Monday, July 14, 2025
CHENNAI

THE HINDU

EDUCATIONPLUS

GET THE EDGE Follow us facebook.com/thehindu twitter.com/the_hindu instagram.com/the_hindu

GETTY IMAGES/ISTOCKPHOTO

For an equitable future

How an inclusive campus culture can empower students from under-represented communities

Vasanth G.

Higher education isn't just about academics; it's about making sure every student feels welcome, supported, and valued. When campuses embrace inclusivity, they don't just check a box. They create an environment where students from all backgrounds, especially those from under-represented communities, can truly thrive.

Why it matters

For many students from marginalised backgrounds, college is both a dream and a challenge. The weight of history can make academic spaces feel unwelcoming and, without the right support, talented students may struggle to find their footing. But when universities actively cultivate inclusive practices such as ensuring diverse voices in the curriculum, creating safe spaces for dialogue, and celebrating different cultures, students feel seen and heard. That sense of belonging isn't just nice to have; it's a game-changer for academic success.

When students see themselves represented in what they're learning, they gain confidence. They participate more in discussions, connect deeply with their studies, and develop a genuine passion for learning. Inclusivity transforms classrooms into vibrant spaces where multiple perspectives enrich conversations and push everyone toward deeper understanding.

The impact of inclusivity isn't just emotional; it directly affects performance. In classrooms where students engage with diverse narratives and viewpoints, learning becomes dynamic and relevant. Imagine a History class that highlights global perspectives rather than just a Western lens, or a Science course that acknowledges contributions from researchers of all backgrounds. Suddenly, students don't just feel like passive learners; they see themselves as part of the academic conversation.

Beyond content, inclusive teaching methods – like adaptive learning strategies and culturally aware mentoring – help reduce anxiety and encourage intellectual risk-taking. When students feel safe, they're more likely to challenge themselves, ask questions, and push beyond their limits leading to stronger academic outcomes.

Build support systems

College isn't just about getting in; it's about staying in and finishing strong. But for students facing financial hardships, social barriers, or the pressure of stereotypes, it's easy to feel overwhelmed. That's why institutions must go beyond academics and build real support systems.

Mentorship programmes, culturally competent counselling, and personalised academic advising can make all the difference. Knowing that help is just a conversation away empowers students to push through challenges rather than walk away from their education. When universities show that they care about students as individuals – not just as numbers on a roster – retention rates improve, and students are more likely to achieve their goals.

Representation isn't just symbolic; it shapes reality. When students see faculty and leaders who share their backgrounds, they gain more than teachers. They gain role models. Diversity in leadership reassures students that success isn't limited by where they come from. It also creates an environment of trust, where students feel encouraged to dream big and work toward ambitious goals.

The influence of inclusivity doesn't stop at the classroom door. Today, learning happens everywhere: on digital platforms, social media, and virtual classrooms. Universities that prioritise accessibility and diversity in their digital resources ensure that inclusivity extends into every part of the student experience. From culturally diverse online content to accessible learning platforms, creating a truly inclusive academic environment means embracing technology as a tool for connection and empowerment.

An inclusive campus isn't just an ideal; it's a necessity for academic success. By diversifying curricula, fostering supportive networks, and ensuring representation at all levels, universities empower students to overcome obstacles and achieve their full potential. In doing so, they're not just changing individual lives. They're shaping a more equitable and innovative future for higher education.

The writer is Associate Professor and HoD, Department of Visual Communication, Dwaraka Doss Goverdhan Doss Vaishnav College (Autonomous), Chennai

SCHOLARSHIPS

HOPE Engineering Scholarship
From Schaeffler India
Eligibility: Open to female students across India who are in the first year of an Engineering programme at any UGC or state-recognised college, have scored over 60% in Class 12 and have an annual family income of less than ₹500,000.
Rewards: ₹50,000 a year for four years
Application: Online
Deadline: July 30
www.b4s.in/edge/SIHE16

National Means -cum-Merit Scholarship
Offered by the Department of School Education and Literacy, Government of India.
Eligibility: Open to Indian nationals enrolled in Class 9 in a government, government-aided, or local-body school who have secured at least 60% in Class 8 with an annual family income of less than ₹350,000.
Rewards: ₹12,000 per annum.
Application: Online
Deadline: August 31
www.b4s.in/edge/NMSS4

National Fellowship and Scholarship for Higher Education of ST Students
Offered by the Ministry of Tribal Affairs, Government of India
Eligibility: Open to students from the Scheduled Tribe (ST) communities, who are 36 years or younger on July 1 and are enrolled in specified full-time, regular courses in ministry-approved institutions and have an annual family income of less than ₹600,000.
Rewards: Up to ₹35,000 and other benefits.
Application: Online
Deadline: October 31
www.b4s.in/edge/NFTS2

Courtesy: buddy4study.com

Handloom Hackathon

The Development Commissioner (Handlooms), Ministry of Textiles, in collaboration with IIT-Delhi and National Design Centre, is hosting the Handloom Hackathon 2025 on **August 2 and 3** at IIT-Delhi's Research and Innovation Park.
Aim: Collaborate on real-world challenges faced by the handloom sector and create solutions that foster growth and sustainability.
Eligibility: College students, engineers, fashion designers and others
Deadline: July 31
Details available at https://t.ly/48yZ_

OFF THE EDGE
Nandini Raman

Develop your skills

Uncertain about your career options? Low on self-confidence? This column may help

I finished B.Sc. Physics in 2024. Apart from the Civil Services Exams, are there any other competitive government exams that I can take? Steeva

Dear Steeva,

Several government organisations and departments conduct their own recruitment exams. Prominent ones are Staff Selection Commission (SSC) Exams for for recruitment to different Group "B" and "C" posts in various Ministries, Departments or Organisations of the Government of India such as Inspector of Income Tax, Assistant Section Officer, Lower Division Clerk, Junior Secretariat Assistant and so on.

The Railway Recruitment Board (RRB) Exams conducts exams for various technical and non-technical posts in Indian Railways such as electrical or signal and telecommunications, station master, goods guard, commercial apprentice and so on. Public sector banks conduct recruitment for various posts like IBPS PO (Probationary Officer) and Clerk Exams, SBI PO (Probationary Officer) and Clerk Exams, RBI (Reserve Bank of India) Exams for officers (Grade B) and assistants.

There are exams for the defence forces such as the Air Force Common Admission Test (AFCAT) for various branches like Flying, Ground Duty (Technical and Non-Technical). The Combined Defence Services (CDS) Examination is for recruitment into the Indian Military Academy, Indian Naval Academy, Air Force Academy, and Officers' Training Academy.

Many PSUs such as BARC, ISRO, DRDO, NPCIL, ONGC, BHEL, CSIR labs and so on recruit graduates through their own entrance exams or based on GATE (Graduate Aptitude Test in Engineering) scores. Other Central Government Exams include Indian Meteorological Department (IMD) Exams, Patent Officer Examination, Central Armed Police Forces (CAPF) Exam.

The Public Service Commission of each state conducts its own exam for recruitment to various posts across departments.

Check the official websites regularly of UPSC, SSC, RRB, IBPS, SBI, RBI, and your state's public service commission and other relevant organisations for exam notifications, eligibility criteria, syllabi, and important dates.

I'm in the first year of a UG course in economics. In Class 11 and 12, I had taken Science. What are my career options? Airin

Dear Airin,

Traditional career paths include banking, insurance, market research analysis, business journalism and international trade. You could also explore Data Science and Analytics or Quantitative Finance. Actuary Sciences is another good option. You can also explore research and academia or public policy and roles in the government.

I am in the fourth semester of B.A. Hons. I wanted to do a B.A. LL.B. but didn't get admission into the university I wanted. I am also preparing for the UPSC CSE. I am wondering if I should do a B.A. LL.B. after graduating or attempt the UPSC. Kangna

Dear Kangna,

Are you confident about attempting the UPSC exam based on your preparation? How strong is your desire to study law? What are your immediate career goals? Based on your answers, make an informed decision about whether to pursue B.A. LL.B. after attempting the UPSC (regardless of the outcome) or to focus solely on career paths related to your B.A. Hons. and/or the UPSC.

My recommendation would be to complete your B.A. Hons. and attempt the UPSC CSE without the added burden of a law degree. Completing your current degree will likely be faster than starting a new five-year law programme. A Bachelor's in any discipline makes you eligible for the UPSC CSE. There will be an added advantage of some overlap of the UPSC syllabus with your B.A. Hons. programme.

However, if you pursue a B.A. LL.B., it will open up various career options in the legal field (litigation, corporate law, legal advising). This may cause a delay in your attempts at the UPSC CSE and will require a significant investment of time.

Switching to B.A. LL.B. now means loss of the time and effort already invested in the B.A. Hons. degree. The admission process for law programmes is also highly competitive. Switching mid-way could disrupt any momentum that you have built in your UPSC preparation.

I have completed a PG in Sociology and am preparing for the UPSC. In UG, my subjects were History, Sociology and Political Science. I can't do a Ph.D. because of the time commitment. What else can I do? I don't want to be idle while preparing for the UPSC. Harsh

Dear Harsh,

Consider working on developing and enhancing specific skills like Communication, Digital Literacy and Technology, Web Development, Digital Marketing, Data Analysis, Writing and Content Creation, Public Speaking or Presentation Skills. Gain practical experience and explore working part-time as a research assistant, content developer, teaching assistant or tutor in History, Sociology, or Political Science. Explore short-term internships with NGOs, think tanks, policy research organisations, or even government departments if feasible. Working with NGOs will expose you to the real-world understanding and challenges.

Explore platforms like Coursera, edX, and NPTEL for courses related to public administration, economics, international relations, current affairs, or any other area relevant to the UPSC syllabus or your interests. Short-term certifications can add value to your profile. Read widely on diverse topics to broaden your understanding of the world. Participate in online or offline events related to current affairs, policy debates, and academic discussions.

Use your academic background and create your notes, mind maps, and study materials in a structured and effective way. This process itself reinforces your learning.

Disclaimer: This column is merely a guiding voice and provides advice and suggestions on education and careers.

The writer is a practising counsellor and a trainer. Send your questions to eduplus.thehindu@gmail.com with the subject line Off the Edge

GETTY IMAGES/ISTOCKPHOTO

Going beyond words

Language learning involves stimulating several areas of the brain to facilitate analytical thinking and interdisciplinary understanding

Jairam Balakrishnan

In India's culturally and linguistically complex environment, language has a purpose beyond mere communication; it is a passage to deeper insight, closer ties, and greater chances. Yet in most universities today, language is taught only as an elective only if it relates to a student's individual interest or profession. As India and the rest of the globe become increasingly interconnected, it poses a valid question: must another language have to be learned in college as a compulsory course of study?

India officially recognises 22 languages as per the Eighth Schedule, according to the Census of India 2011. This multilingualism is not limited to culture or tradition; it is deeply connected to how services, governance, and businesses operate in India. With growing urbanisation, graduates employed in healthcare, administration, development, or education tend to be posted in areas where the predominant language may not be their own. Here, proficiency in a local language adds not just to professional competence but also helps build confidence and rapport with people. Compulsory language education in a university setting can instil this important skill early so that students are ready for the multilingual environment they will work in.

Cognitive gains

The gains in cognition due to learning a language are well documented. A study conducted in 2022 by the Indian Council of Medical Research (ICMR) reported that people who were bilingual or multilingual displayed enhanced memory, concentration, and problem-solving skills. The study also documented heightened decision-making skills and flexibility... all abilities very important to competence in any field.

For young people in demanding academic courses, in particular, multilingualism creates mental agility. It supports executive function following a plan, organising and alternating between activities efficiently. Language learning is more than learning vocabulary and grammar; it involves stimulating several areas of the brain to facilitate analytical thinking and interdisciplinary understanding. It helps improve academic performance, enhance retention, fosters creative and bestows a critical intellectual advantage.

In a job market where versatility is prized, language skills can be a differentiator. Banking and finance, healthcare, education, hospitality, logistics, and even e-commerce are assigning greater importance to employees who can reach out to India's multi-lingual population. The rise of regional media, state-level governance, and grassroots development programmes have also created demand for professionals fluent in local languages. Moreover, as Indian businesses expand globally, bilingual or trilingual professionals fluent in English and an international language like Mandarin, Spanish, or French are increasingly sought after. By embedding language learning in higher education, students can gain not just academic enrichment but also a practical skill that expands their career horizon.

Flexible system

Although the argument in favour of requiring language learning is compelling, it has to be implemented with regard to academic diversity. A single requirement for all programmes can become a source of pressure, particularly in disciplines that have strict course structures like Medicine, Engineering, or Law.

Alternatively, universities can follow a tiered or modular system. Language credits must be made obligatory but flexible and offer a combination of Indian and international languages based on student requirements and career aspirations. Courses may incorporate functional language instruction, professional communication modules, or vocabulary in areas of specialisation so that they are relevant and motivating. For example, medical students may study colloquial Hindi or Tamil to interact with patients, while business students may study Mandarin or Spanish to facilitate overseas operations.

Language is more than an academic subject; it's a fundamental skill for navigating India's pluralistic society and succeeding in a complex workplace environment. By incorporating language acquisition into higher education as a mandatory and well-integrated component, students can develop building blocks of cognitive development, cultural understanding, and practical skills.

The writer is the CEO of Globeducate, India

In the high-stakes gap

Tips for candidates who have cleared the UPSC Prelims and are preparing for the Mains

GETTY IMAGES/ISTOCKPHOTO

Rohit Pande

Every year, lakhs of aspirants take the UPSC Civil Services Examination but only a small fraction are successful. What distinguishes successful candidates is how they behave in the high-stakes gap between the Prelims and the Mains, a period of around 100 days that rarely makes headlines but almost always shapes final ranks. These are not days of passivity or linear preparation; they involve deep introspection, disciplined execution, and structured course correction.

From recall to analysis

Most aspirants approach the Prelims with an information-heavy strategy, solving MCQs, memorising facts, and guessing under pressure. The first thing that changes post-Prelims is mindset. The Mains do not reward memory but require clarity, structure, and articulation.

Toppers flip this switch within 24-48 hours and move away from solving MCQs and begin writing General Studies answers, Ethics case studies, essays ... even when they feel unprepared. This isn't about performance; it's about creating neural familiarity with expression, which leads to clarity.

Planning in cycles

Top performers do not follow subject-based study plans. Instead, they work in tightly managed revision cycles. A typical rolling plan includes rotating through three General Studies papers each week, two essay drafts, and one complete revision every 20 days. This keeps all subjects fresh, reinforces retention, and reduces last-minute overload.

They also measure output more than input. Instead of reading or obsessing over new material, they dedicate 60% or more of their time to writing answers, reviewing them, and applying feedback. They focus not just on writing, but re-writing and understanding how to say more with less.

Course correction

Contrary to popular belief, toppers don't just work harder; they correct faster. One of the most striking behavioural traits is the willingness to audit themselves with a mentor. One practice is maintaining a "weak areas" document: a simple list of low-scoring topics, frequently mismanaged themes, or personal writing pitfalls. This feeds directly into weekly test plans and revision focus areas. An underrated pillar at this point is guided mentorship, not in the traditional sense of instruction, but in the form of strategic oversight. This is where fault-finding becomes productive. When a mentor tells a candidate that their answer lacks balance or that their ethics case studies are predictable, it's not criticism; it's a compass. Without this external calibration, many end up over-preparing in comfort zones while neglecting weak points.

The writer is the co-founder and CEO of Civilsdaily IAS

Timely help

Galgotias University's iOS Development Centre has seen students actively develop apps that aid people in their daily lives.

Karan Kumar and Arpita Gupta have developed Sakhi, a personal health app that helps women track their menstrual cycles, tackles societal stigma around menstruation, and provides personalised care to individual users.

Shams Tabrej Alam has developed Kipp: Smart Sticky Notes Reimagined, a note-taking app that includes gesture controls, auto-expiring notes, dark mode, voice memos, and clutter-free reminders.

Aditya Kumar Gupta, Aida Sharon Bruce, Prateek Kumar Rai, and Roshan Karn developed Artistica, which offers a platform for artists to connect, inspire, and grow.

Science of the skin

Parul Ganju, founder and CEO of Ahammune Biosciences, a drug discovery company, on her domain

FUTURE PERFECT
Ananya Ganapathy

The next in the series featuring conversations with entrepreneurs, technologists and researchers about emerging technologies and what students need to know about these fields.

What do you do?

I am the co-founder and CEO of Ahammune Biosciences, a drug discovery company developing new treatments for skin diseases. Our scientists have developed a proprietary small-molecule therapeutics platform that targets first-in class mechanisms of action that trigger autoimmunity in skin. We are using this platform to develop a new treatment for vitiligo, the world's most common depigmenting disorder that does not have a cure yet.

Why is your work important?

Skin diseases are the fourth largest global health burden, affecting about two billion people. Diseases like vitiligo lead to significant emotional, social, and psychological burdens. Current treatments are limited, often

ineffective, and unpredictable. We are developing targeted, science-driven therapies to address this unmet medical need. By advancing innovative treatments, we aim to improve quality of life, reduce stigma, and bring care to patients everywhere, transforming how vitiligo and other skin conditions are understood and treated globally.

What is exciting about your work?

We are uncovering new biological pathways behind vitiligo and using that knowledge to develop truly innovative treatments so that patients may have options that go beyond symptom management. Our research has the potential to shift the treatment paradigm in dermatology and bring hope to millions living with visible, stigmatising skin diseases. We are turning scientific discovery into meaningful impact.

Any experiences in college that led you to become an entrepreneur?

During my Ph.D., I worked closely with vitiligo patients while researching skin immunology. Hearing their stories, especially their desperation for effective treatment, was a turning point. I realised that how poorly their needs were being met by current therapies and how little innovation was reaching them. That experience made it clear to me: I did not just want to study the disease. I wanted to create real solutions. That drove me towards entrepreneurship in drug discovery.

What should students specifically know about your field?

Drug discovery is a powerful example of why STEM matters. It is where science, technology, and innovation come together to solve real-world health challenges. From understanding diseases to designing life-saving medicines, this field shows how STEM can directly improve lives. The process is challenging but incredibly rewarding.

The writer is an avid follower of emerging technologies and their applications.

Where technology meets empathy

As we modernise healthcare education, we must design systems that cultivate both clinical expertise and emotional depth.

Nalin Saluja

Technology is transforming the way we learn across industries. But in healthcare – where the stakes are high and every interaction carries profound weight – human connection continues to make the deepest impact. To truly prepare students for the realities of patient care, we need learning systems that go beyond technical instruction and build emotional intelligence, ethical grounding, and real-world readiness.

In India, the challenge isn't just to educate and train more professionals. It is to prepare skilled, confident ones. The way we teach must evolve. Rethinking healthcare education is no longer optional, it's essential.

Learning new skills is inherently difficult. Numerous studies have shown that, while self-paced online courses work best to build on existing knowledge or satisfying curiosity-driven learning, purely online models fall short when it comes to delivering long-term, foundational outcomes, especially for students entering career-focused education for the first time. For such students, structured classroom learning remains essential. Experienced teachers provide the guidance and discipline needed to build not only core competencies but also the confidence to apply them. In India where employability is the real challenge for most of our youth, classroom education continues to be the most effective path forward.

GETTY IMAGES/ISTOCKPHOTO

Role of AI

In real-life hospital settings, exposure to a wide variety of cases is limited. But through simulation we can scale access to diverse, complex, and clinically relevant scenarios. These range from emergency response to patient diagnostics and treatment planning. AI plays a critical role behind the scenes, tracking learner performance, identifying knowledge gaps, and enabling personalised feedback loops. Combined with immersive technologies, it creates an ecosystem where students are not just taught, but actively tested in real-time decision-making.

Virtual Reality (VR) lets students explore anatomy in 3D, practise procedures safely, and build clinical confidence in a zero-risk environment. Augmented Reality (AR) overlays real-time instructions on physical tasks, allowing learners to receive guided corrections as they work boosting both comprehension and retention.

Yet even the most advanced tools can't replicate the power of human connection. A teacher's encouragement, a peer's support, or the shared energy of a classroom still plays a profound role in learning. These interactions – simple and often unspoken – help students stay motivated, build resilience, and push through the challenges of skill acquisition.

Compassion and care

Technology can build technical expertise. Real-world exposure builds readiness. But what sets exceptional healthcare professionals apart is not just knowledge. It is how they care, i.e., their ability to communicate, show empathy, and respond with compassion. Emotional intelligence, ethics, and resilience aren't soft skills; they are core competencies. Sometimes, it's not the treatment plan, but the human touch that saves a life.

As we modernise healthcare education, we must design systems that cultivate both clinical expertise and emotional depth. Because ultimately, we aren't just preparing students for exams. We're preparing them for the moments when someone's life depends on their response.

Road ahead

Transforming healthcare education in India requires substantial, sustained investments in digital infrastructure, teacher training, and equitable access to quality education, particularly in tier 2 and tier 3 cities. Effective partnerships among educational institutions, healthcare providers, and technology companies can build a scalable and inclusive educational framework.

By integrating classroom-based instruction with powerful tools, immersive technologies, and practical real-world training, we can cultivate professionals who are not just employable, but ready to innovate and lead in healthcare. Ultimately, we aim not merely to close the workforce gap, but to foster a generation of healthcare professionals prepared to deliver competent, compassionate, and confident care.

The writer is Co-Founder and CTO, Virohan.

Level up

Once a niche interest, gaming has grown into an industry that brings together creativity, technology, and storytelling.

Parth Chadha

Gone are the days when gaming was seen just as a hobby. Today, it's a booming global industry that offers a variety of career paths that bring together creativity, technology, and storytelling. With the rise of esports, immersive 3D experience, and next-gen gaming platforms, the world of gaming is no longer just limited to coding and design. Whether one is a technology enthusiast, an artist, a gamer or someone who looks forward to an entrepreneurial journey, the gaming industry offers multiple entry points and long-term opportunities for all.

Education

The initial step involves gaining relevant knowledge through a variety of academic and vocational routes. Short-term certifications and diploma programmes in areas like 3D animation, game development, and designing offer focused training. These courses typically last for six to 12 months and are usually offered by private institutions, both in India and abroad.

At the undergraduate level, students can choose to pursue B.Tech in Gaming Technology, which teaches basic engineering subjects along with gaming logic and graphics programming. A B.Sc in Game Design and Development offers a perfect blend of creative and technical education. A B.A. in Animation and Multimedia focusses on storytelling, concept art and 3D modelling. Students who are interested in business and management can also explore BBA in esports management as it includes gaming knowledge and event management skills. After UG, one can pursue M.Tech or M.Sc in Game Development or Computer Graphics. PG Diplomas in 3D animation or visual effects is an ideal choice for those who are inclined towards character and environment design.

Opportunities

Game Development and Design: Developers usually handle the coding of gaming systems using languages like C++ and Python, while designers focus on crafting the levels and making sure there is just the right amount of challenge to keep players engaged.

Software Development: Skilled professionals build servers, payment systems and databases to make sure that users have a smooth experience and hassle free in-game purchases.

3D Animation and Modelling: Professionals use tools like Maya, Blender, and ZBrush to create immersive, high-quality assets that are the virtual backbone ofgames.

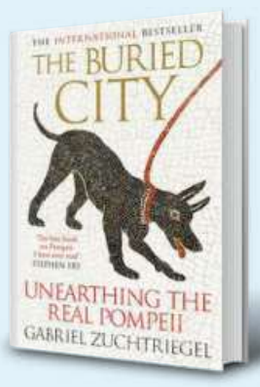
Esports Management: With people interested in organising tournaments and managing gaming teams, along with handling influencer collaborations and fan engagement, this field requires knowledge of the gaming industry, emerging trends, and human psychology.

In order to have a successful career, one must have both technical – programming languages, software engines, and animation tools – as well as fundamental skills. For those who aspire to be streamers and hosts, knowledge of software like OBS Studio, YouTube Studio, Twitch, and Streamlabs is an added advantage, along with basic editing skills. Strong collaborations, time management and problem solving skills are essential across all roles but an understanding of content creation and audience engagement is an advantage for those who aspire to be streamers and influencers.

The gaming industry is no longer a side hustle but is a full fledged career ecosystem. Whether one intends to join a studio or freelance, a career in gaming opens up a world of possibilities, infused with creativity.

The writer is Co-Founder and CEO, STAN.

ON THE SHELF



Mastering Personal Investments

Making smart investment decisions can feel overwhelming. This book breaks down complex concepts into simple, easy-to-follow steps, and offers readers the knowledge they need to invest wisely and make informed and effective financial choices.

Author: Prasanna Chandra and Savita Shrimal
Publisher: Bloomsbury
Price: ₹499

The Buried City

Pompeii is a world frozen in time. Unmade beds, dishes left drying, abandoned tools lie beside captivating works of art. This book reconstructs the catastrophe that destroyed the city, but also offers a behind-the-scenes tour of the city as it was before.

Author: Gabriel Zuchtriegel
Publisher: Hachette
Price: ₹699.