VISION DOCUMENT 2030



DEVA MATHA COLLEGE KURAVILANGAD



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Preface

In an era where higher education system in the country is confronting revolutionary changes, making use of the best opportunities and transforming to an institution of excellence is a question of survival. Holding a sustainable, practical and attainable vision with a sense of purpose and direction can surely drive the higher education institutions to future. It's at this juncture, the College comes up with the first of its kind vision document named Vision 2030 to address issues and bottlenecks in an unfamiliar and novel way to explore the future of opportunities.

Vision 2030 envisages embedding quality in six different parameters such as Academic Excellence and Job oriented Internships, Research Activities, Quality Initiatives and Capacity Building Measures, General Infrastructure, Academic Infrastructure and Sports Infrastructure.

I take this opportunity to express my sincere gratitude to the College Principal, Dr. Sunil C. Mathew for mooting the idea of the vision document entrusting me and my team with the responsibility of drafting the document. I remember with a grateful heart the support and cooperation of the Vision 2030 team members, Dr. Satees Thomas, Dr. Ciby Kurian, Dr. Sunil Jose K., Dr. Jobin Jose, Dr. Varghese M.C., Mr. Jaison Davis, Ms. Anu P. Mathew, Mr. Alphin Chacko and Mr. Benny Kochery without whose inputs and involvement the vision document would not have been materialized. The feedbacks and suggestions received from various departments and all other stakeholders are also profusely acknowledged.

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Coordinator, Vision 2030 Committee

DMCK VISION 2030 Committee

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I. Academic Excellence and Job Oriented Internships

- Course and curriculum to be designed in accordance with the requirement of the vocational and industrial fields.
- Courses to be offered as a complete package- from admission to accommodation facilities, library and recreational centers, labs and studios, culminating in guaranteed placements.
- All departments should be upgraded to Research centers
- As the Courses are graded into levels from school education to PhD completion.
- Suitable vocational courses and career opportunities need to be made available at the respective departments.
- Along with diverting students to various vocations, an attempt could be made to identify students with purely academic interest. Separate chairs shall be instituted for this purpose discipline wise. Academic tie-ups may be made with other outstanding academic institutions - international as well as national.
- Introduce a relevant activity oriented component to every course which can be chosen by students themselves. Example; Theatre production, documentaries etc.
- Start courses that give training in specific use of English to meet emerging corporate and business requirements.

Suggestions from various departments (as received)

Economics

The P G department of Economics would like to have/offer the following academic programmes for achieving academic excellence during the coming 8-10 years.

- To upgrade the department as a research department
- To arrange placement for UG and PG Programmes
- Starting of new double/triple main with internship
- More job oriented add on courses
- E-library facility exclusively for the department
- E-question bank facility
- Facilities to provide soft skills to students
- NET/JRF coaching
- More research publications including the project/internship reports of students

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- Industrial visits through collaboration/MoU with reputed companies
- Installing of software such as Python, Java, SQL, Stata etc
- Department website/portal for each student and faculty

Mathematics

- Recalibration of online Class/guiding/training related infrastructure capacity (Hardware and Software) and curriculum, to address future Technology explosion.
- Full utilization of Internet and related technologies.
- Online classes rooms, powered with Artificial intelligence and internet of things.
- Career oriented restructuring of courses
- Job oriented add on courses and career orientation programs
- Changing/Adding curriculum to produce Deployable resources to industry and society.
- Students' internship programs associated with organizations belongs to Multiple domains
- Introduction of Students exchange (cultural/academic/research) programs with foreign Varsities (to and from).
- Programmes for Skill development and transformation with use of technology, media and multinational experts
- Mandatory training for all students for Disaster Management and Recovery
- Defensive driving techniques Classes for all students.
- Mandatory training/classes for Law enforcement and procedure.

Physics

Department will try to upgrade itself to Research Centre by 2030

Capacity - 8 students

Infrastructure – Existing

Aim: To purse cutting edge research activities that has fundamental applications.

• New courses offered – Android App Development

This MOOC teaches you how to program core features and classes from the Java programming language that are used in Android, which is the dominant platform for developing and deploying mobile device apps. Learners will apply these Java features in the context of core Android components (such as Activities and basic UI elements) by applying

common tools (such as Android Studio) needed to develop Java programs and useful Android apps. Learners will work on several hands-on projects throughout the MOOC.

Time ~ 50 Hours

4 hours per week

Duration: 3 months

Prerequisites: Preferably Plus Two with Science/Commerce

Fees - Rs. 1000 per person

Location: Self-financing Block (After noon) if offline the course is offline.

Nature: Hybrid course (Theory online + Practical offline) or it can offline alone

Installation cost: Nil

Zoology

- Department of Zoology with four permanent faculty members planning to conduct the following courses and programmes by 2030
- M.Sc. Environmental management as self-financing course
- Add on course on environmental monitoring and assessment
- Internship can be provided for biodiversity management and arachnology
- Community linked extension programme---water quality assessment, biodiversity survey of the campus and locality and establishing butterfly park in the campus

English and Foreign languages

Business English Certificate

The department offers (BEC) Business English Certificate (Cambridge University) training programme to students at all the three levels (Preliminary, Vantage and Higher).

Foreign Languages

As the world comes to India and Indians make an impact in countries abroad, many technology professionals find that the knowledge of foreign languages gives them a definite edge over their technical counterparts. The Department of English can design courses in French, Japanese, German and Chinese to meet global needs and turn these foreign languages into an asset for those who intend to join multinational companies and look for opportunities abroad.

BA in foreign languages is a three years full-time undergraduate program

In today's globally interdependent and interconnected economy, the study of foreign languages has become increasingly imperative. An international language can serve as a window to another culture. A certification or degree in a foreign language is an incredible asset that will set you apart in any profession and open up infinite opportunities worldwide. Around the globe, there is an increasing demand for foreign language learners.

Content Writing Courses

Content writing today is one of the most sought-after jobs. The job market for content writing is awash with content writers. An excellent content writing course from an institute of repute will help them become a potential content marketer. Content marketing is one of the most successful techniques that professional marketers use to create brand awareness and reach a larger audience.

Performance Art Forms

Performing Arts course provides education related to entertainment (performance art); Dance, Drama and Music. The courses in performing art are <u>Bachelor of Performing</u> <u>Arts</u> (BPA) and <u>Master of Performing Arts</u> (MPA). A performing arts degree can be practise-based, with a large amount of actual performing, or academic, combining practical work with background analysis.

Certificate Course in Script Writing

Course Coverage

Story Elements

Screenplay Format

Three Act Structure

Premise: Writing your Screenplay

Building Character

Different types of Genres

Basic Eight Plots

Beat sheet: Six stages and Five Turning Points

Creating Dramatic Tension

Places to find ideas

Film Screening: Analyzing a film scene by scene

Photography degree

Diploma in Photography is a one-year diploma course that is design for students who aspire to become professional photographers. The course provides specializations in Documentary and Travel and Nature Photography. The basic eligibility criteria to apply for Diploma in Photography is that the student should have passed 10+2 in any stream from a recognized central or state board and must have keen interest in photography.

Commerce

- Internships on Digital Marketing, Professional Accounting, Tax Consultancy and Capital Market.
- **Compulsory** MOOC programmes to be attended by students.
- **Tax Practitioner course** as an additional qualification for students.
- Short term courses on areas such as Basic Computer Skills and Fundamental Financial Literacy for the benefit of the public.

General Training Programs: IELTS/TOEFL/GATE/JAM/NET coaching centers should be initiated for students to get trained within the campus – Location: Self Financing Block

II. Enhancement of Research Activities

To enable the college to make a meaningful contribution to society, the following recommendations are made to improve the research profile of the college.

List of the activities suggested

- 1. Provide research labs in all departments
- 2. Central software facilities
- 3. Air-conditioned Common seminar hall
- 4. Air-conditioned Common instrumentation facility
- 5. Research collaboration
- 6. Research block
- 7. Seed grant for minor research work.
- 8. Consultancy
- 9. Research policy
- 10. Project coordination
- 11. Publication centre

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- 12. Individual academic audit
- 13. Encouragement to teachers

Provide research labs in all departments:

Each department should have a separate research lab dedicated to enhancing the research output of PhD scholars working under the supervision of department faculty. For science departments, the lab should be divided into two separate sections. An air-conditioned equipment room and a non-AC scholar's room. Scholars should be provided with their own half-cabin space. Each lab should have a computer, wireless Internet access, and a printer.

- Total square feet, 20×20 feet= 400 feet.
- Cost of the room- 4 lakhs,
- Facilities 2 lakhs to 25 lakhs.
- Procurement of the fund: Through research projects, through consultancy, through fee from scholars.

Central software facilities

A central software centre should be established to assist and reduce the cost of acquiring common research software. A full-time information technology professional should be recruited to give effective support to teachers.

- Total square feet, 20×20 feet= 400 feet.
- Cost of the room- 4 lakhs,
- Software 2 lakhs to 10 lakhs.
- Procurement of the fund: Usage fee from scholars, use of library fund.

Air-conditioned Common seminar hall -

- Location- Behind the canteen.
- Total square feet, 30×50 feet = 1500 sq.feet.
- Cost of the building- 1500 x 2000= 30 lakhs.
- Cost of the chair- $100 \times 5000 = 5$ lakhs.
- Cost of the projector, computer and sound system- 4 lakhs.
- Guest rooms: Two guest rooms can be provided inside the seminar hall.
- Procurement of the fund: contribution from the management

Air-conditioned Common instrumentation facility

- Location- middle portion of the college
- Total square feet, 25×25 feet= 625 feet.
- Cost of the room =-5 lakhs.
- Equipment- 50 lakhs. to 2 crores.
- Procurement of the fund: Through research projects, through consultancy, through fee from scholars.

Research block

A separate building for research scholars will be good with all above mentioned facilities coming under one roof.

- Location- Any suitable area.
- Total square feet = 6000 sq. feet.
- Cost of the Building = 6000 x 2000 = 1.2 Crores.
- Equipment- 50 lakhs. to 2 crores.
- Procurement of the fund: RUSA fund, contribution from management.

Research collaboration: inter-institutional collaboration should be promoted and supported actively.

Consultancy

All teachers should be encouraged to begin consulting work in their subject areas. The current strategy of providing free consultation should be discontinued. Consultancy should generate revenue. Each department should make an attempt to produce the revenue necessary for development through consultancy.

Seed grant to teachers for minor research work.

New teachers should be given with a small - scale research grant and encouraged to start conducting research in their field of expertise. Additionally, all PhD holders should get a seed grant, the release of which will be based upon the publication of articles.

Research policy

• The college should have approved research policy which is binding on all staff members.

- As far as possible only PhD holders should be appointed as new teachers.
- Those without a PhD should be given a maximum of five years to complete it, failing which strong disciplinary measures should be resorted.
- Set a target for teachers and researchers to publish one paper or book per year.
- Each research scholar should take one hour of class in a week at PG/ degree level.

Project coordinating Centre :To increase project funding at the college, it must have a project coordinating centre that assists and motivates teachers in submitting for various research proposals.

Publication centre: The College should establish a division dedicated to publication. The division of publication will be responsible for the publication of books and journals, as well as certificates and brochures created by various departments.

Encouragement to teachers: It is strongly recommended that teachers who make a significant contribution to the corporate life of the college be actively encouraged and appreciated. Teachers who publish papers and books should be appropriately recognized.

Individual academic audit: At the end of the year, each teacher should be required to undertake an individual academic audit. Teachers are expected to meet their assigned targets for publications, seminars, and conferences.

III. Quality Initiatives and Capacity Building Measures

- Collaborations- Tie ups with Government, NGOs, Industry counterparts and academia to provide the students with numerous opportunities for holistic learning and capacity building and to foster institutional strive for excellence.
- Website- Revamping the institutional website to be state of the art, dynamic and interactive one with all relevant information accessible to all the stakeholders in a structured and appealing manner.
- E-Content Repository- To bring forth learning resources for the student community at large seizing the countless opportunities of online mode of education. E content developed by the faculty of the College are to be made available in the repository.

- Community Engagement- To confront developmental issues and challenges confronting the society and to give students an experience of involving and contributing towards social cause, a clear cut agenda for meaningful community engagement is to be implemented by the College under the lead of various departments, clubs and/or forums.
- Translational Research College has to encourage application oriented research so as to convert research into socially productive and for the benefit of the society.
- Executive Training Programmes (EEP) To facilitate up-skilling and reskilling of faculty members and also to tap their talents for the benefit of the society at large. Resourceful faculty members can form a team and conduct need based training programmes for employees of government or private organizations.
- Consultancy Services- Faculty of the College are to be motivated to contribute to institutional wellbeing and also their own professional development by effectively engaging in consultancy services. Along with rendering new academic and/or professional exposure to faculty, this will also result in generation of funds from internal resources.
- Placement Services- Elevating facilities of the College to enable conduct of job fairs and placement drives for suitable career placement. An online placement portal is to be established for the benefit of the students and to better their chances of employability. A placement coordinator can be appointed to effectively execute all functions in connection with placement services who will be guided by faculty coordinators.
- Incubation Center- To develop academia entrepreneurial ecosystem an incubation centre is to be established in the campus. This will encourage the entrepreneurial intent among the students and help the institution contribute towards finding solutions to societal problems along with transforming students to successful entrepreneurs.
- Multi Media Studio- To create high quality audio and video resources and SLM-Self Learning Materials which can be made available in the E Content Repository.

- Community Radio- Establishing a community radio highlighting current news, social issues, teen talk, sharing problems and solutions thereby making it relevant to local community and useful to the students for exploring new avenues of self-development.
- Fitness Centre- Refurbishing the health and fitness centre with dedicated space for boys and girls to reinstating a health culture among the students and staff of the College.
- Rhythm Cloister- Creating an arcade for the students, faculty and alumni to fruitfully engage the outside classroom hours in discussions, debates, reading forums, art or cultural events to revive the vibrance of campus life.
- Enriching Lives of PwD Students- Creation of accessible and enabling environment for the especially abled students. Introduction of programmes and learning resources to empower them and facilitate an inclusive ecosystem.
- Save Nature to Save Lives- Enhancing bio diversity with wholesome participation of stakeholders; initiating movements such as one student one plant, bio diversity audit, methods and system for rainwater harvesting and adopting renewable energy sources.
- Earn As You Learn Initiative-To offer a platform to learn new skills which are in demand and to pave way for self-employment and smooth access to jobs. Improvement in self-esteem, recognition as part of the skilled workforce and economic wellbeing are the expected outcomes. This can also be extended to the members of the adopted villages of the institute, who are deprived of formal education. A Skill Competency Certification can also be provided for the successful participants.

Campus Facilities- Overview



College office - Good infrastructure. Regular training has to be provided to the office staff in handling, understanding and processing files systematically and dutifully.

Library - Stock should be made proper. It should be strengthened by including Standard Reference text books in various fields of Arts and Science. Racks and stores should be painted and Books should be kept in the order. All windows should be properly sealed to avoid moisture content. Library will be further strengthened by the addition of Digital Library

E-Learning Centre: It should be properly maintained and used for and by the students to enrich their academic programmes and developing E-content.

Canteen - If possible, it should be renovated sufficient enough to cater to the needs of the stakeholders.

Auditorium – It needs a phase uplift. Stage and windows, Paneling, attractive paintings should be done for all windows.

Indoor stadium – (Under construction) Multipurpose indoor stadium cum auditorium coming up should suit to the requirements of modern days activities of students.

Digital Library - (Under construction)

Wifi Enabled campus – Should be WiFi enabled with WiFi corners for students on restricted timings.

Gymnasium – Fitness programmes and training should be given to students on a regular note.

Toilet Cum wash room Facility: Physical Fitness of the campus depends a lot on the Hygienic ambience. Press Tap for washbasin, health faucets, Rubber mats, Dettol box, Toilet tissue roll etc.

IV. Immediate General Infrastructural Requirements

- 1. Proper sealing to entire college
- 2. Wooden paneling of the front phase of the College as we step into the college at the main entrance
- 3. Potholes on the floor and walls should be cleared, smoothened and painted.
- 4. Seminar Hall cum Visitors longue + Lodging facility College requires a fully furnished seminar hall with at least 200 seating capacity which could be alternately used as an auditorium for students programmes (Possible location behind canteen). Entry is from the phase of Malayalam department.
- **5.** An elevator/Lift: If the maintenance cost is affordable to college, it is essential to have a lift which could be erected near porch and can connect all A Block and auditorium travelers. It will be beneficial for the physically disabled students.
- 6. Solar power plant should be used for the energy needs of the entire college
- 7. Front phase of the college from the main gate (on both sides of the road) should be made attractive by using proper beautifying with shade flowering plants
- 8. **Boundary demarcation of the campus** is very essential. Beautifying plants and trees should be planted along the boundary of the campus along with paving tiles of at least 1 m breadth for the smooth passage of students around the campus.
- 9. A car parking area for the college

- **10. A Bike Stand** (Separate slot for boys and girls) : A leveled, concretized area with separation lines for each bike for parallel parking should be made available for students
- 11. Proper name boards for all class rooms and others
- **12.** Well-equipped **IQAC Office**
- 13. Fully furnished Council Room
- 14. Leisure time tables (Relaxation benches): should be provided within the campus

for students to recreate their free times

R	Rough Estimate of Immediate General Infrastructural Requirements		
SI. No	Requirements	Cost	
1	Proper sealing to entire college	200000	
2	Wooden paneling of the front phase of the college	100000	
3	Potholes on the floor and walls	50000	
4	Seminar Hall + Chairs	3500000	
5	Elevator	1000000	
6	Solar power plant	2500000	
7	Front phase of the college from the main gate (on both sides of the road) (up to canteen)	150000	
8	Boundary demarcation of the campus	500000	
9	A car parking area for the college	300000	
10	A Bike Stand	100000	
11	Proper name boards for all class rooms and others	10000	
12	IQAC Office	Completed	
13	Council Room	Completed	
14	Leisure time tables (Relaxation benches)	200000	
	Total 86,10,000		

V. Academic Infrastructure Facilities

Teaching learning pedagogy used in the class room should be ICT based. So, all class rooms should be equipped with LCD projectors and computer with high speed internet connectivity. 37 class rooms require up gradation based on ICT requirements of some sort and total modernizations is needed while considering the infrastructures within the class rooms (benches, desks, lecture stand ...). Individual class room requirements for all departments are attached here with as appendix -1.

- 1. All benches and desks in 37 class rooms should be painted and smoothened
- 2. LCD projectors with plug-in facility should be provided
- 3. Lecture stand should be provided with uniform structural pattern in all class rooms
- 4. If desks and benches can be replaced by smart desks and chairs (at least for one class room in each department) will definitely improve the phase of the class rooms
- 5. Smart boards should be provided if faculty can properly use it
- 6. Faculty rooms need phase uplift

Approximate Cost of LCD projector - Rs.45000/-

Smart board - Rs. 80000/-

Individual cubicle for Faculties - Rs 25000/-

A model smart desk, compartmentalized faculty space and a model class room are shown below. Individual departments Vision plans are attached as appendix -1. Most of the departmental requirements comes under either in general academic facility or in immediate requirements.





Smart desk





Model class room with smart desks, chairs and Lecture stand with spaces for digital gadgets

VI. Sports – Infrastructure

Regular physical activity is essential to health and longevity. Many people report preferring exercising outdoors, which may also have a greater effect on mental and physical wellbeing. Outdoor exercise is also rated as being more restorative compared to indoors since natural environments reduce emotional and physiological stress. Exercising outdoors provides all the physical benefits of indoor exercise (blood flow, improved cardiovascular health, improved strength, flexibility, endurance, etc.) and can also provide vital exposure to sunlight that increases important levels of vitamin D, unlike indoor exercise.

Sports Facilities - Should be revamped with all possible training and facilities for students in games (Football, Volley ball, Cricket, Basketball and Shuttle...) and sports (all track and field events) in general.

Proposed Vision plan, Sports 2030 consists of four essentials:

1. **Open Gym** - A diverse outdoor recreation system contributes to students and community capital in and around the rural parts of Kuravilangad by providing a high quality of life for its residents and the community at large. It can be located either in a new open space or any recreation centers which are going to be constructed at Multipurpose indoor stadium or on the ground block of seminar hall, allowing users (both students and community people) to exercise while enjoying natural and designed landscapes in an open air environment.

Outdoor exercise is also rated as being more restorative compared to indoors since natural environments reduce emotional and physiological stress. Exercising outdoors provides all the physical benefits of indoor exercise (blood flow, improved cardiovascular health, improved strength, flexibility, endurance, etc.) and can also provide vital exposure to sunlight that increases important levels of vitamin D, unlike indoor exercise. Hence, an open gym is to be created for the common benefit of all the stakeholders of the College.

Facilities to be created

Sl. No	Items	Stack Weight (Kg)	Price [Rs.]
1	Seated chest press	50	57600.00
2	Lat pull down	50	53000.00
3	Squat station	50	48300.00
4	Leg extension	30	41700.00
5	Incline chest press	50	47200.00
6	Fitness rider		23300.00
7	Air walker		27400.00
8	Rower machine		25900.00
9	Double twister		26600.00
10	Arm & shoulder wheel + lat pull		52000.00
11	Bridge ladder		54200.00
12	Exercising bar		23800.00
13	Abdominal board		19100.00
14	Seated chest press + seated leg press		51800.00
15	Knee chair		24200.00
16	Single skier		24900.00
	TOTAL		6,01,000.00





arm & shoulder + lat pull





2. Walkers Lane

Walkers' lane around college ground can be created for students to be trained for track events and jogging. If possible, open the same facility to the public to be used for their fitness purpose. It may cost Rs. 2,00,000.

- **3. Recreation Hall** for the staff and students to be engaged in board games to refresh their minds.
- 4. Jump pits for Long and High jump which may cost around Rs. 1,00,000.

Appendix - 1

Department of Botany

Contents

- 1. Class room Requirements, ambience & appearance
- 2. Laboratory & instrumentation room
- 3. Faculty room Requirements, ambience & appearance
- 4. Entrance corridor Ambience & appearance
- 1. Class room Requirements, ambience & appearance

There are three class rooms in the department, which are furnished in a traditional (desk and bench) way. Most of the furniture are not well maintained. All the three class rooms have internet connectivity. Only IIIDC class room has Computer, LCD projector and an OHP. The total appearance of all the class rooms should be changed.



Existing facilities

Expected

The main development required in IIIDC class room includes -

- Individual chairs for students,
- ➢ Wooden covering of the desks,
- > Facility for keeping students bags inside the table
- Panelling of the windows and door and

Drinking water facility inside the class room.

The list of the items required is given below

Items	Required Nos.	Cost
Smart Desk – wooden covering	12	
Chairs	40	
Paneling of windows & door	6 + 1	
Lecture Stand 1		
NB: Wood of benches can be used for making smart desks		

2. Laboratory and instrumentation room:

Nine instruments purchased are not yet installed due to lack of space and laboratory. In order to conduct practical and project works, an additional lab for plant physiology and biochemistry should be made available. Desktops for the practical purpose is also required.

Items	Required Nos.	Cost
Plant physiology lab	1	
Stool-chair	30	
Desktops	6	
LCD Projector and wall mounting	1	
screen		
Wooden paneling of windows and	7 + 1	
door of existing lab		
NB: Free class room space for lab has already allotted.		

3. Faculty room - Requirements, ambience & appearance:

Compartmentalize office space for individual faculties fitting in tune with modern trends as a model shown below.



4. Entrance corridor - Ambience & appearance:

Systematic arrangement of potted plants in the department and additional fitting required to incorporate different classes of plants such as bryophytes, pteridophytes and angiosperms.



Department of Chemistry

Plan of Action:

- 1) Modernise classrooms with interactive boards with power backup, existing furniture in classroom to be replaced in such a way to use independent laptops.
- 2) Upgrade lab with new safety features, waste management system and equipment's to meet necessities of timely progressing modern chemistrysyllabus.
- 3) We will develop computational laboratory infrastructure with advanced chemistry software.

Requirements:

- Interactive smart board
- Inverter and Battery
- Desktop for department
- Computer lab
- Magnetic stirrer with hot plate
- > Potentiometer with built-in magnetic stirrer & standard cell
- Auto ranging conductivity meter with inbuilt magnetic stirrer & standard conductance
- Microprocessor based Portable pH meter
- Milli-Q water system

- ➢ Micropipette
- Autoclave

Department of Physics

Proposed infrastructural developments - Class rooms

Department of Physics aims to have a model smart class rooms for III DC Physics and if possible for II DC Physics as well. A photo of smart class room is shown below



Requirements of smart class room - II and III DC

Items	Required Nos.	Cost
Smart Desk	20	
Chairs	60	
Lecture Stand	2	
Ceiling Fan	5	
Lockable notice	2	
bulletin board		

> Proper concealed wiring and plug points for LCD projector in III DC

Items	Required Nos.	Cost
Desk -	22 (existing) –	
	Should be coated	
	Laminated sheets/	
Bench (polished)	22 (polished)	
Lecture Stand	2	
Ceiling Fan	5	

Or else renovate the existing infrastructure in II DC and III DC Physics

Requirements for smart class room – I DC Physics

- 1. Lecture stand
- 2. LCD projector
- **3.** Lockable notice bulletin board.

Proposed infrastructural developments - Department

Compartmentalize office space for individual faculties fitting in tune with modern trends (if possible)



General Requirement

Ramp for disabled students

Department of Economics

The P.G. Department of Economics would like to have the following infrastructure developments in the next 8-10 years:

- Computer lab
- Separate cabin with computer facility for each faculty
- ➢ Wall cupboards in each cabin
- Renovation on doors and windows of the department as well as class rooms
- Smart class rooms for U.G. and P.G. programme
- Wash rooms for students including physically disabled/transgender category attached to the department/class rooms

PG Department of Malayalam

- Well-furnished Staff room with separate cabin for each teacher
- Research room for Research Scholars
- Department Library
- Prepare a Heritage museum in association with our Department
- Smart Class rooms for UG and PG students
- Well-equipped Language Lab

Department of Zoology

Department of Zoology is planning for the following infrastructure development:--

Maintenance and renovation of faculty room

Procurement of four computer chairs= $4 \times 6000 = 24000$

Half cabin partitioning= Rs.50000

Providing racks for storage= 50000

Printer = 20000

Blinds for windows=10000

UPS back up for the classroom= 30000

Conversion of III DC classroom as a Seminar hall

Procurement of white board- 25000

Procurement of projector- 40000

Procurement of podium- 25000

Procurement of notice board- 10000

Procurement of sound system - 12000

Procurement of desktop- 30000

Procurement of 50 chairs= 4000 x 50= 200000

Development of the Biodiversity Museum

LED lighting for museum racks- Rs.50000

Providing additional racks for new specimens

CCTV monitoring

Provision of LED display of museum specimens

Renovation of Zoology lab

Desktop computers 10 nos. 5,00,000

Providing smart interactive board- 3,00,000

Microscopes - 5,00,000

Modernization of classrooms

Interactive board in each classroom- 6,00,000

Procurement of sound system -12,000

PG Department of English

- 1. Smart class rrom
- 2. Language lab
- 3. Department renovation
- 4. Seminar hall
- 5. Subscription to online journals
- 6. Space for the department library

PG Department of Commerce

The Post Graduate Department of Commerce envisioned the following infrastructure augmentation in the next 10 years to cope up with the requirements in higher education scenario.

1) Computer Lab

Computer lab is an essential learning facility as the specialization of B.Com programme is Computer applications. At present the number of computer systems in the lab are 30. As half of them were purchased in 2007, most of them are under repair and effectively 25 systems would be available for use. The computer lab can house as much as 60 systems. At present the student computer ratio is 1:2. As we have 50 sanctioned strength, there should be an additional purchase of 25 more computer systems to the computer lab. In addition, the following facilities are also required in the computer lab;

a) Teaching amplifier with speaker

b) Interactive white board

The future design of the computer lab shall be as follows;



Fig 1 Design (model) of Computer Lab

2) Smart Class Rooms for PG Classes

Smart classrooms with interactive whiteboards or smart panels (with audio support) with LAN internet connectivity is the need of the hour for post graduate classes. This will make the teaching learning process more effective and interesting.

The other requirements needed in the classrooms are;

- 1) **One Students PC with internet connection.** This is for use by the students for reference purposes.
- 2) **Power Backup/Inverter support** for the PC and Interactive board/Smart panel

The PG classrooms are expected to be redesigned as given below.



Fig 2 Design (model) of PG Classroom

3) ICT Enabled Classrooms for UG

All the three UG classrooms shall be made ICT enabled with LCD/DLP projectors and LAN connectivity. Separate inverter/power back up shall be provided for each class. One student PC shall be provided in each classroom for students reference use. Teaching amplifiers with a speaker facility (or lecterns) is an urgent requirement considering the strength of our classes. The classrooms shall be redesigned as given in the design below.



Fig 3 Design (model) of UG Classroom

4) Faculty Cabin

The department shall be furnished with spacious separated cabins for the head of the department and faculty members. This will be useful in conducting the tutorial activities and mentoring of students.



Fig 4 Design (model) of Faculty cabin

5) Board Room

A board room like facility for conducting panel discussions, debates, public speaking etc. is essential for improving the communication, negotiation, problem solving skills of the students.



Fig 5 Design (model) of Board room

6) Seminar Hall

A mini seminar hall that can accommodate max 100 participants with audio video support (projectors and speaker support) is also in the infrastructure development plan of the department. This can be used to conduct workshops, seminars, reviewing documentaries/video contents etc. for one or two batches.



Fig 6 Design (model) of Seminar hall

7) Fully Solar Powered Department

Over a period of 10 years, the department plans to meet its energy requirements fully from solar energy.

