)	2	-do-
D	Chemistry	M.Sc. (Chemistry)	2	B.Sc. (Hons.) in Chemistry/ B.Sc. (Pass) with Chemistry as one of the main subjects with atleast 50% marks in aggregate or any other examination recognized by State Universities of Haryana as equivalent thereto.
		M.Sc. Chemistry (Mathematical Stream)	2	
		M.Sc. Chemistry (Non-Mathematical Stream)	2	
		M.Sc. Chemistry with specialization in Pharmaceuticals (Mathematical Stream)	2	
		M.Sc. Chemistry with specialization in Pharmaceuticals (Non-Mathematical Stream)	2	
E	Mathematics	M.Sc. (Mathematics)	2	B.A./B.Sc. (Hons.) in Mathematics/ B.A. or B.Sc. (Pass) with Mathematics as one of the subjects with atleast 50% marks in aggregate or any other examination recognized by State Universities of Haryana as equivalent thereto.
		M.Sc. (Math. With Computer Science)	2	
F	Physics	M.Sc. (Physics)	2	B.Sc. (Hons.) in Physics/ B.Sc. (Pass) with Physics and Mathematics as two of the main subjects with atleast 50% marks in aggregate or any other examination recognized by State Universities of Haryana as equivalent thereto.