PHARMA*fest*

2018-19

Shree Santkrupa Shikshan Sanstha's

SHREE SANTKRUPA COLLEGE OF PHARMACY

Ghogaon, Tal. Karad, Dist. Satara

Ph. No. : (02164) 257374, Mob. No. : 9890003215

Email : principalsntk@rediffmail.com Website : www.sscop.org

VISION

To become premier institution in the field of pharmacy to cater rural educational needs.

MISSION

1. To adopt best practices in teaching learning to integrate pharmacy knowledge and skills.
2. To develop competent pharmacists catering to the needs of Industry, Academia and Society.
3. To inculcate professional ethics in practice of pharmacy.

PROGRAM EDUCATIONAL OBJECTIVES (PEO'S):

1. **Knowledge:**

   To produce graduates with strong background in pharmaceutical sciences and able to use these tools in Pharmaceutical industry and/or institutes where ever necessary for success.

2. **Leadership and Teamwork:**

   The students shall develop the ability to function effectively both as team member and as leader with effective communication skills at the workplace and demonstrate appropriate interpersonal behavior.

3. **Innovation and Entrepreneurship:**

   To engage students in innovative activities by using creative thinking to imagine better ways of accomplishing professional goals.

4. **Professional Ethics:**

   To equip students with integrity and ethical values along with honesty and an ability to relate Pharmaceutical Sciences issues to broader social context.

Board of Directors

Hon. Mr. Shashikant K. Patil
President

Hon. Dr. Usha A. Johari
Vice-President

Hon. Mr. Prasun A. Johari
Secretary

Hon. Mr. Nikhil S. Patil
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Hon. Dr. Ashok N. Johari
Director

Hon. Mr. Sagar S. Patil
Director

Hon. Mrs. Shital S. Patil
Director

Hon. Mrs. Kamal J. Solanki
Director

Message

PHARMACY COUNCIL OF INDIA
(Constituted under the Pharmacy Act 1948)

Prof. B. Suresh M.Pharm., Ph.D., D.Sc.
President

Combined Councils' Building
Kotla Road, Aiwan-E- Ghalib Marg
P.B. No. 7020, New Delhi-110 002

Pro-Chancellor, JSS University
Sri Shivarathreeshwara Nagar, Mysuru-570 015
Phone: 0821 2548391 Fax: 0821 2548394
sureshbhojraj@gmail.com
sureshjssuni@hotmail.com
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July 19, 2019

MESSAGE

I am delighted to write this message for the college magazine "PHARMAFEST 2018-19" being brought by the Shree Santkrupa College of Pharmacy, Satara, Maharashtra.

On this occasion, I congratulate the Principal, Faculty, Staff and Students for bringing out the college magazine and convey my good wishes and hope that this issue would be meaningful, enjoyable and memorable.

With best wishes,

(Dr. B Suresh)

Message

प्रा. (डॉ.) देवानंद बी. शिंदे
एम.एससी., पीएच.डी.
कुलगुरू

Prof. (Dr.) Devanand B. Shinde
M.Sc.,Ph.D.
Vice-Chancellor

Estd :1962
NAAC 'A' Grade
MHRD-NIRF-28th Rank
शिवाजी विद्यापीठ,
विद्यानगर, कोल्हापूर - ४१६ ००४.
SHIVAJI UNIVERSITY,
Vidyanagar, Kolhapur - 416 004.

दूरध्वनी : कार्यालय - (०२३१) २६०९०६०
निवास - (०२३१) २६०९०५३
फैक्स : ००९१-२३१-२६९१५३३
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MESSAGE

I am glad to know that Shree Santkrupa College of Pharmacy, Ghogaon, Tal. Karad, Dist. Satara is bringing out the Annual Magazine 'PHARMAFEST 2018- 19' on the occasion of Independence Day 2019.

I hope that the magazine being brought out will be interesting and will stimulate and encourage the hidden talents of students. I am sure that the magazine will be informative and resourceful.

On this occasion, I convey my good wishes to the Principal, the members of the editorial team, the students, teaching and non-teaching staff for their efforts in publishing the magazine.

(Devanand Shinde)
Vice-Chancellor

Kolhapur
Date: 29 JUL 2019

From the President's Desk

Dear Readers of Pharmafest 2018-19,

As a president of Shree Santkrupa Shikshan Sanstha, Ghogaon-Karad, it gives me an immense pleasure to give my message on the occasion of release of our annual magazine of SSCOP - "Pharmafest 2018-19".

Education is a fundamental right for overall development of any individual. SSCOP is a premier educational establishment which harnesses the inherent potential by fulfilling the growing need of higher education and industry.

Today, the Indian Pharmaceutical Industry is one of the most thriving industries which are not affected by global recession. Our Pharmaceutical industry boasts of having more than 100 U.S. FDA approved plants, having state of the art facilities and large number of NDA & ANDA's is filled by its scientists. Pharmaceutical industry needs highly competent and skilled individuals to carry the burden of high expectations and we at SSCOP have taken this mission to produce competent and qualified pharmacy professionals"Tailor-made" to meet the stringent requirements of pharmaceutical industry.

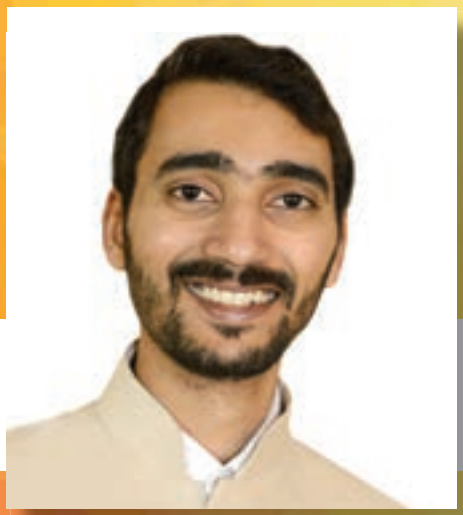
We at Santkrupa College of Pharmacy take a pledge to serve the healthcare profession and the nation by delivering human resources which will ensure production of quality medicines at affordable prizes.

Our team of dedicated faculty led by the dynamic leader Dr. V. R. Aralelimath is working continuously to meet this demand.

I congratulate our editorial committee for their excellent work in coming out with annual magazine "Pharmafest 2018-19"

My best wishes to everyone at SSCOP.

Hon. Mr. Shashikant K. Patil
President,
Shree Santkrupa Shikshan Sanstha.



From the Secretary's Desk

Dear Readers of Pharmafest 2018-19,

I am happy to see the revival & publication of Pharmafest 2018 - 19, the annual magazine of Shree Santkrupa College of Pharmacy (B. Pharm., M. Pharm.). Under the able guidance of our Principal, Dr. V. R. Aralelimath, and the Editorial team, I hope to see this is as a regular feature giving a platform to our students, faculty & management to express their thoughts.

The state of Pharmacy Education in our country was gradually starting to resemble that of Engineering Education. With institutes mushrooming one wondered with concern about the future of the institutes and of the fresh pharmacy graduates. The wisdom of allowing colleges to mushroom with the intent being that only good colleges would survive had somehow not worked for Engineering Education and it is commendable that the Pharmacy Council of India (PCI) has put a halt to all new colleges for the next 5 years. The country can absorb only so many Pharmacy graduates. And a stable environment allows institutes to focus on improving academic standards instead of worrying about admissions & financial survival. Some view these issues to be correlated but I beg to differ.

At Shree Santkrupa College of Pharmacy, we are moving forward on the path of improving Academic standards. This initiative has to start with the head of the institute and I am happy that our Principal, Dr. Aralelimath, despite his administrative commitments, is taking regular lectures for our students. His passion for teaching is infectious. And our dedicated faculty has been carefully selected to be an effective team that delivers the best training to our budding pharmacists. We are on the path of continuous improvement.

I hope our students can make the best of their years at the college. Some of our fondest memories and friendships are made in these years. Being a good student involves not just academic excellence but also requires one to be active culturally, socially, as a writer, poet, artist, singer, dancer, actor etc. I hope the students make the most of all our events, functions & competitions.

I wish the best to our students. And I congratulate our faculty & Principal for the publication of this magazine. May it become the gold standard of College Publications.

Prasun Johari, B. E., M. S.
Secretary,
Shree Santkrupa Shikshan Sanstha.

From the Principal's Desk

Dear Readers of Pharmafest 2018-19,

It gives me immense pleasure to release our college magazine ***'Pharmafest 2018-19'*** of the academic year 2018-19. Shree Santkrupa College of Pharmacy was established in 2004 and offering B. Pharm as well as M. Pharm courses (Pharmaceutics). The institute is affiliated to Shivaji University, Kolhapur and approved by DTE, AICTE, Pharmacy Council of India, New Delhi.

Under the able leadership of President Shri. Shashikant Patil and Secreatry Mr. Prasun Johari, college is committed to provide high quality education in rural area.

Pharmacy profession has evolved from its conventional and traditional drug focused approach to an advanced patient focused approach over the years. Pharmacy education in India is largely industry oriented and hence Indian pharmaceutical industry with its tremendous growth capacity has several job opportunities. The future pharmacists should be equipped with appropriate education and relevant training to make them fit to meet the challenges.

We are dedicated towards providing quality pharmacy education. Highly qualified and dedicated teaching faculty-to deliver quality education, excellent infrastructure and library facilities along with placements are aiding us in that direction.

College regularly conducts seminars, guest lectures and workshops along with cultural and sport activities to boost overall development in students. The best platform to showcase the literary skills of our students is the publication of magazine.

A college magazine is a mirror of the college life. It reflects the literary, educational and sports activities conducted in the college. ***'Pharmafest 2018-19'*** is a perfect blend of academic activities, achievements, and creativities of our staff and students. It gives me a sense of pride and satisfaction that we are presenting you this wonderful issue.

We are grateful to the management for their support in executing all creative activities.

I appreciate and congratulate the magazine committee for their continuous efforts in the release of a memorable issue.

Dr. V. R. Aralelimath
Principal,
Shree Santkrupa College of Pharmacy, Ghogaon

From the Editor's Desk

"Every accomplishment starts with the decision to try, If you never try then you will never succeed."

We feel an immense pleasure in presenting our college magazine ***'Pharmafest 2018-19'.*** The college magazine is a best podium which is used for sharing the knowledge, achievements, activities, writing skills and memories.

Pharmafest gives you a glimpse of various activities carried throughout the year. Pharmafest depict the talent of our students and staffs in the form of poetry, art, sketches, humour, creativity, scientific and non scientific articles.

We place on record our deepest gratitude towards our President Shri. Shashikant Patil Saheb and Secretary Mr. Prasun Johari Sir for their constant encouragement and support. We extend our heartfelt thanks to Principal Dr. V. R. Aralelimath Sir, for his constant guidance, motivation and free hand during the process of planning and publication of the magazine.

With a sense of pride and satisfaction, we would like to thank all the students, teaching and non teaching staff for their direct and indirect contribution. We are extremely thankful to Mr. Milind Gijare, Lokmanya Communications for his continuous support in designing and printing of the college magazine.

This issue of magazine will inspire all of us for a new beginning enlighten with hope, confidence and faith in each other. Looking forward to your valuable feedback which will help and nourish the growth of next volume of college magazine.

Mr. Mukund N. Urade
Asst. Professor,
Shree Santkrupa College of Pharmacy,
Ghogaon

Mr. Prafull P. Kolekar
Magazine Secretary,
Shree Santkrupa College of Pharmacy,
Ghogaon

SSCOP Faculty

Principal Dr. Aralelimath Vijayanand R., M. Pharm. Ph.D, **Dept. :** Pharmacology
Experience : Teaching: 24 Yr., Clinical: - 01 Yr., **Paper Published :** National: - International: 03,
Paper Presented : National: Oral: 01, International: 02 **Seminar/Workshop Attended :** 18
Other Achievement : Received Dr. A. P. J. Abdul Kalam Best Teacher Award at Bangalore in 2018.

Dr. Belvotagi Venkatrao A., M. Pharm. Ph.D, Professor, **Dept. :** Pharmaceutical Chemistry
Experience : Teaching: 26 Yr., Industry: 03 Months, **Paper Published :** National: - 02 International: 10
Paper Presented : National: Poster : 04, Oral: 01, International: 01 **Seminar/Workshop Attended :** National 20, International: 02, **Other Achievement :** i) Underwent Post Doctoral Research Training for a period of 15 months at Chem. Dept. of Lund University, Sweden. ii) Won best paper award in 3rd IAPST Conf. at Manipal in 2009. iii) Two projects selected in Avishkar competition (University Level Poster Presentation).

Dr. Patil Sachinkumar V., M. Pharm. Ph.D, Associate Professor, **Dept. :** Pharmaceutics
Experience : Teaching: 14 Yr., Industry: 01 Yr.,
Paper Published : National: - 21 International: 18
Paper Presented : National: 11, International: 02
Seminar/Workshop Attended : 9

Dr. Jameel Ahmed S. Mulla, M. Pharm. Ph.D, Associate Professor, **Dept. :** Pharmaceutics
Experience : Teaching: 14 Yr., **Paper Published :** National: - 20 International: 16
Paper Presented : National: 15, International: 14, **Seminar/Workshop Attended :** 35
Other Achievement : i) 9th Rank, D. Pharm (Part – I), Karnataka State, ii) 6th Rank, D. Pharm (Part – II), Karnataka State, iii) Recognized PG & PhD Guide for Shivaji University, Kolhapur

Mr. Lade Pravinkumar D. M. Pharm., Assistant Professor, **Dept. :** Pharmaceutical Chemistry.
Experience : Teaching: 14 Yr., Industry: -
Paper Published : National: - 08 International: 11
Paper Presented : National: 03, International: 03
Seminar/Workshop Attended : 12

Mr. Urade Mukund N., M. Pharm., Assistant Professor, **Dept. :** Pharmacology
Experience : Teaching: 13 Yr., Industry: -
Paper Published : National: - 2 International: -
Paper Presented : National: 2, International: -
Seminar/Workshop Attended : 16

Mr. Patrakar Ramling G., M. Pharm., Assistant Professor, **Dept. :** Pharmacologynosy

Experience : Teaching: 13 Yr.

Paper Published : National: 03 International: 10, **Paper Presented :** National: 01, International: 02

Seminar/Workshop/Conference Attended : 09

Mr. Janugade Bhagyesh U., M. Pharm., Assistant Professor, **Dept. :** Pharmaceutics

Experience : Teaching: 11 Yr., Industry: -,

Paper Published : National: 05 International: 01, **Paper Presented :** National: 04, International: -

Seminar/Workshop Attended : 14,

Ms. Suryawanshi Gayatri B., M. Pharm., Assistant Professor, **Dept. :** Pharmaceutical Chemistry

Experience : Teaching: 09 Yr., Industry: -

Paper Published : National: 05 International: 0 **Paper Presented :** National: 2, International: -

Seminar/Workshop/Conference Attended : 18

Mr. Kadam Atul M., M. Pharm. Assistanat Prof., **Dept. :** Pharmaceutics, **Experience :** Teaching: 11 Yr., Industry: - 1 Yr. **Paper Published :** National: - 07 International: 09, **Paper Presented :** National: 07, International: 06, **Seminar/Workshop Attended :** 20, **Other Achievement :** i) Guest Lecture on Artificial Intelligence in One Day Conference on Applications of Computational Chemistry in Pharmaceutical research at Channabasweshwar Pharmacy College, Latur, on 15-03-2019. ii) Received Travel Grant from Shivaji University Kolhapur for attending International Conference at Bhubaneswar in 2019 iii) Co- chairman and Judge for Poster session at 3rd Pharm. Tech. IAPST International Conference on "Molecular Mechanism of Diseases and Novel Therapeutic Approaches" at Odisha India on 19and 20-01- 2019. iv) Reviewer for Medicinal chemistry research a Journal of Springer. v) Member for NGO Action committee against Unfair Medical Practice for project entitled Pharmaceutical waste management

Mrs. Janugade Aparna B. M. Pharm., Assistant Prof., **Dept. :** Pharmaceutics, **Experience :** Teaching: 03 Yr., Industry: - **Paper Published :** National: - 01 International: -, **Paper Presented :** National: 04, International: 01. **Seminar/Workshop Attended :**. i) "University IInd Rank" in the B.Pharm and M.Pharm. ii) Awarded Shivaji University Merit scholarship. iii) Honored "Best Outgoing Student Award (B.Pharm)" by Shree Santkrupa College of Pharmacy, Ghogaon for the year 2010-2011. iv) Honored "Best Outgoing Student Award (M.Pharm)" by Shree Santkrupa College of Pharmacy, Ghogaon for the year 2012-2013. v) Honored "Runner up Prize for Research Paper- "Colorimetric Method for Simultaneous Estimation of Amlodipine Besylate from Plasma" in National Level online Poster Compition-2012 held at College of Pharmacy Jaoli, Medhai) vi) Received research grant to college teachers during year 2017-2018 from shivaji university Kolhapur for topic "Improvement of Compressibility, Flowability Along With Bioavailability of Olmesartan Medoxomil by Spherical Agglomerates: A Comparative Evaluation With Marketed Tablets" and sanctioned a grant of Rsi)20000/- for the research project.

Mr. Patil Sandipkumar Y., M. Pharm., Assistant Professor, **Dept. :** Pharmaceutical Chemistry
Experience : Teaching: 7 Yr., Industry: -
Paper Published : National: - 3 International: 4
Paper Presented : National: 2, International: -
Seminar/Workshop Attended : 16

Ms. Thorat Mamata S., M. Pharm., Assistant Professor, **Dept. :** Pharmaceutical Chemistry
Experience : Teaching: 3 Yr.
Paper Published : National: 0 International: 0,
Paper Presented : National: 1, International: 0
Seminar/Workshop/Conference Attended : 4

Ms. Rane Nilima U., M. Pharm., Assistant Professor, **Dept. :** Pharmaceutics
Experience : Teaching: 1 Yr., Industry: -,
Paper Published : National: 02 International: 0
Paper Presented : National: 01, International: -
Seminar/Workshop Attended : 6

Ms. Shinde Shital S., M. Pharm., Assistant Professor, **Dept. :** Pharmaceutics
Experience : Teaching: 06 Months, Industry: -
Paper Published : National: 04 International: 0
Paper Presented : National: -, International: -
Seminar/Workshop/Conference Attended : 4

Ms. Thorat Priyanka A., M. Pharm., Assistant Professor, **Dept. :** Pharmaceutics
Experience : Teaching: 1 Yr., Industry: -
Paper Published : National: 1 International: 1
Paper Presented : National: -, International: -
Seminar/Workshop/Conference Attended : 6

Ms. Thorat Ankita M., M. Pharm., Assistant Professor, **Dept. :** Pharmaceutical Chemistry
Experience : Teaching: -, Industry: -
Paper Published : National: 1 International: -
Paper Presented : National: Oral – 1, Poster: - 4, International: -
Seminar/Workshop/Conference Attended : 3

B.Pharm First Yr.

B.Pharm Second Yr.

B.Pharm Third Yr.

B.Pharm Final Yr.

M.Pharm Students

PharmaFest Organising Committee

Teaching Staff

Non-Teaching Staff

ROLL OF HONOURS

Academic Year : 2017–18

First Year B.Pharm (Sem. I + II)

Ms. Dhanashri Kalugade
College Rank : 1 (77.10%)

Ms. Jyoti Kharaje
College Rank : 2 (70.71%)

Ms. Muskan Mulla
College Rank : 3 (69.45%)

Academic Year : 2017–18

Second Year B.Pharm (Sem. III + IV)

Ms. Ankita Anure
College Rank : 1 (77.70%)

Ms. Jyoti Mali
College Rank : 2 (72.70%)

Ms. Aishwarya Patil
College Rank : 3 (72.10%)

Academic Year : 2017–18

Third Year B.Pharm (Sem. V + VI)

Ms. Kolekar Shamali
College Rank : 1 (75.10%)

Ms. Thombare Pratiksha
College Rank : 2 (74.20%)

Ms. Yadav Pooja
College Rank : 3 (73.60%)

Academic Year : 2017–18

Final Year B.Pharm (Sem. V + VI + VII + VIII)

Ms. Nita Jagtap
College Rank : 1 (73.20%)

Mr. Aniruddha Satale
College Rank : 2 (70.75%)

Ms. Vidya Thorat
College Rank : 3 (70.20%)

ROLL OF HONOURS

Academic Year : 2018–19

First Year B.Pharm (Sem. I + II)

Ms. Prajakta Atkekar
College Rank : 1 (75.14%)

Ms. Tanuja Pawar
College Rank : 2 (74.86%)

Mr. Kartik Aralelimath
College Rank : 3 (74.78%)

Academic Year : 2018–19

Second Year B.Pharm (Sem. III + IV)

Ms. Dhanashri Kalugade
College Rank : 1 (80.23%)

Ms. Rutuja Patil
College Rank : 2 (78.40%)

Ms. Pratiksha Pawar
College Rank : 3 (77.18%)

Academic Year : 2018–19

Third Year B.Pharm (Sem. V + VI)

Ms. Ankita Anure
College Rank : 1 (78.40%)

Ms. Varsha Bendre
College Rank : 2 (74.90%)

Ms. Jyoti Mali
College Rank : 3 (74.10%)

Academic Year : 2018–19

Final Year B.Pharm (Sem. V + VI + VII + VIII)

Ms. Shamali Kolekar
College Rank : 1 (75.65%)

Ms. Megha Karale
College Rank : 2 (74.75%)

Ms. Pratiksha Thombare
College Rank : 3 (74.7%)

ROLL OF HONOURS

Academic Year : 2018–19
First Year M.Pharm (Sem. I + II)

Mr. Omkar Tipugade
College Rank : 1 (75.46%)

Mr. Amit Shelke
College Rank : 2 (72.62%)

Mr. Manohar Patil
College Rank : 3 (69.92%)

Academic Year : 2017–18
First Year M.Pharm (Sem. I + II)

Ms. Ankita Hogale
College Rank : 1 (72.62%)

Ms. Ashwini Rakshe
College Rank : 2 (69.92%)

Mr. Mayuresh Redkar
College Rank : 3 (66.23%)

Academic Year : 2017–18
Second Year M.Pharm (Sem. III + IV)

Ms. Ashwini Dhulap
College Rank : 1 (71.29%)

Ms. Shivani Jadhav
College Rank : 2 (66.44%)

Mr. Ganesh Atugade
College Rank : 3 (65.57%)

GPAT QUALIFIERS 2017-18

Ms. Ankita Hogale
GPAT Score : 115

Ms. Supriya Askat
GPAT Score : 120

Mr. Sanket Lokare
GPAT Score : 90

GPAT QUALIFIERS 2018-19

Ms. Pooja Yadav
GPAT Score : 153

Mr. Rakesh Pawara
GPAT Score : 95

Interview of **Dr. Sheela A. Khairmode,**

M.B.B.S., DCH, Class-I Paed.
Venutai Sub-Dist. Hospital, Karad.

1) स्वाईन फ्लू कशामुळे होतो?

स्वाईन फ्लू हा डुक्कर या प्राण्यापासून होतो, H1N1 virus मुळे, बाधित प्राण्यामुळे होतो.

2) स्वाईन फ्लू ची लक्षणे कोणती?

अंगदुखी, थंडी वाजून ताप येणे, खोकला, डोकेदुखी, घसा कोरडा पडणे, थकवा येणे, क्वचित उलटी, जुलाब ही लक्षणे आढळून येतात.

3) स्वाईन फ्लू चे संक्रमण पावसाळा आणि हिवाळ्यातच का होते?

हा काळ विषाणूच्या वाढीसाठी योग्य आहे तसेच या काळात मनुष्याची रोगप्रतिकारक क्षमता कमी झालेली असते, त्याच्या मुळे संक्रमण अगदी जलद होते.त्याचा incubation period 4-5 दिवस इतका असतो. वयोवृद्ध, लहान मुले, गरोदर स्त्रिया त्यांच्यामध्ये हा अधिक पसरतो.

4) त्याचे निदान कसे करायचे?

Swine Flu ओळखण्यासाठी नाक किंवा घसा यातून swab गोळा केले जाता, आणि 15 मिनिटात Lab मध्ये Influenza A किंवा B झालेला आहे ते तसेच X- Ray, Blood Test, CBC Test केल्या जातात.

5) त्याच्यावरील उपचार पद्धती कोणती?

FDA approved Antivirus औषधे उपलब्ध आहेत.ठोस अशी उपचार पद्धती नसली तरी, तीव्रता कमी करण्यासाठी Oseltamivir, Zanamivir वापरतात. Vaccines लस उपलब्ध आहेत. त्या 10 वर्षापुढील मुलांना/ व्यक्तींना देता येतात.

6) तो कसा टाळावा?

बाहेरून आल्यावर हात स्वच्छ धुणे, पुरेशी झोप, व्यायाम, ताण-तणाव नियोजन, भरपूर पाणी प्यावे, चौरस आहार इ. गोष्टी केल्याने प्रतिकार शक्ती वाढते. तसेच संसर्गजन्य व्यक्तीशी संपर्क टाळावा, खोकताना, शिंकताना तोंडावर रुमाल ठेवावा, मास्क वापरावेत.

7) हॉस्पिटल मध्ये तुम्ही कशी काळजी घेता?

रुग्ण हॉस्पिटलमध्ये दाखल झाल्यानंतर तज्ज्ञ डॉक्टर त्यांच्या protocol प्रमाणे केस handle करतात किंवा Further treatment साठी पुढील सल्लागारांकडे पाठवतात.

8) कापुर/निलगिरी तेल वापरून swine flu टाळता येऊ शकतो का?

हो, हा घरगुती उपाय आहे, तसेच तुळशीची पाने, आले, हळद, लिंबू वर्गीय फळे यांचे सेवन केले तर प्रतिकारशक्ती नक्कीच वाढू शकते

-By Patil Aishwarya, T.Y.B.Pharm

Interview of **Pandurang K. Mali**

Ex-Army Man

1. What is your name and tell us your post in Indian Army?

My name is Pandurang Krishna Mali and I am Subedar major in army.

2. How many years did you worked in Indian Army?

I have worked for 32 years.

3. How do you feel about telling people you worked at Indian Army?

I feel proud to be Indian and Proud to work, serve to our own Nation.

4. Which type of work you have done to keep your fiftness?

I use to do early morning exercises up to two hours and then take healthy breakfast to keep my Fitness.

5. What are Qualities of an Army Officer?

I think that an Indian Army Officer should have qualities like Effective intelligence, Reasoning Ability, Self confidence with great Determination, courage, Power of expression and Josh in his life.

6. Which was your life turning period during your service time?

In 1971 Dist. Khulna near Jute mill 12 soldiers team were fighting with Bangladesh at that time Kernal M.D Anand, Caption S. Kulkarni and Nk. (Gunshooter) Sembha were shahid. It was very Scaring movement of my life.

7. In which wars you participated against various countries.

I had participated in China war in 1962. In 1965 against Pakistan and in 1971 against Bangladesh.

8. In which states you have worked.

I have my posting in various states like delhi, Assam-Rangia, Dhagandra in Gujarat, Bangladesh, Thangdhan in Shrinagar, Jammu Kashmir, Ranchi, and Hydrabad,etc.

9. Tell us about your proudest achievements.

I think that my 1st proudest achievement is my joining in Indian Army. And 2nd most proud Movement when I won the wars of 1965 and 1971.

10. What message you will give to our young generation?

I think our young generation is future of our nation. I suggest that they should develop Respect and Positive relationship with elders, try to learn more new skills, build stronger communities and most important feel good about themselves and help others and make nation proud.

-By Pooja Mali, T.Y.B.Pharm

।। श्री संतकृपा शिक्षण संस्था ।।

श्री श्रींचा घेऊनी आशीर्वाद ।
वसवली पंढरी ज्ञानाची ।।

सं संपवुनी अंध:कार अज्ञानाचा ।
प्रगतीच्या ध्यासाला साथ यशाची ।।

त तन-मन-धन अर्पण करुनी ।
बाग विद्यार्थ्यांची फुलवली ।।

कृ कृपा झाली संत ईश्वराची ।
मंदिरात ज्ञानाच्या सरस्वती अवतरली ।।

पा पावसाप्रमाणं पाझरतं इथं ।
अमृत ज्ञान संस्काराचं ।।

शि शिक्षणातुनी देतो आम्ही जीवनाचे धडे ।
इवलसं वाटतं मग शिखर यशाच्या एव्हरेस्टचं ।।

क्ष क्षणाक्षणाला जाणतो आम्ही ।
जपतो नाती आपुलकीची ।।

ण नसानसात आत्मविश्वास आमच्या ।
खरी करितो स्वप्न भरारीची ।।

सं संस्काराचा धनी विद्यार्थी आमुचा ।
करितो उधळण सप्तरंगी कलागुणांची ।।

स्था स्थापिली संतकृपा शिक्षण संस्था ।
जिद्द आमुची आकाशाला जिंकण्याची ।।

DECLARATION

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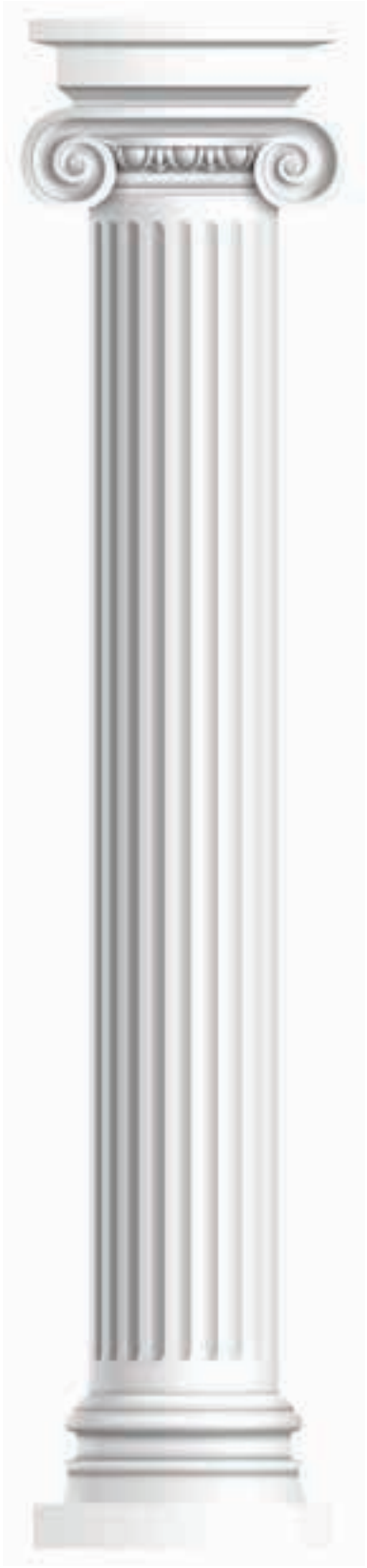
I, Dr. Vijayanand R. Aralelimath, Principal Shree Santkrupa College of Pharmacy, declare that the particulars given above are true to the best of my knowledge and belief.

Dr. Vijayanand R. Aralelimath,
Principal



PHARMACIST'S OATH

I swear by the code of ethics of Pharmacy Council of India in relation to the community and shall act as an integral part of health care team

I shall uphold the laws and standards governing my profession

I shall strive to perfect and enlarge my knowledge to contribute to the advancement of Pharmacy and Public health

I shall follow the system, which I consider best for Pharmaceutical care and counseling of patients

I shall endeavor to discover and manufacture drugs of quality to alleviate sufferings of humanity

I shall hold in confidence the knowledge gained about the patients in connection with my professional practice and never divulge unless compelled to do so by the law

I shall associate with organizations having their objectives for betterment of the profession of pharmacy and make contribution to carry out the work of those organizations

While I continue to keep this oath unviolated may it be granted to me to enjoy life and the practice of pharmacy respected by all at all times!

Should I trespass and violate this oath, may the reverse by my lot

SCIENTIFIC SECTION

ORGANOIDS: A NEW RAY OF HOPE FOR BIOLOGICAL RESEARCH ???

Dr. Aralelimath V. R. & Dr. Belvotagi A. V.

Recall a situation from a sci-fi movie or a mythological story in which the alien / demon's tissues regrow without getting affected from the assault of the hero / gods. How nice it would be if, humans also develop the capacity to grow damaged tissues by patching up with a piece of the tissue grown in the lab? or we could graft a new organ for a damaged organ as replacement? Thanks to the success in organoid culture, it is possible now.

Fig.1. A view of the human ear grown on a rat and a mini brain grown in the lab.

How crucial it would be if, a doctor could identify a more sensitive drug for a cancer patient before he does a trial with several drugs on a cancer patient at an advanced stage?. It would be possible soon to screen drugs on a cancerous tissues developed from patient's body.

Similarly, if the toxicity of drugs could also be evaluated in vitro, before being tried on a patient, a concept of personalized medicine is possible through this technique.

Study of organogenesis, differentiation and tissue homeostasis of tissues in in accessible areas is possible.

Stringent regulations governing experimentation involving animal and humans have made the life of biologists, biochemical scientists and pharmacologists, difficult. But, success in growing human cells in-vitro for anti-cancer drug evaluation and Zebra fish based studies in developmental, genetic and anti-cancer studies have provided a temporary relief.

Those working in the field of biological research are aware of the difficulties associated with: studying normal physiology of the human cells; changes in their physiology in diseases /disorders; evaluation of drugs in an in-vitro tissue sample.

Accumulated experience of handling in-vitro cell-line cultures; knowledge about their development and maintenance; problems associated with prolonged, expensive cell-line culture techniques made researchers look at other possible alternatives. They tried growing progenitor cells (cells from a tissue

that have the tendency to develop into a specific tissue, though present in normal tissue same ones which heal wounds) or pluripotent stem cells (self replicating embryonic cells that can develop into a tissue) and were successful.

Such cell mass grown in a culture medium, when provided with a support, started yielding a three dimensional structure.These structures started showing physiological activities of organs. They were named *organoids*. The term *Organoid* means "organ like". These are three dimensional tissues grown on artificial medium as compared to the mono-layered, flat / 2 dimensional cell aggregates.

Organoids from most organs like liver, kidney, lung, optic nerve have been generated.This 3D cell mass mimics the physiology of real organs from which they are originated. Firstly,this gives us a chance to induce pathological conditions in the cells of humans / animals in which the disease could be studied. We can carry out in-vitro drug evaluation to find out drug sensitivity / efficacy and safety of drugs before being tested directly on humans. Anti-cancer drug evaluation could also be done on organoids from cancerous tissues. Because the cultivation, preservation/ maintenance of organoid cell masses is easier and economical than cell-lines, it is the preferred method now a days. Studies began on *organoid* culture in the early part of the 21st century. Calvin Kao and Maureen Lyles of Stanford University, in 2009 successfully produced the first intestinal organoid in lab.

Method of cultivation: Similar to cell line culture, these too are grown on commercially available cell culture medium in an anaerobic environment. They are more complex in their. Additionally they need extracellular matrix to support the 3D growth of the tissue. Though appears easy, it is a highly demanding process, but, the efforts are highly rewarding in terms of wealth of information this area is providing. Hence there is a rapid growth in research work in this area around the world.

Applications:

Organoids of many tissues including liver, lungs, kidney, brain have been developed may be in near future we may get "organs on order". Organoids of kidney tissue are used for therapy, disease modelling and nephrotoxicity screening. Organoids from brain are being used for studying autism.

In 2018, another group of scientists grew intestinal villi and intestinal monolayer trying to understand nutrient transport, barrier function,interaction with gut bacteria.to understand their functioning. Liver tumaroids of 3 type were generated which helped evaluate tissue specific drug sensitivity.

Source:

1. https://www.essentialknowledgebriefings.com/downloads/organoid-research-techniques-evolution-and-applications/. Accessed 07/07/2019.

2. Takahashi T. Organoids for Drug Discovery and Personalized Medicine. Ann. Rev. Pharmacol.Toxicol.

2019.59;9.1-9.16.

SIGNIFICANCE OF ISSN AND ISBN IN PUBLICATIONS

Dr. Sachin V. Patil
Asso. Professor

ISSN (International Standard Serial Number)

Introduction:

An ISSN is an international standard serial number which is unique international identifier for serial publications. The ISSN program is international in scope and is directed. ISSN are assigned since the 1970s and universally accepted within the print publishing world as a means of identifying the serials. Consequently, and from the end of the 1990s, ISSN are also assigned to electronic serials (online, CD-ROM, DVD etc.) and to electronic "ongoing integrating resources" like websites and databases. The ISSN is an eight-digit number which identifies periodical publications as such including electronic serials. The ISSN is a numeric code which is used as an identifier. It has no signification in itself and does not contain in itself any information referring to the origin or the contents of the publications. The ISSN text the form of acronym ISSN followed by two groups of four digits separated by a hyphen. The eight character is a control digit calculated according to a modulo eleven algorithm on the basis of this seven preceding digits; this eighth control character may be an "X" if the result of the computing is equal to "10", in order to avoid any ambiguity (figure 1). The ISSN is linked to a standardized form of the title of the identified serial, known as the "key title", which repeats the title of the publication, qualifying it with additional elements in order to distinguish it from other publications having identical titles. If the title of the publication changes in any significant way, a new ISSN must be assigned in order to correspond to this new form of title and avoid any confusion, a serial publication whose title is modified several times in the course of its existences will be assigned each time a new ISSN, thus allowing precise identification of each form of the title: In fact it is then considered that they are different publications even if there is a logical link between them. Contrary to other types of publications, the world of serial publications is particularly changeable and complex: the life time of the title may be extremely short; many publications may be a part of the complex set of relationship, etc. These particularities themselves necessitated the introduction of the ISSN.

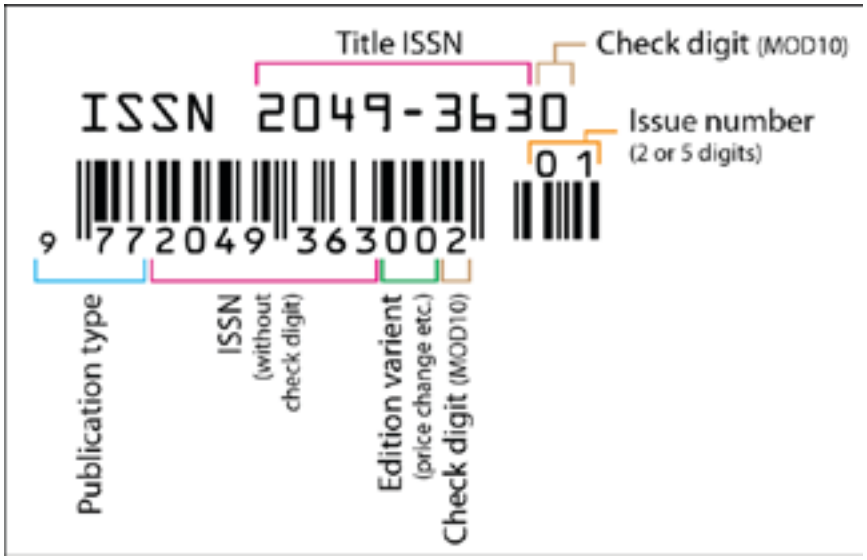


Figure 1: ISSN Number

Significance of ISSN:

There is no any connection between the ISSN and the copyright. The procedure of the both is different with different significance the later is an identifier of serial publications. ISSN is generally printed in prominent place, such as at the top right hand corner of the front cover, near the title on every issue. The number of copies produced is not relevant to the ISSN assignment. Publications that are intended to be continued indefinitely on either a regular or irregular basis require an ISSN for example Annual reports, Quarterly reports, Biannual reports, Bulletins, Newsletters, Journals, proceedings etc. The ISSN identifies the title of the serial publications. As long as the title remains the same you can use the name ISSN. There will be change in ISSN only if name is changed of the publication. One ISSN is assigned to all internet formats and qualified with 'online'. However, other types of electronic formats, such as DVD's and CD-ROM's are assigned their own ISSN. Separate ISSN is required for the same publication in different language; means one ISSN to each language. There is no expiry date for ISSN. If title is changed it is mandatory to inform ISSN office for the same also it is applicable for the case if you are not going to publish the upcoming issues.

How to get ISSN

ISSN numbers can be issued in advance of publication via the application form which can be completed and sent online, or printed out and faxed / posted to the ISSN international authority for international publication and ISSN national authority of the respective country. The website for all details is http://www.issn.org. The form is also available in PDF format which can be emailed to the concerned authority. It is not possible to assign ISSN over the telephone. The basic information required is:

1. Proposed title (working titles / project titles are not sufficient);
2. Frequency of publication;
3. Proposed start date (month / year);
4. Publisher name and address.

The Centre will also need to receive a copy of the first issue on publication in order to validate our records. This copy will be passed through to the Legal Deposit Office and subsequent issues can be sent directly to them. In the case of ISSN requests made for existing serials, authority will need to receive an application form completed with the information as above, together with:

1. For print publications, a copy of a recent issue;
2. For on-line journals, either the URL and any passwords required (as requested on the form); or a printout of the title screen, and any screens giving publisher information (company name and the place of publication).
3. For CD-ROM or diskette journals, a sample copy or a printout of the title screen together with copies of the labelling, documentation and packaging

Sample ISSN numbers of the publications:

ISSN 0027-9633 (online)

ISSN 0027-9634 (print)

ISBN (International Standard Book Number)

Introduction:

In 1965, W. H. Smith (the largest single book retailer in Great Britain) announced its plans to move to a computerized warehouse in 1967 and wanted a standard numbering system for books it carried. They hired consultants to work on behalf of their interest, the British Publishers Association's Distribution and Methods Committee and other experts in the U.K. book trade. They devised the Standard Book Numbering (SBN) system in 1966 and it was implemented in 1967. At the same time, the International Organization for Standardization (ISO) Technical Committee on Documentation (TC 46) set up a working party to investigate the possibility of adapting the British SBN for international use. A meeting was held in London in 1968 with representatives from Denmark, France, Germany, Eire, the Netherlands, Norway, the United Kingdom, the United States of America, and an observer from UNESCO. Other countries contributed written suggestions and expressions of interest. A report of the meeting was circulated to all ISO member countries. Comments on this report and subsequent proposals were considered at meetings of the working party held in Berlin and Stockholm in 1969. As a result of the thinking at all of these meetings, the International Standard Book Number (ISBN) was approved as an ISO standard in 1970, and became ISO 2108. That original standard has been revised as book and book-like content appeared in new forms of media, but the basic structure of the ISBN as defined in that standard has not changed and is in use today in more than 150 countries. Today the ISBN Agencies around the world are administered by the International ISBN Agency, located in London, UK.

The International Standard Book Number (ISBN) is a 13-digit number that uniquely identifies books and book-like products published internationally. The purpose of the ISBN is to establish and identify one title or edition of a title from one specific publisher and is unique to that edition, allowing for more efficient marketing of products by booksellers, libraries, universities, wholesalers and distributors. Every ISBN consists of thirteen digits and whenever it is printed it is preceded by the letters ISBN. The thirteen-digit number is divided into four parts of variable length, each part separated by a hyphen (figure 2). The four parts of an ISBN are as follows:

1. Group or country identifier which identifies a national or geographic grouping of publishers;
2. Publisher identifier which identifies a particular publisher within a group;
3. Title identifier which identifies a particular title or edition of a title;
4. Check digit is the single digit at the end of the ISBN which validates the ISBN

Significance of ISBN:

The ISBN is a unique international identifier for monographic publications; assigning a number replaces the handling of long bibliographic descriptive records, thereby saving time and staff costs and reducing copying errors. Correct use of the ISBN allows different product forms and editions of a book, whether printed or digital, to be clearly differentiated, ensuring that customers receive the version that they require. The ISBN facilitates compilation and updating of book-trade directories and bibliographic databases, such as catalogues of books-in-print. Information on available books can be found easily. Ordering and distribution of books is mainly executed by ISBN; this is a fast and efficient method. The ISBN is machine-readable in the form of a 13-digit EAN-13 bar code. This is fast and avoids mistakes. The ISBN is required for the running of electronic point-of-sale systems in bookshops. Many publishing and supply chain systems are based on ISBN. The accumulation of sales data is done by the ISBN. This enables the varying successes of different product forms and editions of publications to be monitored, as well as

enabling comparisons between different subject areas and even different publishing houses. The national lending right in some countries is based on the ISBN. Such schemes enable authors and illustrators to receive payments proportionate to the number of times that their books are lent out by public libraries

Figure 2: ISBN Number

How to get ISBN

ISBN numbers issued by ISBN international authority for international publication and ISBN national authority of the respective country in advance of publication via the application form which can be completed and sent online, or printed out and faxed / posted to the. The website for all details is http://www.isbn-international.org. The form is also available in PDF format which can be emailed to the concerned authority. It is not possible to assign ISSN over the telephone. The basic information required is:

1. Proposed title (working titles / project titles are not sufficient);
2. Proposed start date (month / year);
3. Publisher name and address.

Sample ISBN numbers as examples:

ISBN 978-951-45-9693-3 (hardback)
ISBN 978-951-45-9694-0 (paperback)
ISBN 978-951-45-9695-7 (PDF)
ISBN 978-951-45-9696-4 (EPUB without DRM)
ISBN 978-951-45-9999-5 (EPUB with ACS4 DRM)

Difference between ISSN and ISBN

The ISSN identifies the title of a serial and stays the same from issue to issue unless the title changes, at which point a new ISSN needs to be assigned. The ISBN (International Standard Book Number) represents a single volume such as a novel, a monograph, a specific title within a monographic series or a specific issue of an annual or yearbook. ISBN is issued by the UK ISBN Agency. The two systems are complementary and can be used together on the same publication. On an annual, for example, the ISBN will identify a specific volume (e.g. 1996 edition, 1997 edition) whilst the ISSN identifies the title and stays the same each year. ISBN should not be assigned to specific issues of periodicals and should not usually be assigned to any title published more frequently than once a year. A fundamental difference between the two systems / numbers is that the stem of the ISBN identifies the publisher whereas the ISSN contains no publisher identifier. The ISSN is a purely arbitrary number that remains linked to the serial even when the responsibility for the serial passes from one publisher to another.

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1. ISSN International Centre "Cataloging Part", ISSN Manual, ISSN International Centre.2012.
2. ISSN in Canada, Library and Archives Canada. 2004
3. Getting an ISSN in the UK, British Library, 2006
4. ISBN International Centre "Cataloging Part", ISBN Manual, ISBN International Centre.2012.
5. Frequently Asked Questions about the new ISBN standard from ISO, 2012.

A CONCISE REVIEW ON 3D PRINTING AND ITS MEDICAL APPLICATIONS

Dr. Jameel Ahmed S. Mulla
Asso. Professor

The three-dimensional (3D) printing is a rapidly evolving revolutionary technology that is getting substantial interest from both scientific community and academician with users from various domains such as automotive, product designer, aerospace, engineers, consumer goods industry, architecture, military, chemical industry, food industry, fashion industry, and medical field.

Brief history of 3D printing

The origins of conventional 3D printing can be traced back to the 1980s when stereolithography (SLA), the first ever 3D printing technology, was invented by Hull. SLA is a process in which photons from an ultraviolet (UV) laser light source is targeted onto the surface of a photo-curable liquid monomer bath and scanned in different patterns. The scanned monomers are sensitive to light, hence can be crosslinked by using a suitable light source. When exposed to photons these monomers harden to form the required 2D cross- sections, while the unexposed monomers remain unchanged in the bath. Hull was also the first person to find a way to use a CAD file to interact with the RP system in order to develop computer-modeled objects. Hull's patent was accepted in 1986, which was the first patent for a 3D printer.

Basic components of 3D printing

The basic components of 3D printing can be divided into three groups: (1) hardware (which is the 3D printer itself); (2) software (used to communicate with hardware and also software which allows conversation of CAD images into stereolithography images which are recognized by the printers); and (3) materials used to print objects.

Process of 3D printing

First by using the digital design software (Autocad, Autodesk, Creo parametric, Onshape, Mimics, 3Matic, Solidworks, and Google SketchUp), 3D digital scanners, or phone-based applications, digital virtual 3D design of an object is created. Then, this digital model is converted into standard tessellation language or stereolithography (.STL) digital file format. The .STL file includes a list of triangulated facets that indicate the information about the surfaces of the 3D model. Increased number of triangles indicates more number of data points in a text file (higher resolution of the device).

Specialized slicer software present in the 3D printer converts the .STL file into G file by slicing the design into a series of the 2D horizontal cross-section (generally in the range of 25–100 μm), and then the base of the 3D object is created by moving the print head in the x-y direction. Subsequently, the complete three-dimensional (3D) objects are created by repetitively moving the print head in the z-direction and depositing the desired material into layers sequentially.

Figure1: Generalized 3D printing process

Types of 3D printing technologies

There are varieties of 3D printing technologies ranging from well-established methods, which have been employed in industrial settings for years, to more recent techniques under development in research laboratories that are used for more specific applications.

American Society for Testing and Materials (ASTM) Committee F42 on Additive Manufacturing Technologies have grouped these technologies into seven main categories according to the methods of adding material and working principle to produce the desired 3D object.

Sr. No.	Types of 3D Printing Technologies	Examples of Commonly Used Materials
1.	Vat photo polymerization	Photopolymer, acrylic, and epoxy-based polymers, infused polymers
2.	Powder bed fusion	Metals, plastics, ceramics, Polymers including Polycaprolactone (PCL), Hydroxyapatite (HA)
3.	Binder jetting	Gypsum, Acrylates HA/PLA, HA/PCL, and bioactive glass (6P53 B)/PCL
4.	Material jetting	Acrylic-based polymers, ceramics
5.	Material extrusion	Acrylonitrile butadiene styrene (ABS), polylactic acid (PLA) plastics, composites, metals, polycarbonate
6.	Sheet lamination	PVC, paper, HA, Zirconia
7.	Directed energy deposition	Almost any metal alloy, HA/PLA, HA/PCL

Applications of 3D printing in medicine

The variety of 3D printing technologies has been utilized in a number of medical applications including (1) surgery for creating anatomical models for surgical planning, practicing, and medical education, (2) fabrication of patient-specific implants, (3) surgical tools, (4) organ printing, (5) in vivo tissue models, and (6) pharmaceuticals.

The pharmaceutical applications of 3D printing are getting substantial interest over the last decade. It includes the development of complex drug release profile, personalized and unique drug dosage, customized and on-demand drug printing, and implantable drug delivery devices. 3D printing technologies provide precisely controlled dosage and droplet size, controlled rate of drug delivery, highly reproducible and efficient drug dosage with minimum risk of adverse reactions, and the provision for developing personalized dosage forms having complex drug release profiles. 3D printing technologies allow the printing of complex drug in any shape, size, design, and color for immediate consumption. Moreover, these technologies can also print drugs of different shapes having same drug dosage. It has been reported that shape of the drug also affects many other parameters such as disintegration, the rate of drug release, and drug dissolution. For example, FDA approved the first 3D printed drug Spritam, which consists of a porous and soluble structure produced by the powder bed fusion 3D printing technique that binds powder without compression.

In addition, 3D printing provides the potential to determine the optimal amount of drug delivered to a patient, that is, personalized medicine based on patient's parameters such as pharmacological profile, body weight, gender, metabolism, and age. Moreover, 3D printing also enhances patient compliance by allowing the printing of "polypills"-a pill that includes entire patient's medication. Multidose drug, that is, drug having multiple active ingredients, can be printed at the point of care for the patients with multiple chronic diseases.

PHARMACOVIGILANCE: A BRIEF REVIEW

Dr. Jameel Ahmed S. Mulla
Asso. Professor

Pharmacovigilance (PV) is defined as the science and activities relating to the detection, assessment, understanding and prevention of adverse effects or any other drug-related problem. WHO established its Programme for International Drug Monitoring in response to the thalidomide disaster detected in 1961. Together with the WHO Collaborating Centre for International Drug Monitoring, Uppsala, WHO promotes PV at the country level. At the end of 2010, 134 countries were part of the WHO PV Programme. The aims of PV are to enhance patient care and patient safety in relation to the use of medicines; and to support public health programmes by providing reliable, balanced information for the effective assessment of the risk-benefit profile of medicines.

The aims of Pharmacovigilance

Events such as the thalidomide tragedy highlight the extreme importance of effective drug monitoring systems for all medicines. The principal aims of pharmacovigilance programmes are:

- To improve patient care and safety in relation to the use of medicines, and all medical and paramedical interventions;
- To improve public health and safety in relation to the use of medicines;
- To contribute to the assessment of benefit, harm, effectiveness and risk of medicines, encouraging their safe, rational and more effective (including cost-effective) use;
- To promote understanding, education and clinical training in pharmacovigilance and its effective communication to health professionals and the public.

Pharmacovigilance in national drug policy

The provision of good quality, safe and effective medicines and their appropriate use is the responsibility of national governments. The establishment of a national medicine regulatory agency and a designated centre for the study of adverse reactions are central to the achievement of these functions. Multidisciplinary collaboration is of great importance; in particular, links need to be forged between various departments of the ministry of health and also with other stakeholders, such as the pharmaceutical industry, universities, nongovernmental organizations (NGOs) and those professional associations having responsibility for education on rational use of medicines and pharmacotherapy monitoring.

Pharmacovigilance in the regulation of medicines

To be effective, the remit of drug regulatory authorities needs to go further than the approval of new medicines, to encompass a wider range of issues relating to the safety of medicines, namely:

- Clinical trials;
- The safety of complementary and traditional medicines, vaccines and biological medicines;
- The development of lines of communication between all parties which have an interest in medicine safety, ensuring that they are able to function efficiently and ethically, particularly at times of crisis.

Pharmacovigilance Program of India (PvPI)

Pharmacovigilance in India was initiated way back in 1986 with a formal adverse drug reaction (ADR) monitoring system, under supervision of the drug controller of India. India joined the World Health Organization (WHO) Programme for International Drug Monitoring in 1998, but was not successful. Later, the National Programme of Pharmacovigilance was launched in 2005, and was renamed as the Pharmacovigilance Programme of India (PvPI) in 2010.

The National Coordination Centre-Pharmacovigilance Programme (NCC-PvPI) of India, Indian Pharmacopoeia Commission, Ministry of Health and Family Welfare, Government of India was launched as a WHO Collaborating Centre for Pharmacovigilance in Public Health Programmes and Regulatory Services on 30 October 2017.

Adverse drug Reactions (ADRs) are reported from all over the country to NCC-PvPI, which also work in collaboration with the global ADR monitoring centre (WHO-Uppsala Monitoring Centre), Sweden to contribute in the global ADRs data base. NCC-PvPI monitors the ADRs among Indian population and helps the regulatory authority of India (Central Drugs Standard Control Organisation, CDSCO) in taking decision for safe use of medicines.

The challenges of Pharmacovigilance in India

The biggest challenge facing the PVPI is the gross underreporting of adverse effects. There are many reasons for this, including lack of medical expertise in drug administration and adequate skilled resources in PV, and inadequate nationwide awareness of PV. The other challenges are infrastructure which are still conservative, wide time interval between guidelines and laws, orthodox attitude to new drug research, and PV and regulatory inspections that are almost non-existent. The system needs to be refined with the help of PV experts in collaboration with information technology (IT) because India boasts of a highly developed IT sector. Since PV deals with large numbers of ADRs, it would be wise for PV experts to collaborate with software professionals to develop and build a robust system. Software programs developed can be used for collection and analyses of data sets, determining trends of drug usage in various disease areas, compliance, medication errors and drug interactions leading to ADRs. Moreover, with more clinical research and PV outsourcing work now being conducted in India, it has been worthwhile for the Drug Controller General of India (DCGI) to invest in a robust PV system to enable assessors and decision makers to analyze safety data and take regulatory decisions without the need to depend on other countries.

Future prospects

As future prospects increase, PV systems capable to detect new ADRs, and taking regulatory actions are needed to protect public health. Little emphasis has been put into generating information that can assist a healthcare professional or a patient in the decision-making process. The aim of the PV is to receive the information, documentation of the work and knowledge online while giving priority to the new and important safety issues. This very innovative tool and the processes will help to advance PV by improving efficiency and providing new analytical capabilities. Similar approach may be adopted by pharmaceutical companies for prompt detection and analysis of ADRs. Transparency and communication would strengthen consumer reporting, which are positive steps towards involving consumers more in PV.

INTELLECTUAL PROPERTY RIGHTS

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What Is Intellectual Property Rights?

Intellectual Property Rights (IPRs) are the rights given to the creators of intellectual property (i.e., creations of minds), which bestows exclusive right to the creator for that product/property for a defined period of time.

As per World Trade Organization (WTO), IPR can be categorized basically into two categories: copyright and industry property.

Copyright and rights related to copyright

Rights of the authors of artistic and literary works are protected under "copyright and rights related to copyrights." The protection offered under "copyright" is for a minimum duration of "60 years" after author's death. Intellectual properties that come under "copyright" are books, other writings, music compositions, sculpture, film, computer program, and painting. Other "neighboring rights" protected along with copyright are performer rights (acting, musician, and singing), phonogram producers recordings), etc. The motto of such protection is to encourage creative works.

Industrial property

Trademarks and geographical indications

Trademarks refer to distinctive signs which distinguish services or goods of one undertaking from those without undertaking and geographical indices refer to goods originating from one place or attributed to one geographic location, for example, Darjeeling tea. These distinctive signs may be used symbolically for their service/quality and can stimulate fair competition and can help the purchaser with information regarding choices. Inventions, industrial designs, and tread secrets These categories of IPR are primarily aimed to encourage innovation in the field of design, new inventions, and new technology. Patents, designs, and trade secret come under this heading. Moreover, the protection offered is for a finite period, i.e., 20 years (for patent).

"Intellectual Property Rights" in Indian Context

The Indian IPR section is grossly categorized into patents, designs, trademarks, and geographical indices. If we see the history of Indian "IPR" section, it can be divided into three definite eras: pre-independence, post-independence (before Trade Related Aspects of Intellectual Property Rights or TRIPS), and postindependence (after TRIPS) era.

Pre-independence era

In India, the history of IPR dates back to preindependence era. In 1856, India witnessed the first legislation regarding patent (Act VI), which was subsequently replaced in 1857 and 1859. In 1872, the act was renamed as "The Patterns and Designs Protection Act." The 1911 act (Act II) replaced all previous acts which bought patent administration under the "controller of patents," which was further amended in

1920, 1930, and 1945.

Criticisms of the Current Indian Patent System

Effect of product patent on Indian pharmaceutical sector

As Indian patent system was a "Process patent−" driven system, the transition to "product patent" system was expected to be devastating to the pharmaceutical industry, and the early reaction was full of panic. The expected outcomes were "unexpected rise in drug price" and subsequent destruction of Indian Pharmaceuticals Industry. However, the Indian pharmaceutical sector copped up with the new regulatory changes and the indigenous R&D sector started growing.

Patent protection period of 20 years

Granting of "patent" is a way to encourage innovation, which allows patentees to enjoy monopoly over the patented product for a period of 20 years from the date of filing. The effect of this monopoly can be very severe in pharmaceutical sector, more so in the case of lifesaving drugs.

Compulsory licensing

To counteract this monopoly associated damage, the Patents Act, 1970, has some specific provisions to balance the situation. This act also has a provision that the patented products to be available to end users at sufficient quantity, and at the same time, the price should be in affordable range. If the patentee fails to do so, the Government of India can give CL to interested parties so that the patented product fulfills the requirement of the product. Although the first CL was issued in the year 2012 (Bayer's patented drug Nexavar to Natco Pharma Limited), the history of compulsory licensing is not new. In Section 22 of the Patents and Design Act, 1911, it is mentioned that, after the expiration of 3 years of a patent life (day 1 being the date of sealing of the patent), any interested person can apply for CL if the following grounds are not satisfied, for example, the commercial angle of the patent is not fully worked out, the Indian population demand/requirement regarding the patented property is not met adequately and the demand of the "patented product" has to be fulfilled substantially by importing it from other countries.

Evergreening

"Evergreening," refers to a strategy by which additional "secondary patent," is applied by minor formulation or other changes of the parent patented molecule, of which patent period is going to expire. Indian Patent Act counteracts evergreening measures by inclusion of Section 3(d), which distinguishes between "discovery and innovation" and clearly defines which is not patentable. Although a criticism like nonagreement to TRIPS came in the NOVARTIS case with regard to GLIVEC, the Honourable Court cleared its stand on "evergreening" and discouraged such strategies.

Reference: - Ajay Prakash, Phulen Sarma, Subodh Kumar, Bikash Medhi, Indian Journal of Pharmacology - Volume 50, Issue 2, March-April 2018, Page No. 57 – 60.

IMPACT FACTOR, H-INDEX, I10-INDEX AND I20-INDEX OF WEBOLOGY

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The Journal Impact Factor:

The impact factor (IF) of a scientific journal is a measure reflecting the average number of citations to papers published in that journal. This indicator measures the relative importance of a journal within its scientific field, with journals with higher impact factors deemed to be more important than those with lower ones. The impact factor was devised by Eugene Garfield, the founder of the Institute for Scientific Information (ISI) in Philadelphia (now a part of Thomson Reuters), as a way to count the impact of scientific journals. Thomson Reuters calculates the impact factor of journals every year. It should be noted that the Webology journal is not indexed by the Web of Science (WoS) database of Thomson Reuters. However, a "Cited Reference Search" indicated that the journal has received 186 citations from publications indexed in WoS. Scopus Journal Metrics Webology is indexed by the Scopus database since 2006. The Scopus Journal Metrics allow for direct comparison of journals, independent of their subject classification. The Journal Metrics of Scopus for Webology is as follows: SNIP (Source Normalized Impact per Paper): 1.130 IPP (Impact per Publication) (2015): 0.548 The SJR (SCImago Journal Rank) (2015): 0.203

The h-index:

The h-index is short for the Hirsch index, which was introduced by Jorge E. Hirsch (2005) as a way to quantify the productivity and impact of an individual author. Similar to how the IF is now be used to measure a journal or an author to their scientific field, the h-index has become another measure of relative impact of scientific publications. While the IF is derived from the quotient of total citations and total papers in a two-year span, the h-index is simply a count of the largest number of papers (h) from a journal or author that have at least (h) number of citations. For example, Webology has an h-index of 21 based on Google Scholar which indicates that the journal has published 21 papers with at least 21 citations.

The i10-index:

The i10-index is the newest in the line of journal metrics and was introduced by Google Scholar in 2011. It is a simple and straightforward indexing measure found by tallying a journal's total number of published papers with at least 10 citations.

i20-index:

The i20-index, proposed in this editorial note, is obtained by tallying a journal's total number of published papers with at least 20 citations. It is interesting to note that the total number of citations received by i20 papers (i.e., 24 papers out of all published papers) was 1693. This briefly means that i20 papers received 70 percent of all citations to Webology. The i20-index helps shift concern for editors and encourages journals to accept more relevant papers that can be used and cited by peers.

Citations in patents:

The number of citations to a journal in patents indicates to what extent a journal is technology- oriented. Google Patents, we have conducted a keyword search by Webology. The field of OREF (Other References) on the USPTO database contains other references cited as prior art, including journals, books, and conference proceedings.

Citations in Google Books:

The Webology journal is cited by about 1250 books available on Google Books. These mean that the journal is interested by authors.

HIV DRUG DEVELOPMENT

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Introduction

In 1986, the first known case of HIV was diagnosed by Dr. Suniti Solomon amongst female sex workers in Chennai, Tamil Nadu. Later that year, sex workers began showing signs of this deadly disease. At that time, foreigners in India were traveling in and out of the country. It is thought that foreigners were the ones responsible for the first infections.(1)

By 1987, about 135 more cases came to light. Among these 14 had already progressed to AIDS. Prevalence in high-risk groups reached above 5% by 1990. As per UNDP's 2010 report, India had 2.395 million people living with HIV at the end of 2009, up from 2.27 million in 2008. Adult prevalence also rose from 0.29% in 2008 to 0.31% in 2009. Setting up HIV screening centres was the first step taken by the government to screen its citizens and the blood bank.(2)

To control the spread of the virus, the Indian government set up the National AIDS Control Programme in 1987[dubious] to co-ordinate national responses such as blood screening and health education.(2)

In 1992, the government set up the National AIDS Control Organisation (NACO) to oversee policies and prevention and control programmes relating to HIV and AIDS and the National AIDS Control Programme (NACP) for HIV prevention. The State AIDS Control Societies (SACS) was set up in 25 societies and 7 union territories to improving blood safety.(3)

HIV Medicines and Vaccines in Development

Biopharmaceutical research companies are investigating new ways to treat and prevent HIV infection. Potential therapies being developed for HIV infection include:

Attachment Inhibitor—A new class of HIV medicines is intended to protect cells from HIV infection by preventing the virus from attaching to new cells and breaking through the cell membrane. One attachment inhibitor in development attaches to gp120, a part of the virus, and inhibits the entry of the virus into cells by blocking the interaction between gp120 and the cell receptors.

Gene Modification—CCR5 is a co-receptor on the surface of cells that allows HIV to enter and infect T cells. Without this receptor on the cell surface, it is more difficult for HIV to infect the cells. One cell therapy currently in clinical trials is designed to modify the DNA sequence encoding CCR5 with the intent of making the patient's own cells resistant to infection by HIV. The patient's cells are extracted, modified, and then reinserted into the patient. The goal of this therapy is to provide the patient with a population of cells that can fight HIV as well as the opportunistic infections from which patients with HIV often suffer.(4,5)

Inducing T Cell Responses—Another therapeutic vaccine in development is designed to induce CD4+ T cell responses in HIV-infected people. CD4+ T cells play a key role in immune protection against viral infections. Deficits in CD4+ T cells are associated with virus reactivation, vulnerability to

opportunistic infections, and poor vaccine efficacy.

HIV/AIDS World wide

- At the end of 2013, approximately 35 million people were living with HIV, and some 2.1 million people became newly infected globally.
- Sub-Saharan Africa is the most affected region, with nearly 25 million people living with HIV in 2013. That region also accounts for almost 70 percent of the global total of new HIV infections.
- In 2013, 12.9 million people living with HIV were receiving antiretroviral therapy (ART) globally. Of those, 11.7 million were receiving ART in low- and middle-income countries. Approximately 740,000 of them were children.
- Pediatric coverage lags behind adults with fewer than 1 in 4 children on ART, compared to 1 in 3 adults. Of all adults living with HIV, 38 percent were receiving treatment; however, just 24 percent of all children living with HIV were receiving those lifesaving medicines in 2013.[6]
- In 2013, 67 percent of the estimated 1.4 million pregnant women living with HIV in low- and middle-income countries received antiretroviral drugs to avoid transmission to their children, up from 47 percent in 2010.
- HIV continues to be a major global public health issue, having claimed more than 39 million lives so far. In 2013, approximately 1.5 million people died from HIV-related causes.

HIV/AIDS in India

According to National AIDS Control Organization of India, the prevalence of AIDS in India in 2013 was 0.27, which is down from 0.41 in 2002. While the National AIDS Control Organisation estimated that 2.39 million people live with HIV/AIDS in India in 2008–09, a more recent investigation by the Million Death Study Collaborators in the British Medical Journal (2010) estimates the population to be between 1.4–1.6 million people.[5]

The last decade has seen a 50% decline in the number of new HIV infections. According to more recent National AIDS Control Organisation data, India has demonstrated an overall reduction of 57 percent in estimated annual new HIV infections (among adult population) from 0.274 million in 2000 to 0.116 million in 2011, and the estimated number of people living with HIV was 2.08 million in 2011.

Medicines are in Development Process

Antiviral

1) Efavirenz/lamivudine/tenofovir fumarate(fixed-dose combination) by Mylan Laboratories
(HIV-1 infection treatment application submitted).

2) Elvitegravir (integrase inhibitor) by Gilead Sciences
(HIV-1 infection treatment application submitted)

Cell therapy

1) Cal-1 (blood stem cell therapy) Calimmune (HIV-1 infection treatment Phase I/II compelted)

2) MazF gene therapy (HIV-1 infection treatment Phase I completed)

Vaccines

1) HIVAX™ **(**Replication-defective HIV-1 vaccine) by GeneCure Biotechnologies (HIV-1 infection treatment Phase I completed).

2) PBSVax™ (HIV-MAG DNA vaccine) by Profectus BioSciences (HIV infection treatment, phase I completed).

Approved Medicines for HIV/AIDS

Entry Inhibitors

- Selzentry® **(**maraviroc) ViiV Healthcare
- Fuzeon® **(**enfuvirtide) Genentech, Trimeris
- Integrase Inhibitor
- Isentress® **(**raltegravir) Merck
- Tivicay® **(**dolutegravir) ViiV Healthcare

Nucleoside Reverse Transcriptase Inhibitors (NRTI)

- Combivir® (lamivudine/zidovudine) ViiV Healthcare
- Emtriva® (emtricitabine) Gilead Sciences
- Epivir® (lamivudine) ViiV Healthcare
- Epzicom® (abacavir/lamivudine) ViiV Healthcare
- Hivid® (zalcitabine) Roche, marketing discontinued
- Retrovir® (zidovudine) ViiV Healthcare
- Trizivir® (abacavir/lamivudine/zidovudine) ViiV Healthcare
- Videx® (didanosine) Bristol-Myers Squibb
- Videx® E**C (**didanosine delayed release) Bristol-Myers Squibb

14 Medicines in Development **HIV/AIDS** 2014

Nucleotide Reverse Transcriptase Inhibitor (NtRTI)

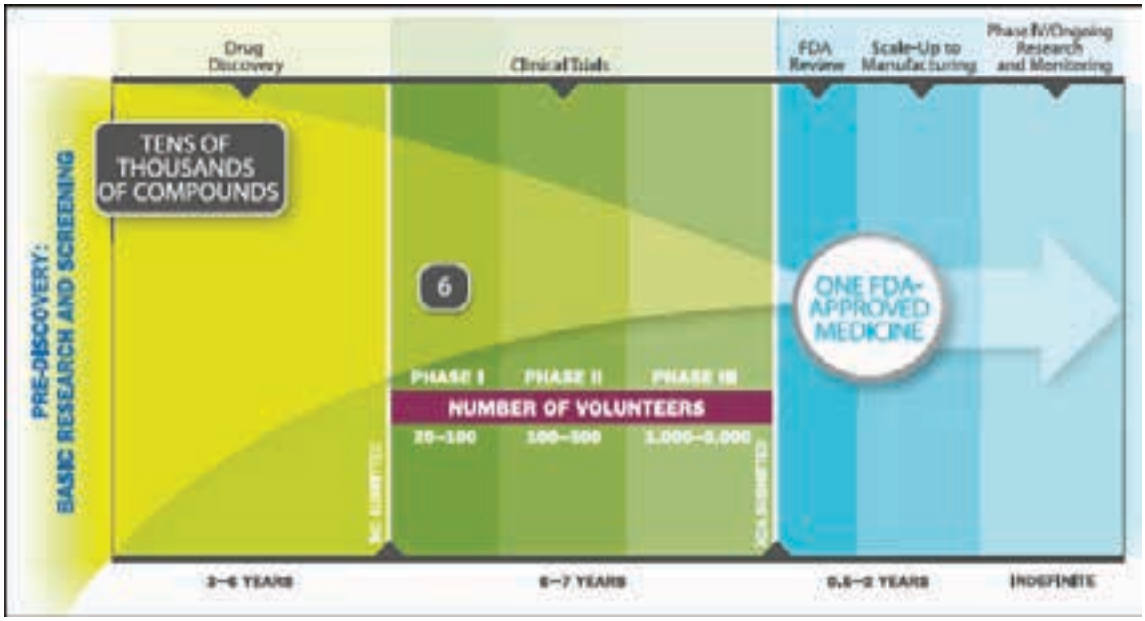
- Viread® **(**tenofovir disoproxil fumarate) Gilead Sciences

Protease Inhibitors

- Agenerase® **(**amprenavir) GlaxoSmithKline, Vertex Pharmaceuticals, marketing discontinued
- Aptivus® (tipranavir) Boehringer Ingelheim Pharmaceuticals
- Crixivan® (indinavir) Merck
- Fortovase® (saquinavir soft-gel) Roche, marketing discontinued
- Invirase® (saquinavir) Genentech
- Kaletra® (lopinavir/ritonavir) AbbVie
- Lexiva® (fosamprenavir) ViiV Healthcare, Vertex Pharmaceuticals
- Norvir® (ritonavir) AbbVie
- Prezista® (darunavir) Janssen Therapeutics
- Reyataz® (atazanavir) Bristol-Myers Squibb
- Viracept® (nelfi navir) ViiV Healthcare

New Drug Development Process

Developing a new medicine takes an average of 10-15 years. Of the tens of thousands of compounds screened, only one is approved.



The Drug Development Process

Once a new compound has been identified in the laboratory, medicines are usually developed as follows:

Preclinical Testing—A pharmaceutical company conducts laboratory and animal studies to show biological activity of the compound against the targeted disease, and the compound is evaluated for safety.

Investigational New Drug Application (IND)— After completing preclinical testing, a company files an IND with the U.S. Food and Drug Administration (FDA) to begin to test the drug in people. The IND shows results of previous experiments; how, where and by whom the new studies will be conducted; the chemical structure of the compound; how it is thought to work in the body; any toxic effects found in the animal studies; and how the compound is manufactured. All clinical trials must be reviewed and approved by the Institutional Review Board (IRB) where the trials will be conducted. Progress reports on clinical trials must be submitted at least annually to FDA and the IRB.

Clinical Trials, Phase I—Researchers test the drug in a small group of people, usually between 20 and 100 healthy adult volunteers, to evaluate its initial safety and tolerability profile, determine a safe dosage range, and identify potential side effects.

Clinical Trials, Phase II—The drug is given to volunteer patients, usually between 100 and 500, to see if it is effective, identify an optimal dose, and to further evaluate its short-term safety.

Clinical Trials, Phase III—The drug is given to a larger, more diverse patient population, often involving between 1,000 and 5,000 patients (but sometimes many more), to generate statistically significant evidence to confirm its safety and effectiveness. They are the longest studies, and usually take place in multiple sites around the world.

New Drug Application (NDA)/Biologic License Application (BLA)—Following the completion of all three phases of clinical trials, a company analyzes all of the data and files an NDA or BLA with FDA if the data successfully demonstrate both safety and effectiveness. The applications contain all of the scientific information that the company has gathered. Applications typically run 100,000 pages or more.

Approval—Once FDA approves an NDA or BLA, the new medicine becomes available for physicians to prescribe. A company must continue to submit periodic reports to FDA, including any cases of adverse reactions and appropriate quality-control records. For some medicines, FDA requires additional trials (Phase IV) to evaluate long-term effects. Discovering and developing safe and effective new medicines is a long, difficult, and expensive process. Pharma member companies invested an estimated $51.1 billion in research and development in 2013.

Reference

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RECENT TRENDS IN THERAPEUTIC APPROACHES FOR DIABETES MANAGEMENT

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Introduction

Diabetes is a major killer worldwide and its unprecedented rise poses a serious threat to mankind. The therapeutics for type 1 diabetes includes stimulation of insulin secretion. The treatment approach for type 2 diabetes includes several drugs. Subsequently, secondary forms of the disease may arise due to defects/ mutations in genome of the organism.

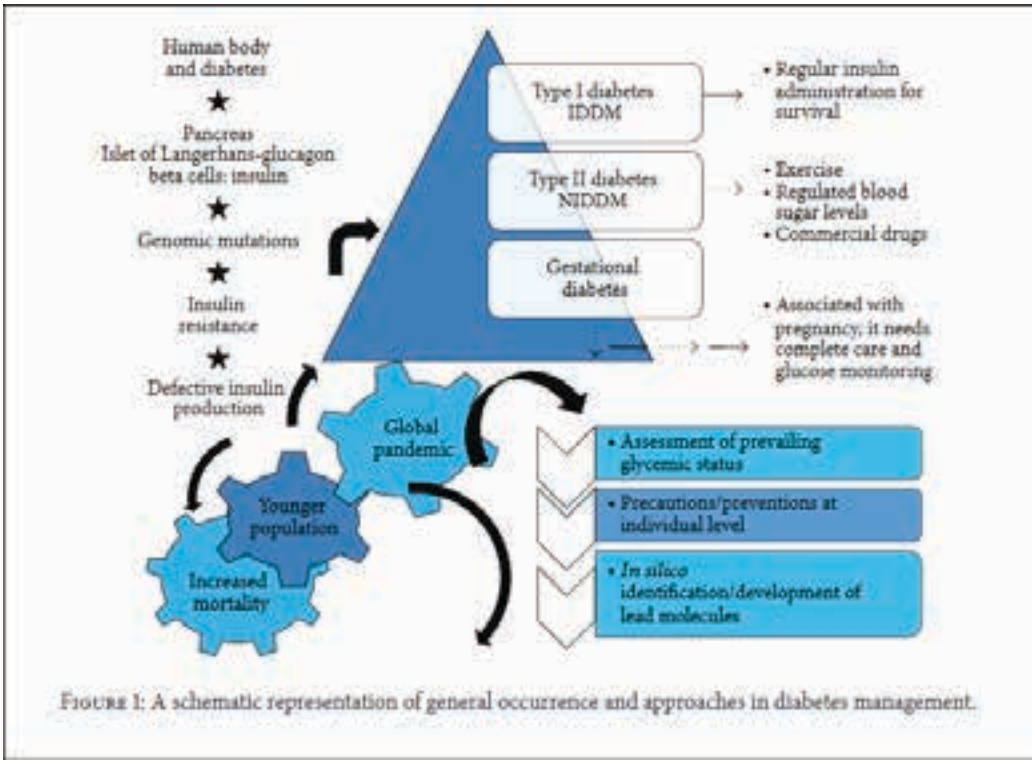

FIGURE 1: A schematic representation of general occurrence and approaches in diabetes management.

Classification of Diabetes:

On the basis of insulin deficiency it can be classified into following types:

1. **Idiopathic Diabetes:**

   Type 1 diabetes needs insulin replacement therapy.

2. **Noninsulin Dependent Diabetes Mellitus (NIDDM):**

   Insulin resistance as well as loss of insulin secretion contributes to the onset of disease. Most common form of diabetes and is the fourth leading cause of death in developed countries.

3. **Gestational Diabetes Mellitus (GDM):**

   It is defined as any degree of glucose intolerance resulting in hyperglycaemia of variable severity that is diagnosed during pregnancy.

4. **Catamenial Hyperglycaemia:** Diabetic keto acidosis (DKA) is a condition, arising due to infection, inadequate insulin or poor insulin compliance, acute pancreatitis, stroke, drugs, metabolic disturbances within the body or negligence with the treatment.

- **Nanotechnology and Diabetes:**

The interface of nanotechnology in the treatment of diabetes has introduced novel strategies for glucose measurement and insulin delivery. Microcapsules containing replacement islets of Langerhans cells, mostly derived from pigs, could be implanted beneath the skin of diabetes patients. This could temporarily restore the body's delicate glucose control feedback loop without the need for powerful immunosuppressant's that can leave the patient at serious risk for infection.

- **Statin Therapy: A New Perspective:**

  Since the long term effect of diabetes include the high risk of cardio-vascular diseases, statins (HMG-CoA reductase inhibitor) are a main line of therapy in reducing cardiovascular risk in the patients suffering from type 2 diabetes. The lipid lowering agents, popularly known as statins, cause inhibition of HMG-CoA reductase specifically and reversibly.

- **Gene Therapy in Diabetes:**

  Somatic gene therapy involving the somatic cells of the body includes two methods of gene delivery. The first one known as ex vivo gene therapy is described as the one in which the tissues are removed from the body; the therapeutic gene is inserted in vitro and then reimplanted back in the body while the in vivo therapy involves the insertion of gene therapy vectors directly to the patients by subcutaneous, intravenous, or intrabronchial routes, or by local injection.

- **Medical Nutrition Therapy:**

It constituting 2 phases, namely, adjudging the nutritional requirement of a person and treatment through counseling and nutrition therapy respectively. The objectives of nutritional therapy in diabetes is to regulate optimal level of lipids in blood, ideal body weight, and blood glucose level in normal range. Calorie requirement to maintain ideal body weight for moderately active individual is 30–35 kcal/kg/day; for obese people it is 20–30 kcal/kg/day. It is estimated that gradual weight loss of 1 lb per week should occur, if the calorie intake is reduced by 500 calories/day.

- **Natural Products and Diabetes:**

  The bioactive constituents found in many plant species are isolated for direct use as drugs lead compounds, or pharmacological agents. These traditional approaches might offer a natural key to unlock diabetic complications. The chemical structures of a phyto-molecule play a critical role in its antidiabetic activity. Several plant species being a major source of terpenoids, flavonoids, phenolics, coumarins, and other bioactive constituents have shown reduction in blood glucose levels as demonstrated by Several plants like Allium sativum. Linn. (Liliaceae), Gymnema sylvestre (Retz.) Schult (Ascle-piadaceae) , Murraya koenigii(L.) Spreng. (Rutaceae), Alliumcepa (Liliaceae), Withania somnifera Dunal (Solanaceae), and Ferula foetida Linn. (Umbelliferae) have been found to possess antidiabetic properties when assessed in experimental models of diabetes.

WIRELESS HEALTHCARE DELIVERY: Adapting to tomorrows needs with mobile processes. Mobile Health System Communications: A Need of Tomorrows

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A health care system is the organization and the method by which healthcare is provided. In practice, these systems vary widely from one country to another, and not all healthcare is delivered as a way of a healthcare system.Healthcare delivery is a complex process involving all types of integrated and inter-dependent steps, each of which has the potential to fail. Failure at any point can set off a chain of events that can result in patient injury. Medication ordering, preparation, and delivery are multidisciplinary processes in their own right; but multiple checkpoints and safeguards must be in placed in order to arrest errors before the medication reaches the patient

Just as the principal objective of a healthcare system is to improve people's health, the chief function the system needs to perform is to deliver health services. Service provision refers to the way inputs (such as money, staff, equipment and drugs) are combined to allow the delivery of a series of health interventions. Thus, improving and scaling up service delivery depends on having key resources and on how required resources are organized and managed. Lack of managerial capacity at all levels of the healthcare system is being cited increasingly as a binding constraint to scaling up services and achieving the Millennium Development Goals.

Health processes enhanced by wireless technology

The first one, enhanced health processes, emerges from the world-wide cost crisis of healthcare industry. The processes have to be enhanced and wireless technology is seen one of the most promising solution. Wireless technology brings methods to manage the processes by using locating and tracking information in addition to collection of diagnostic data unobtrusively and conveniently. Also a unified platform supported by wireless technology could be used to enhance healthcare processes by integrating different software and hardware applications to communicate to each other

a. Collection of vital parameters from patients by wireless sensors (human monitoring)
b. Health processes enhanced by wireless technology
c. Locating and tracking of people, information, equipment and goods
d. Integration of different software and hardware applications on the unified platform supported by wireless technology
e. Ubiquitous healthcare services available for out-hospital and home-hospital patients
f. User-friendly integration of mobile devices and services to the last meter wireles body area network (Bluetooth, ZigBee, Ultrawideband, etc.)

Sensing the winds of change

The changing healthcare market—and the need for the healthcare community to plan for and adapt to these dramatic changes in demographics, technology and resource availability are driving fundamental change in the healthcare sector. Hospitals and other healthcare providers are raising to this challenge have

tended to focus on larger institutions, whose size, scale and resources have enabled them to move ahead with important innovations. One of the hallmarks of the coming change in healthcare is its "democratic" nature, in that its impact will be felt by providers of all sizes. Some of the most important lessons come from the ranks of the smaller or regional hospitals. Healthcare delivery systems are confronting important challenges posed by the rapid development of mobile communications and biomedical technology, the need for cost-containment and the focus on effectiveness and efficiency, the increase in demand for services and changes in demographic and epidemiological factors.

Wireless technologies and healthcare are a perfect fit. The clinical environment is a highly mobile one, and physicians, nurses and other clinical operators have a real need for fast information and action. With a record of successful implementations of various aspects of healthcare from patient care to sales, wireless technologies have moved from conjecture to reality. Hospitals are dedicating large portions of current and future budgets to IT development and wireless is likely to be among their choices.

Wireless technologies have immense potential to cast a major influence on the healthcare industry. The application of wireless technologies in healthcare can lead to improvement in the patient care, cost savings, streamlined processes, regulatory compliance and a number of other benefits. For making decisions at the point of action, doctors, nurses, clinicians, pharmacists and sales people alike, need real-time access to data for enhancing the decision-making process. With the use of wireless technologies, healthcare personnel can enhance and streamline their decision-making processes. Some other applications of wireless technologies in healthcare are remote patient monitoring, e-clinical trials, e-prescription and asset management and tracking.

The cost of medical- and healthcare has been skyrocketing over the past decades. This is mainly due to the rapid growth of the aging population. To provide more comfortable and effective healthcare services, a recent trend of healthcare has been directed towards deinstitutionalization, community care, and home care. The technologies have witnessed an impressive evolution in signal/image processing, computers, and network communications. Currently all over world healthcare practices face the challenge to improve their quality on multiple dimensions simultaneously. This requires new ways to think about how to deliver healthcare services A careful and ‘flexible’ standardization of care into ‘care Programs’, we argue, is central Yet such standardization is powerless without these principles restructuring and delegation of tasks ,integrated planning , implementing process-supporting information technology We will only be able to improve the safety, effectiveness, patient-centeredness, and timeliness of healthcare, while reducing costs and improving equity, by integrating professional and organizational approaches to quality.

The technologies referred to, have facilitated the development of effective signal processing techniques in consumer electronics to improve the quality of community and home healthcare as well as many portable devices with a wide variety of applications where signal processing-based software plays a pivotal role in their success. The goal of this article is to provide most up-to-date and recent advances in wireless technology & mobile devices techniques used in healthcare delivery.

Some technologies and examples of Techniques developed for system and network design of healthcare applications are as bellow.

- Computer-aided diagnosis for various medical modalities
- Signal processing for vital signs monitoring and analysis

- Signal analysis in circuits and devices design for healthcare systems
- Signal processing and analysis in surveillance and home monitoring for healthcare systems
- Embedded system design for healthcare devices
- Bluetooth,
- RFID
- Wireless Local Area Networks (WLAN),
- Wireless Metropolitan Area Networks (WMAN)
- Wireless Wide Area Networks (WWAN).
- BAN (Body Area Network)

Turn around; Time is the most critical factor hindering productivity in healthcare related scenarios; whether it is telemedicine over WAN or remote viewing within a hospital LAN, the images are mission-critical and need to be stored and transmitted optimally to achieve the highest benefits.

Nowadays IT industries trialing new mobile value-added services in the area of healthcare, is bringing healthcare to the patient. This upcoming system allows patients to be fully mobile whilst undergoing health monitoring.

With the number of diverse imaging devices located throughout today's healthcare environment, it becomes necessary to facilitate and manage them from both productivity and Quality of Service to meet the customer's point of view.

The medical community continues to look for ways to maintain accuracy while improving operational efficiency. For instance, doctors can access and update patient information using computers at the patient's bedside instead of manually keeping charts that are kept either at the bedside or nurses station. Equipment used to monitor patient well-being can be hard-wired to the nurse's station to provide remote access to vital data. It is easy to see that the trend toward the use of technology in managing patient care is beneficial. Yet, concern is often expressed over using wireless technology to advance operational efficiency. Interference—an issue associated with the use of multiple emitters within the same spectrum—seems to obscure perceptions of data-link reliability. 'Why Wireless?' is the question often raised let's first examine how wireless connections can increase operational efficiency while maintaining accuracy. Medical records can be accessed by a medical practitioner from any place and at any time by using a radio-enabled PDA or laptop. Records can be maintained on a central database server for access by authorized users. Wireless access provides following benefits:

- It provides the most up-to-date patient information available.
- It provides the ability to update this information.

Medical equipment used to monitor a patient is typically mobile and can be readily moved anywhere along with the patient. Typically, such equipment is disconnected and reconnected via hardwire to each network-equipped room where every time the patient is moved. If the monitoring equipment has a wireless capability, on the other hand, connections can be managed automatically by the equipment itself—making the device truly mobile. Medical telemetry, which is used to monitor ambulatory patients while they move about, can be easily managed with wireless systems. This has been the case since the 1960s— at least where community antenna television, or CATV, technologies in the VHF and UHF spectrum have typically been used. Several other medical applications (or instruments) have been considered as candidates for using a wireless link. These are identified in Table 1.

APPLICATION	STATUS IN MARKET	DEVICE TYPE
Telemetry	Candidate	Embedded device
Heart-rate monitor	In trials	Embedded device
Ambulance crew device	Soon to be in trials	Embedded device
Ultrasound	Candidate	Embedded device
Infusion pump	Candidate	Embedded device
Glucometer	In trials	Embedded device
ECG/respiration bedside monitor	In trials	Embedded device
Hearing aid programmer	In trials	Embedded device
Stethoscope	Candidate	Embedded device
Sleep monitor	Candidate	Embedded device
Epileptic brain monitor	Candidate	Embedded device
Defibrillator	Candidate	Embedded device
Handheld patient monitor	Candidate	Windows based
Data collection	Candidate	Windows based

Table1: Use of wireless technology to support applications

In some instances, trials have begun with the instrument to see how the device works under real-world untethered conditions. Other medical instruments are being considered for conversion as indicated in the table. Needless to say, wireless connectivity should not be used to establish connections to every medical device. Life critical monitors used in intensive care units still need to be connected via wire line to ensure reliability.

Wireless Healthcare: A need of Time

In the USA 40,000-1,00,000 deaths per year occur due to medical errors. Death of 1 in 200 admitted to hospital this figure is more than car accidents, breast cancer & AIDS. Medical errors can occur in diagnosis, treatment, prevention of disease & failures. Informatics needed to minimize medical errors Wireless can minimize mobile errors and improve healthcare delivery Medication errors are common errors FDA has proposed that by 2006 medication errors be minimized by using patient and drug bar codes wireless required to optimally use the barcode system.

Why Wireless healthcare? Wireless information required minimizing mobile medical errors and improving healthcare delivery but wireless radio-waves must not cause electromagnetic interference (EMI) that lead to patient injury. The risk of patient injury due to EMI in properly designed wireless environment is minimum.For EMI patient safety, the companies have developed system that addresses the need for patients safety by operating at a lower radio frequency power output and in the 1900 MHz frequency band, which eliminates the risk of interfering with crucial electronic data transmitting equipment such as heart monitoring systems

Spending on mobile hardware, software and services across the global healthcare sector is set to rise to $2.7bn by 2010, according to Juniper Research. One of the greatest changes will be a correlating rise in investment in patient management systems (PMS).

This prediction by Juniper Research is in line with a survey conducted by the Healthcare Information and Management Systems Society, which states that healthcare professionals will be looking to advances in wireless technology to best improve patient service in the future with a half of all hospitals pointing to wireless as the top emerging technology they would deploy within the next two years.

Juniper highlights the potential for wireless technology applications throughout healthcare services, with the rise in use of electronic health records as a major driving force for the adoption of wireless PMS -- predicted to rise globally from $289m in 2005 to $1.51bn by 2010.

Juniper forecasts an increase in use of wireless technology and applications across the world. They observe a significant increase from $11m to $445m one that could result in the elimination of 2 million adverse drug events each year. And through linking into other applications, Lab works can expect to increase from $3.4m to $232m between 2005 and 2010.

There have been a lot of advancements in patient care in home, hospital and mobile environments as well. For home care services there are home monitoring solutions for patient's vital parameters. More compact versions of these solutions are the wireless home monitoring devices, which can be used by patients at home, office or while in transit. Diverse technologies like tracking software, mobile user devices, multi-agent systems, coordination, databases and computing technologies are being used in modern healthcare facilities.

CPOE (Computerized Physician Order Entry)

.RFID (Radio Frequency Identification)

Hand-carried ultrasound sonographer

Implantable Drugs Go Wireless

The MobiHealth BAN (Body Area Network)

“Mobile ECGs

Electronic medical records (EMRs)

It is the right time to plan a robust strategy and road-map for the wireless healthcare technology and business which would be followed both in India and other developing countries as a part of the European and/or global market and health tourism. The wireless sensors and wireless positioning and tracking solutions (tracking of people, information, equipment, goods, drugs and material) combined with wireless communications will change drastically the healthcare industry worldwide.

GENERIC VERSUS BRANDED DRUGS

Mrs. Aparna B. Janugade
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GENERIC DRUG

Generic drugs are copies of brand-name drugs that have exactly the same dosage, intended use, effects, side effects, route of administration, risks, safety, and strength as the original drug. In other words, their pharmacological effects are exactly the same as those of their brand-name counterparts.

- Stringent quality control
- Low manufacturing cost
- Low marketing investment
- Low retailer margin

BRANDED DRUGS

A brand name drug is a medicine that's discovered, developed and marketed by a pharmaceutical company. Once a new drug is discovered, the company files for a patent to protect against other companies making copies and selling the drug. These is chosen by the company that makes it several companies may make the same generic medicines , each with their own brand name. The name is often chosen to be memorable for advertising , or to be easier to say or spell than the generic name.

- Stringent quality control
- High manufacturing cost
- High marketing investment
- High retailer margin

Content

A generic drug is the same as a brand-name drug in Dosage, Safety, Strength, Quality, The way it works, The way it is taken, The way it should be used.

Differences between generic drugs and branded drugs

- Both look different, different shapes, size, colors.
- Might have different inactive ingredients (Drugs are made up of both active and inactive ingredients. Some people may be sensitive to inactive ingredients.)
- Generic costs less than the brand name drug (the cash price and insurance co-pay is usually lower. Generic can cost between 20-80% less, but keep in mind that cost is only one factor when considering the right medication for your condition.

- Generics vary by manufacturer, which means you could receive different versions based on where you purchase your medications and what type of generic they dispense.

Why do brand name drugs cost more than generics.

It takes several years, costly, scientific development and many clinical studies to get a drug approved. Manufacturers of new brand name drugs usually take on the research and development costs for new medications these research and development costs along with marketing costs, account for most of the higher prices we pay for brand name drugs.

Why do generic drugs cost less?

Generic drug companies don't have the expense of researching and developing a new chemical entity. There is usually competition among generic drug manufacturers.Generic drugs have less research and development costs since the original manufacturer has already done many studies to make sure the drug is safe. These savings are passed on to the consumer.

The most important thing to note down between branded drugs and generic drugs is

1) Both contains the similar active ingredients and generic drugs are equally effective and safe as the branded ones. So it can be said that there is no major difference between the two drug types.
2) However generic drugs are available at a lower price and thus it makes it affordable for most of the people.
3) There is difference in the color of generic drug and the branded drugs.

Why doesn't any doctor automatically prescribe generic drugs?

Not all medication have a generic form available. Some doctors might not be aware of recently approve generics. Doctors also differ in their beliefs towards, and experiences with, different medications. Our medical histories, insurance and personal preferences may also influence our doctors decision. Its important that we consult our doctors before deciding if a generic is right for us. If you are interested in trying a generic drug, first find out if it is available. Ask your doctor. Also your pharmacist will have a list of generic drugs and can usally tell you how much they will cost on your insurance plan.

Conclusion

The idea that "higher prices = higher quality" is not true for pharmaceuticals. Generic medications meet the same quality standards as brand-name medications. Many newly approved medications are minor reformulations of generic products that are older, but still effective. Generic medications have longer clinical safety records compared to newer, branded medications. For most plan members, generic medications provide the best overall value.

BIOFERTILIZERS

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Biofertilizers are the substances which make use of microorganisms to fertile the soil. These fertilizers are not harmful to crops or other plants like the chemical fertilizers. They are actually taken from the animal wastes along with the microbial mixtures. Microorganisms are used to increase the level of nutrients in the plants. They let the plants grow in a healthy environment. They are also environment friendly and do not cause the pollution of any sort. Use of biofertilizers in the soil, makes the plants healthy as well as protect them from getting any diseases.

Types of Biofertilizers:-

- **Nitrogen Biofertilizers:-**

This type of biofertilizers helps the agriculturists to determine the nitrogen level in the soil. Nitrogen is a necessary component which is used for the growth of the plant. Plants need a limited amount of nitrogen for their growth. The type of the crops also determines the level f nitrogen. Some crops need more nitrogen for their growth while some crops need fewer amounts. The type of the soil also determines that which type of biofertilizers is needed for this crop. Fr example, Azotobacteria is used for the non legume crops; Rhizobium is needed for the legume crops. Similarly blue green algae are needed to grow rice while Acetobacter is used to grow sugarcane. It means almost all the crops need different types of biofertilizers depending on their needs.

- **Phosphorus biofertilizers:-**

Phosphorus biofertilizers are used to determine the phosphorus level in the soil. The need of phosphorus for the plant growth is also limited. Phosphorus biofertilizers make the soil get the required amount of phosphorus. It is not necessary that a particular phosphorus biofertilizers is used for a particular type of crop. They can be used for any types of the crops for example; Acetobacter, Rhizobium and other biofertilizers can use phosphotika for any crop type.

- **Compost Biofertilizers:-**

Compost biofertilizers are those which make use of the animal dung to enrich the soil with useful microorganisms and nutrients. To convert the animals waste into a biofertilizers, the microorganisms like abcteria undergo biological processes and help in breaking down the waste. Cellulytic fungal culture and Azetobacter cultures can be used for the compost biofertilizers.

Advantages of biofertilizers:-

1) They help to get high yield of crops by making the soil rich with nutrients and useful microorganisms necessary for the growth of the plants.

2) Biofertilizers have replaced the chemical fertilizers as chemical fertilizers are not beneficial for the plants. They decrease the growth of the plants and make the environment polluted by releasing harmful chemicals.

3) Plant growth can be increased if biofertilizers are used, because they contain natural components which do not harm the plants but do the vice versa.

4) If the soil will be free of chemicals, it will retain its fertility which will be beneficial for the plants as well as the environment, because plants will be protected from getting any diseases and environment will be free of pollutants.

5) Biofertilizers destroy those harmful components from the soil which cause diseases in the plants. Plants can also be protected against drought and other strict conditions by using biofertilizers.

6) Biofertilizers are not costly and even poor farmers can make use of them.

7) They are environment friendly and protect the environment against pollutants.

Applications of biofertilizers to crop:-

- **Seedling root dip:-**

This method is applied to the rice crop. A bed of water is spread on the land where the crop has to grow. The seedlings of rice are planted in the water and are kept there for eight to ten hours.

- **Seed treatment:-**

In this method, the nitrogen and phosphorus fertilizers are mixed together in the water. Then seeds are dipped in this mixture. After the applications of this paste to the seeds, seeds are dried. After they dry out, they have to be sown as soon as possible before they get damaged by harmful microorganisms.

- **Soil treatment:-**

All the biofertilizers along with the compost fertilizers are mixed together. They are kept for one night. Then the next day this mixture is spread on the soil where seeds have to be sown.

GREEN CHEMISTRY

Ms. Mamata S. Thorat
Asst. Professor

- **Introduction to green chemistry:**

Environment is a sphere around us which comprises of some physical and chemical components with which we are interacting and are a part of it. Due to development in science (chemical science), the use of chemicals has become a quantity; same is the case with our environment. The chemical components in our environment are increasing day by day of which some can be degraded but most of them are undegradable. This is termed as pollution.

The addition of undegradable substances that causes instability, disorder, harm or discomfort to the ecosystem is termed as pollution. Pollution is creating a risk to the environment. Thus in order to reduce the risk of pollution a system should be introduced that must reduce the risk by not changing the effect but by changing the cause. Thus a concept named green chemistry was introduced.

Green Chemistry or environmentally benign chemistry is the design of chemical products and processes that reduce or eliminate the use and generation of hazardous substances.

Rather than focusing only on those undesirable substances that might be inadvertently produced in a process, green chemistry also includes all substances that are part of the process. Therefore, green chemistry is a tool not only for minimizing the negative impact of those procedures aimed at optimizing efficiency, although clearly both impact minimization and process optimization are legitimate and complementary objectives of green chemistry. Green chemistry applies to industrial prospects organic chemistry, inorganic chemistry, biochemistry, analytical chemistry, and even physical chemistry.

- **Collectively, Green chemistry works on:**

Evaluation of methods to design safer chemicals:

Mechanism of action analysis:
Structure activity relationship:
Avoidance of toxic functional groups:
Minimizing bioavailability:
Minimizing auxiliary substances.

Evaluation of reaction types:

Addition reactions
Substitution reactions &
elimination reactions

Evaluation and design of energy efficient processes.

The best way of waste disposal.

- **Principles of green chemistry:**

Beyond these green chemistry works on certain principles for making environment safe. These 12 principles are

1. Waste Prevention : It is better to prevent waste than to treat or clean up waste after it has been created.
2. Atom Economy : Synthetic methods should be designed to maximize the incorporation of all materials used in the process into the final product.
3. Designing Less Hazardous Chemical Syntheses wherever practicable, synthetic methods should be designed to use and generate substances that possess little or no toxicity to human health and the environment.
4. Designing Safer Chemicals : Chemical products should be designed to affect their desired function while minimizing their toxicity.
5. Safer Solvents and Auxiliaries : The use of auxiliary substances (e.g., solvents, separation agents, etc.) should be made unnecessary wherever possible and innocuous when used.
6. Design for Energy Efficiency : Energy requirements of chemical processes should be recognized for their environmental and economic impacts and should be minimized. If possible, synthetic methods should be conducted at ambient temperature and pressure.
7. Use of Renewable and degradable Feedstock : A raw material or feedstock should be renewable rather than depleting whenever technically and economically practicable.
8. Reduce Derivatives : Unnecessary derivatization (use of blocking groups, protection, deprotection, temporary modification of physical/chemical processes) should be minimized or avoided if possible, because such steps require additional reagents and can generate waste.
9. Catalysis : Catalytic reagents (as selective as possible) are superior to stoichiometric reagents.
10. Design for Degradation : Chemical products should be designed so that at the end of their function they break down into innocuous degradation products and do not persist in the environment.
11. Real-time analysis for Pollution Prevention : Analytical methodologies need to be further developed to allow for real-time, in-process monitoring and control prior to the formation of hazardous substances.
12. Inherently Safer Chemistry for Accident Prevention : Substances and the form of a substance used in a chemical process should be chosen to minimize the potential for chemical accidents, including releases, explosions, and fires.

- **Examples and applications of green chemistry:**

As starting materials:

Polysaccharides polymers: polymers are a very important class of compounds that have broad applications and a wide array of compounds can be exploited. They have their hazardous effects. In order to use starting materials more environmentally we must use polysaccharides as the feedstock. These are biological feedstock, and as such have the advantage of being renewable, as opposed to those feedstock which are the product of petroleum. On the other hand these have no chronic toxicity to human health and environment.

Commodity chemicals from glucose: glucose is another alternative for commodity chemicals. Using biotechnological techniques to manipulate the schkimic acid pathway (responsible for making aromatic

compounds), compounds such as hydroquinone, catechol, and adipic acid, all of which are important, can be synthesized. Benzene is the starting material for these substances, by using glucose in place of benzene, can help in minimizing the use of certain reagents with certain toxicity. The conduction of synthesis in water instead of organic solvents is more beneficial.

Some reactions are:

Green chemical reactions:

Atom economy and homogeneous catalysis: Atom economy was developed by Trost. The goal of this work is to reduce the number of atoms that are produced as unwanted by-products. Aldol condensation reactions are examples where little or no by-products are formed.

Halide free synthesis of aromatic amines: Traditional synthesis of aromatic amines involves chlorination of benzene followed by nitration and nucleophilic displacement of the chlorine with a new substituting group. The synthesis of 4-amino-diphenylamine illustrates this process. Monsanto has developed a new synthesis of 4-aminodiphenylamine that utilizes nucleophilic substitution for hydrogen (fig.4). The process avoids the use of halogenation intermediates. In this process nitrobenzene and aniline are heated in presence of tetramethyl ammonium hydroxides to give tetramethyl-ammonium salts of thew condensation products.

As green reagents:

Green oxidative transmission complexes: many oxidative processes have negative ecological consequences. The metal ion contamination can be minimized by using molecular oxygen as the primary oxidant. Many ligands which are stable towards oxidative decomposition in oxidizing environments have been developed. Now, stable high oxidation state transition metal complexes can be synthesized.

Liquid oxidation reactor: it allows safe oxidation of organic chemicals with pure oxygen. The amount of vent gas has been reduced because of use of oxygen. The use of can make reaction to occur at low temperature is beneficial.

Non phosgene isocynate synthesis: polyurethanes are important polymers that are widely used for variety applications. These are generally prepared with the help of phosgene. But phosgene is an extremely toxic gas whose acute end point is lethality. A method of synthesis is developed in which poly-urethanes and their isocyanate precursors are synthesized without using phosgene.

Green solvent and reaction conditions:

Super critical fluids: the use of co2 as a substitute for organic solvents already represents a tool of waste reduction in chemical industry. Of the wide range of supercritical carbon dioxide reactions that have been explored, one class of reaction has shown exceptional promise, it was found that asymmetric catalytic reactions, particularly hydrogenation and hydrogen transfer reactions, can be carried out in supercritical carbon dioxide with selectivity compared or superior to those observed in conventional solvents.

Immobilized solvents: With solvents being of extremely high volume and very broad breadth of applicability, their potential for negative impact on human health and the environment is very large. Therefore, the immobilization of such solvents helps in reduction of hazards. Immobilized solvents or solvent molecules tethered to a polymeric backbone follow the same logic as the ionic liquids. By creating a system where a known solvent, e.g., THF, is tethered properly, it can still maintain its solvency but is

incapable of manifesting any hazard by exposing humans or the environment. These types of solvents are expensive and difficult to handle.[5]

aqueous reaction conditions

Irradiative reaction conditions:

Green chemical products:

Design of alternative nitrites: toxicological structure activity relationships of a compound are explored and synthetic modifications that reduce toxicity are found. The mechanism of acute toxicity is proposed to be elimination of hydrogen cyanide from cyanohydrins, depending on the nature of the substitution at alpha carbon position can be slowed or accelerated.

Donlar's polyaspartic acids:

Polaroid's complexed developers:

Manufacture of drugs:

Oligonucleotide drugs: Synthetic oligonucleotides are an emerging class of drug molecules with a broad spectrum of therapeutic application.

Currently, our manufacturing process uses HL-30™, a polystyrene bead support loaded at 90 mmol/g. The HL-30 bead has several limiting characteristics: (a) nonbiodegradable,(b) nonrenewable (c) it contributes ~40% of raw material costs, and (d) it is a single-source raw material. Therefore, effective regeneration of spent solid supports and their reuse is done in Oligonucleotide synthesis. The reusable solid-support technology is based on use of a Q-linker™ (hydroquinone diacetic acid) spacer arm between the 3′-end of the first nucleoside and a hydroxyl- functionalized support (in fig). In summary, the method allows used support to be quickly rederivatized with protected nucleoside and reused, without opening and recharging the synthesis column. The solid-support bed may be used up to six times in this manner.

In agriculture:

Management of the soybean cyst nematode by using a biorational strategy: Soybean cyst nematode infestation continues to be a serious agricultural problem. As part of an interdisciplinary effort to identify a biorational solution to the problem, analogs of glycinoeclepin A, a natural hatching stimulus of the nematode, were prepared and tested. Several of the analogs were discovered to inhibit the hatching of soybean cyst nematode eggs. The eggs are now so protected in the female that it can last for eleven to twelve days in soil.[7]

Potential of entomo-pathogenic Fungi as Biological Control agents against the Formosan subterranean Termite: Control of colonies of pest species of termite can be achieved by treatment of conidia applied directly to the nest, although the time of elimination may vary depending on factors such as the target species, time of year and colony vigour. Spores will remain active in nests for at least two years. The repellency of conidia can be used to protect timber. Spores can be sprayed directly onto sound timber or into termite-infected timber to provide protection at least for a period of time. Conidia are capable of proving protection from termite attack for timber in ground contact. A soil barrier created by mixing conidia of M. anisopliae has given protection to susceptible timber for up to three years under cool, dry conditions in the Canberra region, but only for less than six months at a site near Darwin in the tropics. With a "trap-and-treat" system, one of the approaches in bait technology, it is possibe to introduce the conidia to a termite colony. The major factor limiting the efficacy of M. anisopliae with the currently

available isolates is the behavioral response of healthy termites to the applied conidia, to foraging termites bringing conidia

- **Future trends in green chemistry:**

Oxidation reagent and catalysis: historically, many of the oxidation reagents and catalysts have been comprised of toxic substances such as heavy metals. Since these substances were often used in extremely large volumes required to convert millions of pounds of petrochemicals, there was a significant legacy of these metals being released to the environment and having substantial negative effect on human health and environment. It can be changed by the use of benign substances.

Non covalent derivatization: use of chemicals is dependent upon formation and breaking of covalent bond. chemistry happening without bond making physical, chemical properties are modified and performance measures are enhanced by utilization of dynamic complexation which allows for the temporary formations of modified chemical structures, the properties of molecules can be changed for the period of the necessary to carry out a particular function without all of the waste that would be generated if full derivatization is implemented.

Supramolecular chemistry: Research is currently ongoing in the area of supramolecular chemistry to develop reactions which can proceed in the solid state without the use of solvents. The cycloaddition of trans-1,2-bis(4-pyridyl)ethylene is directed by resorcinol in the solid state. This solid-state reaction proceeds in the presence of UV light in 100% yield.

Biometric multifunctional reagents: while synthetic catalysis and reagents for the most part have centered on carrying out one discrete transformation. The manipulations may include activation, conformational adjustments, and one or several actual transformations and derivitizations.

Combinatorial green chemistry: it is the chemistry of being able to make large numbers of chemical compounds rapidly on a small scale using reaction matrices. The example is lead that has a large no of derivatives. This chemistry has enabled large no of substances to be made and their properties assessed without the magnitude of the effects of waste disposal.

Energy focus: The environmental effect of energy usage are profound but have not been as visible and as direct as some of the hazards that have not been posed by materials used in manufacture, use and disposal of chemicals. The benefit of catalysis is dramatic in photochemistry. There is a need to design substances and materials that are effective, efficient and inexpensive at the capture, storage and transportation.

Proliferation of solvent less reactions: one of the 'solvent alternatives' that is being: it is one of the solvent alternatives that is being developed in green chemistry is that of solvent less reaction system. The carrying of manufacturing process in solvent-less condition utilizes some non-traditional conditions. This helps in development of product isolation, separation and purification that will be solvent-less as well in order to maximize the benefits.

GREEN AND RED BIOTECHNOLOGY

Ms. Nilima U. Rane
Asst. Professor

Biotechnology is the broad area of biology involving living systems and organisms to develop or make products, or "any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use.

Green Biotechnology is the use of genetically altered plants or animals to produce more environmentally farming solutions as an alternative to traditional agriculture, horticulture, and animal breeding processes. Green biotechnology involves the creation of more fertile and resistant seeds, plants and resources by using specialized techniques. It is considered as the next phase of green revolution, which can be seen as a platform to eradicate world hunger by using technologies which enable the production of more fertile and resistant, towards biotic and abiotic stress, plants and ensures application of environmentally friendly fertilizers and the use of biopesticides, it is mainly focused on the development of agriculture. Red biotechnology involves a process that utilizes organisms to improve health care and help the body to fight diseases. It is a branch of modern biotechnology which is utilized in the field of medicine. Red biotechnology is used to create substances for medical use or to directly aid the body in fighting diseases.

GREEN BIOTECHNOLOGY

Green biotechnology refers to biological techniques with the target of improving the nutritional quality, quantity and production economics. Such as production of disease-resistant or UV-resistant plants, or plants that have superior qualities, by means of genetic modification. Other examples include production of biofuels, such as ethanol or methane, from crops such as corn, or even from marine algae grown at land-based production facilities. The first genetically modified crops were cultivated in the USA in 1996. In 2009, 14 million farmers in 25 countries used Genetically Modified (GM) crops. The annual global acreage has increased to more than 134 million hectares worldwide. GM seed tends to be more expensive but in return, it reduces expenses in other areas, such as the cost of pesticides, machines and labor.

The three major contributions of green biotechnology to the mitigation of the impact of climate change are:

A. Greenhouse gas reduction

B. Crops adaptation

C. Protection and increase yield with less surface

RED BIOTECHNOLOGY

Red biotechnology based on the use of organisms for the improvement of medical processes. It includes the designing of organisms to manufacture pharmaceutical products like antibiotics and vaccines, the engineering of genetic cures through genomic manipulation, and its use in forensics through DNA profiling. Creating biopharmaceuticals or “red" biotechnology applications is a long and expensive process that occurs in order to introduce a new drug into the market. There are numerous applications of biotechnology. It has been a part of the agricultural industry for quite some time. In addition to the agricultural uses, biotechnology has also been making waves in the pharmaceutical industry. Some of the biopharmaceuticals that are produced through the use of biotechnology include antibodies, nucleic acids, proteins, DNA and RNA. These are all used for in-vivo therapeutic or diagnostic purposes. They are different than other pharmaceuticals because they are developed using methods of biotechnology rather than direct extraction. The first biopharmaceutical that was approved for use is actually insulin. Insulin was created using recombinant technology with DNA. Since the inception of insulin being released and used in the medical community, there have been continuous strides in the field of biopharmaceuticals.

NANODIAMONDS: AN EMERGING CONCEPT IN DRUG DELIVERY SYSTEM

Mrs. Shital S. Shinde
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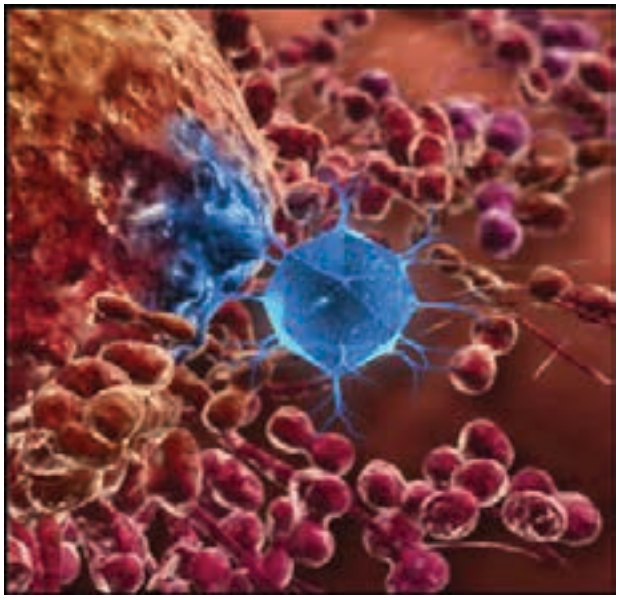
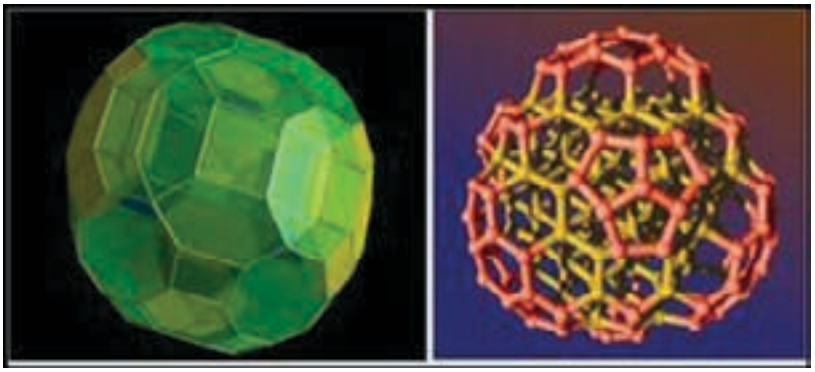
Introduction:

Nanodiamonds drug delivery system is a new path to the medical science. Nanodiamonds have contributed significantly in the development of highly efficient and successful drug delivery systems and in stem cell therapy.With the rapid development of nanoscience and nanotechnology, a wide range of nanomaterial is synthesized and discovered.First detail study about nanodiamonds was conceded in the 1960's in Russia. Currently many substances are under investigation for drug delivery and more specifically for cancer therapy. Nanodiamonds have been considered for use in several medical applications due to its unique mechanical, optical, chemical, and biological properties. It has also sensing, imaging and drug delivery properties. Nanodiamonds could be used in disease diagnosis.



Nanodiamonds

Structure of Nanodiamonds:



Structure of Nanodiamonds

Nanodiamonds are carbon based nanomaterials that provide large surface area. They can be functionalized with different ligand molecules, which can be used to conjugate various compounds or drugs. The basic crystal structure of an nanodiamonds consist of a nanocrystal having tetrahedral bonded carbon atoms in the form of three dimensional cubic lattice which imparts the properties of diamond and an onion shaped carbon shell containing a coat of functional groups on the surface. Nanodiamonds have now gained worldwide attention due to their large scale synthesis based on the detonation of carbon containing explosives, small particle size(4 to 5nm) with narrow size distribution, facile surface functionalization including bioconjugation and biocompatibility.

Synthesis of nanodiamonds:

A mixture of trinitrotoluene (TNT) and hexogen are detonated; nanodiamonds with diameters of about five nanometers are formed. The quicker the cooling after the detonation, the greater the yield of nanodiamonds, which can be reach up to 90%.To obtain the nanodiamonds from the soot, high pressure and high temperature boiling in acid is done, which also gets rid of metal from the detonation chamber that contaminates the nanodiamond yield. The nanodiamonds have a diamond cubic lattice, thus having the name “nanodiamond”.

Properties of Nanodiamonds-

1. Surface area and solubility- They have a larger surface area, so larger amounts of drugs can be placed on the particles. They are very soluble in water, thus allowing them to travel throughout the body easily and can be used to target specific areas in the body.

2. Hardness- Physical properties of diamond compared to Titanium and stainless steel. The hardness of diamond is about 50 times of Titanium and stainless steel. The toughness of diamond makes it suitable in applications in biomedical fields such as implant, cutting tools for surgeries etc.

3. Chemical inertness- Chemical inertness is an important factor for ND to be applied in biology, since the biological environment is corrosive. Alloy of Ti6Al4V coated with ND films show that the diamond films have a very good chemical resistance to the corrosive liquid.

4. **Excellent optical property-** Excellent optical property is necessary for diamond to be applied as a biomarker or a biolabel. There are impurity sites within core, defects in the diamond or sp2 clusters on the ND surface. With the light excitation, the ND will emit light with different frequency due to different type of impurity site.

5. Chemical modification- Chemical modification of diamond surface is essential for diamond to be applied as potential biosensor or biochip or a substrate to immobilize biological molecules. With the hydrogen terminated nanocrystalline diamond, designed a chemical procedure to attach DNA onto the diamond surface. Recently, ND with the size of 5-100nm in diameter was carboxylated. It was found that carboxylated ND has good physical absorption properties including hydrophobic and hydrophilic interaction, which can be used to immobilize biomolecules.

Significance of Nanodiamonds:

1. Through the nanodiamonds drug can be slowly released over time and combined with various drugs and RNA.
2. The novel system delivers the drugs to minimize and reduce side effects.
3. Nanodiamonds are nontoxic and body's immune system doesn't attack them.
4. They can be bind to a variety of molecules and deliver them into a tumor.
5. Nanodiamonds can trap nearly 5 times compared to conventional drug delivery.
6. As compare to other nanoparticle nanodiamonds have that purity, size selectivity, retention of aggregation, colloidal stability, surface functionality.

Conclusion- Nanodiamonds drug delivery system shows a new path to the medical science. The unique nanodiamond properties have demonstrated exceptional performance in various fields, especially in pharmaceutical as drug delivery system and Biotechnology. As compare to other nanoparticle nanodiamond have that purity, size selectivity, retention of aggregation, colloidal stability, surface functionality. Recent work on cancer therapy shows that nanodiamond is good carrier for used in drug therapy. Nanodiamond doesn't harm to other system of our body and also having patient compliances. Nanodiamond having a coat of the drug and proteins that targets the Cancer cell in body and destroy the cancerous cells without affecting any normal cell and they can bind tightly to a variety of molecules and deliver them right into a tumor. So in future, Nanodiamonds can be used as safe and non toxic target drug delivery system and cure many diseases including cancer etc. As nanodiamond drug delivery is an emerging and growing concept, it is gaining more attraction by industries and many research scientists due to its wide potential and acceptance.

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Details of Staff Participated in Publications & Presentations during Academic Year 2017 – 18.

1) Dr. Sachinkumar V. Patil Associate Professor, Department of Pharmaceutics

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Publications:

1. Sachinkumar Pandey, Trupti Powar, Sachinkumar Patil, 'Preparation and characterization of herbal solid dosage form for anti diabetic activity.' ***World Journal of Pharmaceutical Research***. 2017; 6(5): 869-890.
2. Patil S. V., Patil S. S., Mahajan V. A., Inamdar N. R., Belekar A. M. Formulation and Standardization of Avaleha Preparation from Benincasa Hispida. ***Indian Drugs*****,** 2018; 55 (06), 69–72.
3. Patil S. V., Aralelimath V. R., Mahajan V. A., Inamdar N. R., Shinde S. S. Formulation and Standardization of Asava of Syzygium cumini. ***Indian Drugs*****,** 2018; 56 (08), 64–67.

Presentations:

1. Patil S. V., Patil S. S. 'Formulation and evaluation of fruit pulp powder of *Cordia Dichotoma* powder as a binder in tablet dosage form. ***International Conference on Advanced Polymeric Materials*** at Kottayam, Kerala, India, March 2017, **IL 26**.

2) Dr. J. S. Mulla Associate Professor, Department of Pharmaceutics

Publications

1. **Jameel Ahmed S. Mulla**, Mostafa Mabrouk, Yahya E. Choonara, Pradeep Kumar, Dharmesh R. Chejara, Lisa C. du Toit, Viness Pillay. Development of respirable rifampicin-loaded nano-lipomer composites by microemulsion-spray drying for pulmonary delivery. Journal of Drug Delivery Science and Technology 41 (2017) 13-19.
2. Komal M. Jadhav, **Jameel Ahmed S. Mulla,** Rajendra C. Doijad. Comprehensive Study of Pharmaceutical Process Validation of Solid Dosage Forms: Quality Assurance Point of View. Indian Journal of Novel Drug Delivery 9(4), 2017, 214-222.
3. Prasad M. Potekar, **Jameel Ahmed S. Mulla**, Rajendra C. Doijad. Gastro-Retentive Drug Delivery Systems: A Review. Indian Journal of Novel Drug Delivery 9(3), 2017, 159-166.

3) Mr. R. G. Patrakar Assistant Professor, Department of Pharmacognosy

Publications:

1. Ramling Patrakar, Dr. Nitin B Ghiware. Review on phytochemical and pharmacological Aspects of diospyros melanoxylon. International Journal of Innovative Pharmaceutical Sciences and Research.2017; 5(6):64-73.

4) Mr. A. M. Kadam Assistant Professor, Department of Pharmaceutics

Publications:

1. Atul M Kadam, Shitalkumar S Patil. Improvement of micromeritic, compressibility and solubility characteristics of linezolid by crystallo-co-agglomeration technique. Int J Appl Pharm 2017;9(4):47-53.

Presentations:

1. Poster Presentation on "Improvement of flowability, compressibility and dissolution of aceclofenac by emulsion solvent diffusion with polyethylene glycol" 53rd Annual International conference of Indian Hospital Pharmacists Association, at Goa on17th &18th February 2018
2. Oral Presentation on "Modification of Physicochemical Property of carbamazepine by using solvent evaporation technique" at World Congress on Pharmaceutical Sciences at Goa on 5-7th October 2017

5) Mr. B. U. Janugade Assistant Professor, Department of Pharmaceutics

Publications:

1. Lade PD, Patil SV, Janugade BU, Uv- Visible spectroscopic method development of Etodolac from its tablet formulation by difference spectroscopy.' Journal of Pharmaceutical research and education. 2017, 1 (2)225-231.

Presentations:

1. Presented research paper on Modification of Physicochemical Characteristics of Olmesartan medoxomil by Particulate Drug Delivery System in Avishkar 2017-18 research project competition at Shivaji University Kolhapur sponsored Art and Commerce College Nagthane.

6) Mrs. A. B. Janugade Assistant Professor, Department of Pharmaceutics

Presentations:

1. Poster presentation on particle engineering: Drug delivery system at Pharma talent hunt at Sant Gajanan Maharaj College of Pharmacy, Mahagaon.
2. Presented research paper on Modification of Physicochemical Characteristics of Olmesartan medoxomil by Particulate Drug Delivery System in Shivaji University, Kolhapur sponsored Avishkar 2017-18 Research Project Competition at Art and Commerce College Nagthane.

Details of Staff Participated in Publications & Presentations during Academic Year 2018 – 19.

1) Dr. Sachinkumar V. Patil

Patent Filed

1. **Indian Patent** (Application No. 201721005460), entitled 'Use of *Jatropha Curcas* Latex for development of microemusion.' Publication No. 33/2018, Dt:17/08/2018.

Book Chapter

1. Sandi Bandgar, Amulyaratna Behera, Namdeo Jadhav, Sachinkumar Patil, Book: Advances in Drug Delivery Volume –IV, ***Chapter 2: SSMEDDS,*** Pharma Med Press, Hyderabad, India, 2018. (ISBN: 9789352300952)

Publication

1. S. S. Shelake, S. V. Patil and S. S. Patil, Formulation and Evaluation of Fenofibrate-loaded Nanoparticles by Precipitation Method. ***Indian Journal Pharmaceutical Sciences.*** 2018; 80(3) :420-427.
2. S. Pallavi, S. V. Patil and S. S. Patil, S. Shinde. Preparation and Evaluation of Mucoadhesive Nanoparticles of Rosuvastatin. ***Indian Journal Pharmaceutical Sciences.*** 2018; 80(3) :427-430.

Presentations:

1. Patil S. V., Lade P. D. Formulation and Evaluation of Bioadhesive Pulsatile Drug Delivery System of Fenofibrate. ***53rd IHPA Annual International Conference*** at Ponda, Goa, February, 2018, **OP-3**.
2. Patil S. V., Mali V. Effect of recrystallization solvent on physicochemical properties of Ketoprofen. ***Anvewshanam 2018***, Pune, **16.**

2) Dr. J. S. Mulla Associate Professor, Department of Pharmaceutics

Publications:

1. **Jameel Ahmed S. Mulla,** Utkarsh A. Chopade, Suraj B. Kumbhar, Pallavi S. Marathe, Priyanka V. Ware. Formulation and Evaluation of Fast Dissolving Oral Films of Domperidone. Indian Journal of Novel Drug Delivery 2018; 10(2): 68-75.
2. Shivani D. Jadhav, **Jameel Ahmed S. Mulla.** Development and Characterization of Rapidly Disintegrating Tablets of Amlodipine Besylate. Indian Journal of Novel Drug Delivery. 2018; 10(2); 84-90.
3. **Jameel Ahmed S. Mulla.** Drug Delivery and Therapeutic Approaches to Prostate Cancer. Indian Journal of Novel Drug Delivery. 2018; 10(3): 98-109.

Paper Presentations: -

1. A. B. Hogale, P. S. Mane, **J. S. Mulla**. Formulation and Evaluation of Herbal Antidandruff Gel. One Day National Level Seminar on Pharma Talent Hunt held at Sant Gajanan Maharaj College of Pharmacy, Mahagaon, 2nd April 2019.

2. N. S. Patil, M. R. Redkar, **J. S. Mulla**. Scenario of Biosimilars in Immune Mediated Disease. One Day National Level Seminar on Pharma Talent Hunt held at Sant Gajanan Maharaj College of Pharmacy, Mahagaon, 2nd April 2019.
3. O. B. Tipugade, P. G. Nakhare, **J. S. Mulla**. Artificial Intelligence In Pharmaceutical Product Formulation. One Day National Level Seminar on Pharma Talent Hunt held at Sant Gajanan Maharaj College of Pharmacy, Mahagaon, 2nd April 2019.

3) Mr. M. N. Urade Assistant Professor, Department of Pharmacology

Publications:

1. Dr. A. V. Yadav, Mr. M. N. Urade, Formulation and Evaluation of Chitosan Based Transdermal Patches of Lornoxicam for Prolonged Drug Release and to Study the Effect of Permeation Enhancer, Indian Journal of Pharmaceutical Education and Research, Volume : 53, Issue : 1, January – March, 2019, Page No. 88 – 96.

4) Mr. R. G. Patrakar Assistant Professor, Department of Pharmacognosy

Publications:

1. Patrakar R.G. and Bhusnure O.G.Pharmacognostic standardization of *Jacaranda mimosifolia* leaves and stem bark. Indian Drugs. 2019

5) Mr. A. M. Kadam Assistant Professor, Department of Pharmaceutics

Patent Filed

1. Indian Patent Application entitled 'Jatropha Curcas Latex as a Nanosuspension Stabilizer.' No: 201721005460, Published 17-08-2018.

Publications:

1. P B Choudhari, S V Khare, S P Phalle, S S Kumbhar, S Masal, R P Dhavale, D A Bhagwat, Atul M Kadam, Sujata P Choudahri. Optimization Of Thiazolidone Scaffolds Using Pocket Modelling For Development Of Potential Secretary System Inhibitors of Mycobacterium Tuberculosis. Turk J Pharm Sci TJPS-12599 2018.

Presentations:

1. Oral Presentation on "Pharmaceutical Applications of Polymer Brushes" at 3rd Pharm. Tech. IAPST International Conference on "Molecular Mechanism of Diseases and Novel Therapeutic Approaches" at Centurion University, Bhubaneswar,Odisha India on 19th and 20th January 2019.

Details of Staff Participated in Seminar/ Conferences/ Workshop/ Faculty development program attended during Academic Year 2017 – 18.

Name of Staff	Date	Topic	Venue
Ms. Kharade S. M. & Ms. Suryawanshi G. B.	28th July 2017	One Day Workshop on Implementation of PCI Syllabus	GIPER, Limb, Satara
Ms. Thorat M. S. & Mrs. Hol K. C.	3rd August 2017	National Seminar on "International Pharma Market & We" and "Excuses Don't Get Results"	SantGajananMaharaj College of Pharmacy, Mahagaon
Dr. Patil S. V. & Ms. Suryawanshi G. B.	18th to 19th August 2017	Resource Person in Two Days National Seminar on "Red and Green Biotechnology- A Wonder of Pharmaceutical Science"	Rajarambapu College of Pharmacy, Kasegaon.
Dr. Patil S. V.	14th to 15th September 2017	Two Days State Level Faculty Development Program on "Newer Challenges in Pharma Academia"	Krishna College of Pharmacy, Karad
Dr. Patil S. V.	21st September 2017	Resource person in Teachers Training Program of M.Pharm Subject Modern Pharmaceutics	Ashokrao Mane College of Pharmacy, PethVadgaon
Ms. Kharade S. M.	23rd September 2017	One Day Staff Development Program on "Essential of Teaching, Learning and Research in Anatomy and Physiology"	BharatiVidyapeeth College of Pharmacy, Kolhapur
Dr. Patil S. V.	23rd September 2017	Expert Panelist in One Day Staff Development Programme on "Pedagogy enabling advanced understanding of Pharmaceutics Practical – I"	BharatiVidyapeeth College of Pharmacy, Kolhapur
Dr. Patil S. V.	8th to 9th February 2018	Published Paper in International conference on Anveshanam – 2018 New Era of Healthcare Management	ChetanDattaji Gaikwad Institute of Management Studies, Pune.
Dr. Patil S. V.	4th and 5th March 2018	National Seminar on "Quality Control and Standardization of Ethnopharmaceuticals in Present Era"	Centurion University of Technology and Management, Bhubaneshwar, Odisha

A) Details of Students Participated in Seminar/Conference/Workshop & Oral/Poster Presentation during Academic Year 2018-19

Date	Seminar/Conference/ Workshop	Organized By	Name of Student
21st December 2018	National Level Quiz Competition"Mind Expedition 2K18 – The Pharma Quiz"	Krishna Institute of Pharmacy, Karad	Ms. Rajput Rutuja A., Ms. Vishnoi Ravina S.,
18th to 20th January 2019	Bharatiya Chhatra Sansad	MIT World Peace University, Pune.	Ms. Sawant Arurata S., Ms. Suryawanshi Dhanashree B.
19th – 20th January 2019	3rd Pharm. Tech. IAPST International Conference on "Molecular Mechanism of Diseases and Novel Therapeutic Approaches"	School of Pharmacy and Life Sciences, Centurion University of Technology and Management, Bhubaneswar, India.	Mr. Nakhare Parag G., Mr. Tipugade Omkar B.
24th January 2019	District Youth Parliament	Ministry of Youth Affairs & Sports, Government of India in Satara District	Mr. Malave Bhushan S.
16th February 2019	"State Level Poster and Model Competition"	Rajarambapu College of Pharmacy, Kasegaon	Ms. Kalugade Dhanashri A., Ms. Desai Tejaswini B., Ms. Mali Pooja R., Ms. Parit Utkarsha B.
1st April 2019	National Seminar on "Recent Trends in Pharma Industry, Research Methodology" and "Interview Techniques"	Sant Gajanan Maharaj College of Pharmacy, Mahagaon	Ms. Desai Tejaswini B., Ms. Patil Swapnali B., Mr. Darade Nilesh B., Ms. Mali Pooja R.
2nd April 2019	Poster presented in Pharma Talent Hunt-2019	Sant Gajanan Maharaj College of Pharmacy, Mahagaon	Ms. Desai Tejaswini B., Ms. Patil Swapnali B., Ms. Mali Pooja R., Ms. Parit Utkarsha B.
2nd April 2019	**1st Position** in Poster Presentation Competition in Pharma Talent Hunt-2019	Sant Gajanan Maharaj College of Pharmacy, Mahagaon	Ms. Hogale Ankita B., Mr. Mane Pankaj S.
3rd June to 12th June 2019	AVHAN-2019: Chancellor's Brigade – State Level Training Camp on Disaster Management	Swami Ramanand Teerth Marathwada University, Nanded	Ms. Parit Utkarsha B.

B) Details of Students Participated in Lead College Activities under Shivaji University, Kolhapur during Academic Year 2018-19

Date	Name of Event	Organized By
3rd January 2019	Sports Activities : - Running : 100 meter & 4 X 100 meter	Rajarambapu College of Pharmacy, Kasegaon under Lead College Scheme Sangli Zone Shivaji University, Kolhapur
Name of Students : Ms. Gosavi Seema P., Mr. Shiralkar Prasad K., Mr. Kumbhar Pranav S., Mr. Kumbhar Sahil S., Mr. Patil Harshwardhan D.		

Date	Name of Event	Organized By
4th & 5th January 2019	Sports Activities : - Throw ball	Adarsh College of Pharmacy, Vita Under Lead College Scheme Sangli Zone Shivaji University, Kolhapur
Name of Students : Ms. Bhosale Purva V., Ms. Katkar Samartha J., Ms. Kolekar Dhanashri N., Ms. Desai Tejaswini B., Ms. Mohite Rutuja S., Ms. Shewale Sandhya S., Ms. Thorat Snehal S., Ms. Patil Tejaswini B., Ms. Patil Vidya A., Ms. Yadav Mayuri S.		

Date	Name of Event	Organized By
4th & 5th January 2019	Sports Activities : - Volleyball	Adarsh College of Pharmacy, Vita under Lead College Scheme Sangli Zone Shivaji University, Kolhapur
Name of Students : Mr. Awate Omkar P., Mr. Karkhande Nikhil G., Mr. Suryawanshi Omkar B., Mr. Galande Shrikant R., Mr. Gunjale Vikrant A., Mr. Metkari Kiran A., Mr. Shewale Rishikesh S., Mr. Suryawanshi Saurabh M., Mr. Shelke Amit P.		

Date	Name of Event	Organized By
4th & 5th January 2019	Sports Activities : - Kho Kho (Girls)	Adarsh College of Pharmacy, Vita under Lead College Scheme Sangli Zone Shivaji University, Kolhapur
Name of Students : Ms. Atkekar Prajakta B., Ms. Kale Shraddha D., Ms. Pawar Tanuja R., Ms. Kalugade Dhanashri A., Ms. Gosavi Seema P., Ms. Mohite Rutuja S., Ms. Lokawad Shravya T., Ms. Patil Akshata A., Ms. Suryawanshi Dhanashree B., Ms. Mohite Prajkta D., Ms. Patil Tejaswini B., Ms. Patil Vidya A.		

Date	Name of Event	Organized By
4th & 5th January 2019	Sports Activities : - Kho Kho (Boys)	Adarsh College of Pharmacy, Vita under Lead College Scheme Sangli Zone Shivaji University, Kolhapur
Name of Students : Mr. Sawant Giriraj S., Mr. Attar Amar M., Mr. Patil Abhijeet A., Mr. Patil Harshwardhan D., Mr. Shiralkar Prasad K., Mr. Kumbhar Sahil S., Mr. Shewale Pradip H., Mr. Patil Shubham S., Mr. Shete Yogesh B., Mr. Jadhav Amar D., Mr. Shewale Rishikesh S., Mr. Patil Abhijeet R., Mr. Shelke Amit P.		

Date	Name of Event	Organized By
8th ~ 9th January 2019	Sports Activities: - Chess & Carrom	Shree Santkrupa College of Pharmacy, Ghogaon Under Lead College Scheme, Sangli Zone, Shivaji University, Kolhapur
Name of Students : Ms. Mulla Ayesha A., Ms. Pujari Payal J., Ms. Umardand Amruta P., Mr. Attar Asif K., Mr. Shewale Pradip H., Mr. Thorat Akshay D.		

Date	Name of Event	Organized By
18th January 2019	"Pharma Karandak 2018 – 19"	Pharmacy Colleges of Kolhapur Zone under Lead College Scheme of Shivaji University, Kolhapur
Name of Students : Mr. Gaikwad Vinayak D., Ms. Katkar Samartha J., Ms. Kolekar Dhanashri N., Mr. Sawant Giriraj S., Ms. Bankar Prajakta U., Mr. Galande Shrikant R., Ms. Gosavi Seema P., Ms. Mohite Rutuja S., Ms. Nikam Sayali R., Mr. Patil Pratik M., Ms. Tetgure Nisha G., Ms. Anure Ankita A., Ms. Babar Anuya V., Mr. Darade Nilesh B., Mr. Deshmukh Viraj V., Mr. Gavali Dinesh D., Mr. Jadhav Akshay S., Ms. Jadhav Nilambari T., Ms. Jadhav Pranali P., Mr. Kale Shrinivas S., Mr. Kolekar Praful P., Ms. Kshirsagar Namrata V., Ms. Lokawad Shravya T., Mr. Momin Aqib J., Mr. Shete Yogesh B., Ms. Gavhane Vaishali V., Ms. Patil Vidya A., Ms. Yadav Pooja S., Mr. Shelke Amit P., Mr. Mali Vikas K.		

Date	Name of Event	Organized By
4th February 2019	One Day State Level Conference on "Recent Job Avenues for Pharma Graduates"	Pharmacy Colleges of Satara Zone under Lead College Scheme of Shivaji University, Kolhapur
Name of Students : Ms. Ambulkar Reshma N., Ms. Anure AnkitaA., Ms. Bendre Varsha N., Ms. Chavan Pooja C., Ms. Kadam Divya R., Ms. Kheradkar Vidya A., Ms. Kshirsagar Namrata V., Ms. Lokawad Shravya T., Ms. Mali Jyoti D., Ms. Mhoprekar Jyoti D., Ms. Patil Akshata A., Ms. Patil Tejaswini B.		

STUDENT SECTION

Proud to be an Alumni of SSCOP...

SUHAS GURAV
Junior Manager, Quality Assurance,
Syngene International Ltd., Bangalore

First of all, Heartiest congratulations to the Magazine committee for the publications of magazine "Pharmafest 2018 – 19".

It gives me immense pleasure to pen a few words. Also, being a part of SSCOP alumni, I would thankful to all of them for building my confidence day by day.

I want to share some of my experience in short, regarding R&D and Quality Assurance job. The field of pharmacy has always been exciting and there are newer challenges that need to be addressed.

Initially, it was a dream from the day one, I started working with R&D dept. It is always exciting to face new challenges and learn about new drugs and their formulations, manufacturing, different type of testing with different instrument etc. But during R&D, it was observed that Quality of the product is also equally important. I got an opportunity to work in to Quality Assurance dept.

Quality Assurance is important aspects to Pharmaceuticals with which companies assure that their product meet to the appropriate standards for quality and safety. Similar to the food industry, Pharma sector is maintaining international quality standards because of the direct correlation between product quality and public health/safety.

Although all personnel in an organization are responsible for quality, the quality assurance department is primarily responsible for conducting quality assurance tasks and providing system that is both effective and efficient.

Pharma field is not limited to R&D, quality assurance or any other departments. There is huge scope for pharma freshers and they can make their career more successful.

I wish the very best in your endeavor and i am sure that the publication of this magazine will be huge success.

With Regards,

Mr. Suhas P. Gurav
Alumni of SSCOP, Ghogaon
(Batch 2010 - 11).

INDIA
Becoming a Superpower

A potential superpower is a state or a political and economic entity that is speculated to be , or to be in the process of becoming, a superpower at some point in the 21st century. Presently, it is widely considered that only the United States currently fulfills the criteria to be considered a superpower. States most commonly mentioned as being potential superpowers are Brazil, China, the European Union (a supranational entity), India and Russia, based on a variety of factors.

Several media publications and academics have discussed the Republic of becoming a superpower. Is India really shining? Is it really on the path of becoming a superpower? Optimistic Indians would assert an affirmation but it is time one had a reality check India is surely marching ahead, but are all the Indians marching ahead or is it just a small fraction of the population doing so? India can surely boast of a growth rate of around 8-9 per cent, but one needs to ask if this growth is trickling down to the lower strata of the populace.

Seventy two years ago in 1947 when India got independence , the question then asked was 'will India survive'? today, India's economic profile has changed. At over a trillion dollars, it is a force to reckon with not just in Asia but in the entire world. After going through different phases of lows and highs, the doubtful query 'will India survive' has been replaced by more hopeful query, will India become a superpower?

Today India is recognized as an emerging powerhouse by the world community. Form a nation known to the world as a county of snake charmers to a front line developing nation , image of our country has undergone a dramatic change. The key to the extraordinary resilience lies in India's stable and successful democratic institution. India, a home of several religions and several hundred spoken languages is a garland of multitude of diverse communities woven together in a common thread of democracy.

Escalating Population : India is second most populous country in the world, with over 1,210,193,422 people more than a sixth of world's population. Already containing 17.31 per cent of the world population, India is projected to be populous country by 2025 surpassing China. India occupies 2.4 per cent of the world's land and supports 17.5 per cent of world's population. It seems the Govt has stopped all efforts to control the population explosion. Fearing public unrest and possible loss of vote bank after Sanjay Gandhi the successive Governments abandoned family planning programmes if at all some programme is being executed it is only as tokenism without political will.

Increasing Unemployment : India is facing massive problem of unemployment. The incidence of unemployment is much higher in urban areas than in rural areas. The incidence of unemployment amongst the educated is higher than the overall unemployment amongst the educated is higher than the overall unemployment. Economic reforms may have given a boost to industrial productivity, but the boom has not crated enough jobs. India's performance on this front has fallen short of target in the past.

Poverty Concerns : Poverty as measured by the new international Multi- dimensional poverty Index(MPI), about 645 million people or 55 percent of our country's population is poor as measured by composite indicator made up of ten

markers of education, health and standard living achievement levels. MPI attempts to capture more than just income poverty at household level.

Literacy Issue : Literacy in India grew to 74.04 per cent in 2011 from 12 per cent at end of British Rule in 1947. Although it is more than five fold improvement, the level is well below the world average literacy rate of 84 per cent. India currently has the largest illiterate population of any nation on earth. India's literacy rate is increasing only sluggishly. Besides low literacy rate there is a wide gender disparity in the literacy rate.

Health Concerns : Great improvement has taken place in public health since independence, but the general health picture remains far from satisfactory. The government is paying increasing attention to integrated health, maternity and child care in rural areas, but the efforts on health front needs to be intensified with spread of health awareness through education through education and mass movement.

Extensive corruption : The license raj in India from 1950s to 1980 sowed the seeds of corruption in the socio- economic structure of our country. Nexus between politician and business community and criminals is known to all. In recent times criminalization of Indian politics has assumed alarming proportions. Some parliamentarians face criminal charges, including human trafficking, embezzlement, rape and even murder. Candidates with criminal records win election on the strength of their 'Bahubali' status. Paying to get a job done is a common phenomenon experienced by majority of our countrymen.

Terrorism and Insurgency : India is faced with terrorism and insurgency both form across the border and from within. Several militant groups backed by ISI of Pakistan are operating in Kashmir. If India is facing terrorist attacks form the militants trained from across the border, threat from across the border, threat from the Naxalite groups within the country is no less. Maoists are killing people in several districts of the country.

Competitor China : China which is India's competitor in becoming superpower is empowering its youth by opening up high number of universities, imparting education and teaching English. India, on the other hand, is still fighting implementation of quotas for students and faculty.

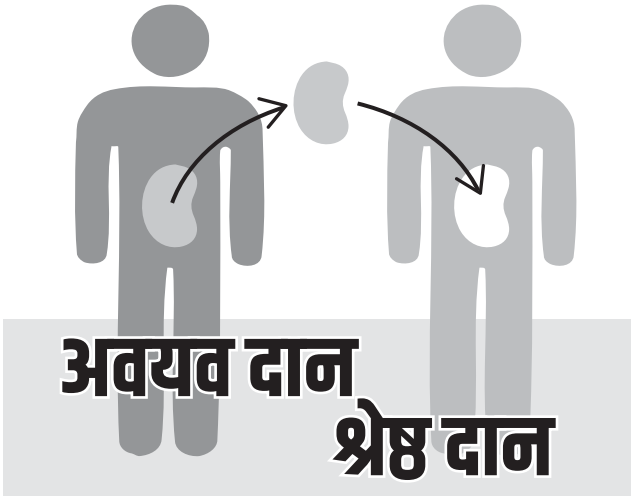
Social Security : According to a recent survey around 400 million persons in India are in the working age group, less than 7 per cent are in the organized sector and 93 per cent of the worker s are unorganized. While organized sector workers have sufficient and reliable access to social security in the form of protection under the law against loss/ stoppage of income on account of illness, disability, old age, death, maternity, the unorganized sector which has been contributing more in GDP in the last five decades is deprived of sufficient and reliable access to promotional and protective social security.

Monsoon and Agriculture : Agriculture and allied sectors like forestry and village industry account 16 per cent of GDP and despite a steady decline of its share in GDP, is still the largest economic sector which plays a significant role in the overall socio- economic development of the country. Monsoon plays a crucial role in agriculture production. Due to lack of adequate irrigation system, increased dependence on monsoon has tremendous impact on Indian agriculture; failure of monsoon, as we have seen in the past, has the capacity to destabilize the entire economy of the country.

Any country on a growth trajectory has to face several hurdles created by external and internal factors during transition period. It largely depends on the collective will power of the citizens who face these changing's and overcome all obstacles that may come in the way of their country becoming a superpower. However, going by the slogan, 'man mai hai vishawas pura hai vishwas hum hongay kamyab aik din', we shall overcome someday.

- Avinash Maske
T.Y.B.Pharm.

(Source- Wikipedia)



अवयव दान श्रेष्ठ दान

आज भारत देश 21व्या शतकात वाटचाल करत आहे. विज्ञानामध्ये अनेक बदल घडत आहेत. सर्व बाजूनी देशांची प्रगती होत आहे. म्हणजेच आपला देश महासत्ता बनण्याच्या दिशेने एक पाऊल पुढे टाकत आहे . याचा सार्थ अभिमान आम्हा भारतीयांना आहे. तरीही खारीचा वाटा म्हणून त्यात हातभार लावणे प्रत्येक भारतीयांचे कर्तव्य आहे. या पैकी एक कर्तव्य म्हणून जनजागृती उद्देशाने हा विषय पोहचवण्याचा तोडका मोडका प्रयत्न...

पर्यावरणाच्या असमतोलामुळे, प्रदूषणामुळे आणि फास्ट फूड मुळे आणि सध्याच्या धावपळीच्या जीवनशैलीमुळे, केमिकल युक्त अन्नामुळे अशा अनेक कारणामुळं आज अनेक प्रकारच्या आजारांनी मनुष्याला आजारांनी ग्रासलेले आहे. परंतु त्याची माहिती म्हणजेच जनजागृती होणे गरजेचे आहे .

आपल्या देशामध्ये अनेक लोक नेत्रहीन आहेत, हृदय रोगी आहेत, कुणाची किडनी फेल आहे, नेत्रदान जगातील सर्वात श्रेष्ठ दान आहे . नेत्रदान हे कुणीही करू शकते. मृत्यूनंतर काही कालावधी पर्यंत नेत्र कार्यरत असतात व ते दुसऱ्या व्यक्तीस बसवता येतात आणि दृष्टीहिनास दृष्टी येते व सर्वांग सुंदर जग तो बघू शकतो. नेत्रदान केलेली व्यक्ती मृत्यू होऊनही आपले डोळ्यांनी हे जग पाहू शकते. किती सुंदर कल्पना आहे. नाहीतर मृत्यू आलेल्या शरीराचे दफन केले जाते किंवा अग्नी दिला जातो व काही वेळातच आपले शरीर नष्ट होते. म्हणून मृत्यू होऊनही डोळ्यांच्या रूपाने जिवंत राहू. नेत्रदान करा. नेत्रदान हे जगातील सर्वात श्रेष्ठ दान आहे.

अनेक रोगी किडनी निकामी झालेमुळे मृत्यूशी झुंज देत आहेत. किडनी हा मानवी शरीराचा अविभाज्य भाग आहे, किडनी आपले शरीरात रक्त शुद्ध करून हृदया पर्यंत पोहोचवते. परंतु किडनी निकामी झाली तर हृदयाला अधुद्ध रक्त पुरवठा होतो. मानवी शरीरात दोन्ही बाजूस दोन किडन्या असतात, एक निकामी झाल्यास दुसऱ्या किडनीवर कार्य चालते परंतु दोनी किडन्या निकामी झालेस मात्र त्या व्यक्तीस महिन्याला डायलिसिस म्हणजे नवीन रक्त भरावे लागते. तरीही ती व्यक्ती जास्त दिवस जगण्याची शक्यता कमी असते, परंतु अशा वेळी त्याच्या कुटुंबातील किंवा नातेवाईक किंवा रक्तगट जुळणाऱ्या कुणीही अशा व्यक्तीस आपली एक किडनी दान केलेस त्या व्यक्तीस जीवनदान मिळू शकते. आपल्यामुळे एखाद्या व्यक्तीस जीवनदान मिळणे हि केवढी भाग्यशाली गोष्ट आहे

किडनी दान जिवंतपणे करता येते. दोन किडनी पैकी एक किडनी दान केली तर दुसऱ्या किडनीवर व्यवस्थितपणे कार्य चालू शकते. म्हणून एखाद्या व्यक्तीच्या दोनी किडन्या फेल झाल्या असतील तर त्या व्यक्तीचे नातेवाईक किंवा कुणीही पुढे येऊन किडनी दान करणे व त्या व्यक्तीस जीवन दान देणे म्हणजे खूप मोठे पुण्य आहे. किडनी दान करा एक जीवन वाचवा.

आजकाल पर्यावरणातील असमतोल, प्रदूषण, आहारातील फास्ट फूड अनेक समस्यांमुळे हृदयरोगचे प्रमाण वाढलेले त्यामुळंच फबुडायचे ब्लॉकेज, रक्तपुरवठा व्यवस्थित ना होणे, त्यात प्रेशर चिडचिड, अयोग्य जीवनशैली यामुळं हृदय रोगाचे प्रमाण वाढलेले आहे. पूर्वी वयस्कर लोकांनाच याचा त्रास होत होता आणि ते रोगी दगावयाचे पण आज रोजी कोणत्याही वयाच्या व्यक्तीस हृदय रोगाचा धोका होऊ शकतो व ती व्यक्ती दगाऊ शकते.

हृदय सुद्धा दुसऱ्यास दान करता येते. एखादी व्यक्ती जर हृदय दान करणार असेल तर मृत्यूनंतर काही कालावधीत आपले नातेवाईक यांनी डोनेशन साठी जिथे नोंदणी केली आहे त्या ठिकाणी कळविल्यास काही कालावधीत त्या व्यक्तीचे हृदय दुसऱ्या व्यक्तीस ट्रान्सफर करता येते व ज्या व्यक्तीला ते हृदय शस्त्रक्रिया करून बसवले जाते त्यास जीवनदान मिळते. अशा पद्धतीने डोनर व्यक्ती हि आपले मृत्यूनंतर ही दान केलेल्या हृदयाच्या रुपाने जगते. म्हणून मृत्यूपूर्वी किंवा मृत्यूनंतर आपले अवयव दान करा व दुसऱ्याना जीवन दान करा. आपले डोळे व आपले हृदय मृत्यूनंतर व किडनी जिवंतपणे दान करता येते व मरण यातना भोगणाऱ्याना आपण जीवनदान देऊ शकतो, यासाठी अनेक सेवाभावी संस्था कार्यरत आहेत. अशा ठिकाणी इच्छेने आपण आपली नोंदणी करु शकता. मृत्यू नंतर शरीर दान हि करता येते. अशा पद्धतीने अवयव दान कोणते करतात व त्याचा दुसऱ्यास फायदा कसा होतो हे मी माझ्या ज्ञानानुसार केवळ जनजागृतीसाठी हा लेख लिहीत आहे. काही चुका असतील तर क्षमस्व.

सर्वजण एकत्र येऊन जीवन दान देऊ या.

- श्री. अनिल कदम
प्रयोगशाळा सहाय्यक

भारतात नोटा कश्या तयार होतात?

• रुपया शब्दाचा प्रयोग सर्वप्रथम शेर शाह सुरीने भारतावर राज्य करीत असताना १५४०-१५४५ च्या कालखंडातकेला होता.

• सध्या भारतासमवेत इतर ८ देशांमधील चलनाला रुपया म्हटले जाते. भारतात नोटा आणि नाणी बनवण्याचे काम भारतीय रिजर्व बँकच्या अखत्यारीत येते.

• भारतात सर्वात पहिली वॉटरमार्क असलेली नोट १८६१ मध्ये छापण्यात आली होती.

• हिंदी आणि इंग्रजी व्यतिरिक्त भारतीय नोटांमध्ये इतर १५ भाषांचा वापर केला जातो.

- भारतात नोटा कुठे छापल्या जातात?

• देशात चार नोट प्रेस आणि एक पेपरमिल आहे.

• देवास (मध्य प्रदेश), • नाशिक (महाराष्ट्र), • सालबोनी (पश्चिम बंगाल) आणि • म्हैसूर (कर्नाटक) या चार ठिकाणी नोटा छापल्या जातात.

• देवास येथील नोट प्रेस मध्ये एका वर्षात २६५ कोटी नोटा छापले जातात. इथे २०, ५०, १००, ५०० किंमतीच्या च्या नोटा छापल्या जातात नोटा छापण्यासाठी वापरण्यात येणारी शाईसुद्धा इथेच बनते.

• नाशिक नोट प्रेस मध्ये १९९१ सालापासून इथे १, २, ५, १०, ५०,१०० किंमतीच्या नोटा छापल्या जातात. सुरवातीला इथे ५० आणि १०० च्या नोटा छापल्या जात नव्हत्या.

- भारतात नाणी कुठे बनवली जातात?

१. मुंबई, २. कोलकत्ता, ३. हैदराबाद, ४.नोएडा

- नाण्यांच्या चिन्हावरून समजते की ते कुठे बनवले आहेत

प्रत्येक नाण्यावर असलेल्या चिन्हावरून समजते की ते नाणं कुठे बनवलं गेलं आहे. नाण्यावर छापलेल्या वर्षाच्या खाली जर स्टारचे चिन्ह असल्यास ते हैदराबादला बनवलं गेलं आहे. जर वर्षाच्या खाली टिंब असेल तर ते नाणं नोएडाला बनवण्यात आलं आहे. वर्षाच्या खाली डायमंड असल्यास ते नाणं मुंबईत बनवलं आहे. कोलकत्ता मध्ये बनवलेल्या नाण्यावर कोणतेच चिन्ह नसते.

- नोटा कोणत्या वस्तूने बनले जातात?.

रिजर्व बँक ऑफ इंडिया नोट बनवण्यासाठी कापसाच्या कागदाचा आणि विशिष्ट प्रकारच्या शाईचा वापर करते. या प्रकारच्या कागदाचे उत्पादन काही प्रमाणात महाराष्ट्रात (सीएनपी) होते, तर मोठ्या प्रमाणात मध्यप्रदेश मधील होशंगाबाद मध्ये होते. काही पेपर आयत सुद्धा केले जातात.

- भारतात प्रत्येकवर्षी किती नोटा छापल्या जातात?.

रिजर्व बँकेच्या एका अहवालानुसार भारत प्रत्येकवर्षी २००० कोटी नोटा छापतो .यामधील ४० टक्के खर्च कागद आणि शाई आयात करण्यामध्ये जातो. हा कागद जपान, जर्मनी आणि ब्रिटन सारख्या देशांमधून आयात केला जातो. नोटा किती छापल्या पाहिजेत, याविषयीचा निर्णय घेण्याचा अधिकार भारतीय रिजर्व बँकेला आहे. नाणी किती तयार केली जावीत याचा निर्णय पूर्णतः सरकार घेते.

- नोटा कशा छापल्या जातात?

विदेशातून आयात होणाऱ्या आणि होशंगाबाद मधून येणाऱ्या पेपरशीटला एका खास मशिन सायमंटन मध्ये टाकले जाते आणि नंतर इंटाव्यू नावाच्या मशीनने त्यावर कलर केले जाते. याप्रकारे नोट तयार होतात. त्या नंतर चांगल्या आणि खराब नोटा वेगळ्या केल्या जातात. एका वेळेस एका शीट मध्ये ३२ ते ४८ नोटा छापण्यात येतात.

. खराब झालेल्या नोटांना कुठे जमा केले जाते?

नोटा तयार करतानाच त्यांची 'सेल्फ लाइफ' (नोटा योग्य प्रकारे बनण्याचा अवधी) ठरवण्यात येते. हा अवधी संपल्यानंतर किंवा सारख्या वापरणे खराब झालेल्या नोटांना रिजर्व बँक परत घेते.

- फाटलेल्या जुना नोटांचे काय केले जाते?

खराब झालेल्या आणि फाटलेल्या नोटा रिजर्व बँक परत चलनात आणत नाही, कारण तसे करणे योग्य नसते. रिजर्व बँक सर्व व्यावसायिक बँकांकडून फाटलेल्या आणि खराब नोटा मागवून एकत्र जमा करते. सुरवातीला या नोटा जाळल्या जात असतं, परंतु आता RBI ने पर्यावरणासंवर्धनाच्या दृष्टीने ह्या नोटा जाळणे बंद केले आहे.

RBI ने एक ९ कोटींची मशीन आयत केली आहे, ही मशीन जुन्या नोटांचे छोटे तुकडे करते. त्यातून मजबूत अशी विट बनवली जाते .ह्या विटा खूप कामांमध्ये उपयोगी येतात.

- भारतात प्रत्येक वर्षी ५ दशलक्ष नोटा चलनातून बाद होतात, ज्यांचे एकूण वजन ४५००० टन एवढे असते.

- शुभम भुसारी, तृतीय वर्ष बी.फार्म.

(Source --wikipedia)

आजोबांचं प्रेम...

मी या जगात खुप प्रेम प्रकरणे पाहिली पण ती सगळीच तेवढी खरी असतीलच हे सांगू नाही शकत. पण या प्रकारातील प्रेम हे तेवढं "खरं आणि विश्वासाचं" देखील. एका आजोबाचं नातवंडा वरचं प्रेम. पण माझे आजोबा माझ्यासाठी सगळं काही आहेत.

मी या जगात आल्या पासून माझी काळजी घेणारा एक जीव मला याच भूतलावर भेटला. जणू माझ्या रथाचा सारथी असल्यासारखा कायम माझ्या सोबत. एक गोष्ट समजावी माझ्या आजोबाला मी अडचणीत आहे, मग हा माणूस माझ्यासाठी सगळं सोडून जो पर्यंत अडचण दूर नाही होत तो पर्यंत प्रयत्न करतच राहणार. आज सुद्धा अगदी मला आठवतेय मी लहान असताना पाय आपटून रडायचो सोबत जायसाठी शाळेत त्यांच्या. ते त्या वेळी वरिष्ठ मुख्याध्यापक या पदावर कार्यरत होते, तेव्हा त्यांच्या विषयी असणारी स्टाफ मधील आदर. स्वभावाने कडक पण तेवढेच प्रेमळ. पण कधी माझ्यासाठी कडक नव्हते. ते नेहमी मी चुकीचा असलो तरी समजून घेणार. पण काय असेल ते नियमातूनच. आज पर्यंत मी खुप ठिकाणी अपयशी झालो पण या अपयशात मला कधीच खचू नाय दिला.

नेहमीच आमचा दोघांचं वैचारीक गोष्टीत तर खुप पटायचं. तासन तास आमच्या गप्पा मग ते समाजकारण असेल किंवा राजकारण किंवा घरातील एकादी गोष्टीवरचा उपाय किंवा नियोजन असो. त्यांच्या या तालमीत मी तयार झालो आणि कदाचित त्यामुळंच लोक म्हणतात तू तुझ्या आज्या सारखाच. आजसुद्धा आम्ही दोघे आमच्या गावाकडील वरांडयात दोघे खुर्ची टाकून गप्पा मारतो. त्यात तिन्ही सांजची वेळ आणि घरातून येणारे दोन चहाचे कप आणि आमच्या गप्पा. आता हे कसं ते कसं, मला जीवनाचं धडे देणारे, चहा सोबत अंदाज लावणारे. घरात पण सगळ्यांना माहिती आमचं किती जुळतं ते मित्रा सारखं नातं आमचं. चिडखोर दोघे पण भांडण झाली तरी नंतर करमत नसायचं एकमेकांना. नंतर आहेच दोघे गाडीवर आम्ही. दोघे मस्त वाराची झुळूक आणि हळूच शांत आणि पू.ल. देशपांडे, भारा तांबे यांच्या मधुर वाणीतील सुरमय पंक्ती मुखातुन सुरेल बाहेर यायच्या. मला संदर्भासहित स्मरती कारण या अशा मैफलीचा भाग बनायाला मला आवडायचं. असा माणूस स्वतः पेक्षा इतरांसाठी खुप जगत आला. आज या माणसामुळे खुप कुटुंबे रांगेला लागली. स्वतःचा भाकरीतला थोडा का पण हिस्सा इतरांसाठी ही विचारधारा कायम ठेवून चालत आला असा आजोबा.

एक विचारी बेधडक स्वभाव कायम अंगात रक्तस्त्राव संचारला असा. कधीच शांत बसणार नाही, कायम दूरदृष्टी ठेवून विचार करणारा, दूरदृष्टी ठेवूनच निर्णय घेणारा, घरातील सगळ्यात चंचल, सखोल अभ्यास करणारा, ठोस पाऊल उचलणारा, एक योग्यच पाऊल उचलणारा साधा चेहरा पण अंदाज तेवढाच गहरा. अनुभवाची बरेच मोठे गाठोडे काखेत असलेला, एक उत्तम प्रशासक. ४० वर्ष प्रशासकिय अनुभव असलेला, तडफदार, राजकारण, समाजकारण व व्यावसायीक वळण असलेला सुख आणि दू:ख यात कधीच गांगरून न गेलेला एक असामान्य माणुस तसेच आध्यात्मिक व साहित्यिक क्षेत्रातील व मराठी, संस्कृत या भाषांवर प्रचंड पकड असलेला महामेरू. हजारो लोकांच्या मनावर अधिराज्य गाजवणारा, शेतीची आवड व शिक्षणाचा खांदा असलेल्या माझ्या आजोबाला "बा" एवढंच "आजोबाचं" पण पात्र आपल्या जीवनात तेवढंच महत्वाचं वाटतं म्हणून आजोबांना fathers day च्या शुभेच्छा ....!!

- भुषणकुमार माळवे
तृतीय वर्ष बी.फार्म.

English language day is celebrated on 23rd April.

WHAT IS ENGLISH LANGUAGE DAY?

English language day was first celebrated in 2010 alongside Arabic language day, Chinese language day, French language day, Russian language day and Spanish language day. These are the six official languages of the United Nations and each has a special day, designed to raise awareness of the history, culture and achievements of these languages.

WHY IS ENGLISH LANGUAGE DAY CELEBRATED ON 23 APRIL ?

This day was chosen because it is tought to be Shakespeare's birthday and tge anniversary of his death. As well as being the English Language's most famous playwright, Shakespears also had a huge impact on modern day English. At the time he was writing in the 16th and 17th centuries, the English language was going through a lot of changes and Shakespeares creativity with language meant he contributed hundreads of new words and phrases that are still used today. For example, the words 'gossip', 'fashionable' and 'lonely' were all first used by Shakespears. He also invented phrases like 'break the ice' , 'all our yesterday', ' faint hearted' and 'love is blind'. Can you guess what they mean?

ENGLISH LANGUAGE DAY

THE ORIGIN OF ENGLISH :

The story of the English language began in the fifth century when Germanic tribes invaded celtic speaking Britian and brought their languages with them. Later, Scandinavian Vikings invaded and settled with their languages too. In 1066 William I, from modern-day france become king and Norman French became the language of the courts and official activity. People's couldn't understand each other at first, because the lower classes continued to use English while the upper classes spoke French, but gradually French began to influence English. An estimated 45% of all English words have a French origin. By Shakespeare's time, modern English had developed, priting had been invented and people had to start to agree on 'correct' spelling and vocabulary.

THE SPREAD OF ENGLISH :

The spread of English all over the world has an ugly history but a rich and vibrant present. During the European Colonical Period, several European countries, including England competed to expand their empires. They stole land, labour and resource from people across Africa, asia, the Americas and Oceania. By the time former British Colonies began to gain independence in the mid-20th century, English had become established in their institutions. Many brilliant writers from diverse place across Africa, the Caribbean and Asia had starts writing in English, telling their stories of appression. People from all over the world were using English to talk and write about justice, equality, freedom and identity from their own perspectives. The different varities of English created through this history of migration and colonisation are known as world englishes.

INTERNATIONAL ENGLISH :

More than 1.75 billion people speak English world-wide that's around 1 in 4 people around the world. English is being used more and more as a way for two speakers with different first languages to communicate with each other, as a 'Lingua france'. For many people, the need to communicate is much mor important than the need to sound like a native speaker. As a result, language use is starting to change. For example, speakers might not use 'a' or 'the' in front of nouns, or they might make uncountable nouns plural and they might make uncountable nouns plural and say informations' 'furmitures' or 'co-operations'.

Are these variations mistakes? Or part of the natural evolution of different Englishes ? 'International English' refers to the English that is used and developed by everyone in the world and doesn't just belong to native speakers. There is a lot of debate about whether International English should be standardised and if so how.

If you're reading this, English is your language too.

Shravya Reddy
Final year B.Ph.

25 Best High Paying Career Change Ideas For Pharmacist in 2019

1) **Lecturer :** You can work as lecturer and help raise students to be professional pharmacists just like you.
2) **Doctor :** If you don't mind going back to medical school to spend a few more years,you can consider bagging a medical degree.So that you can work as a doctor.Your knowledge and experience in health industry would come in really handy in this role.
3) **Nursing :** Another medical related career that you can pursue is working as Nurse. With your pharmacy degree,you won't have to spend too much time acquire a nursing qualification.
4) **Medical Therapy Management :** As a medical therapy manager, your job would be to study and review patient's medications in order to prevent adverse side effects and negative drug interactions.
5) **High school teacher :** You can teach science subjects at high schools. This is a job that you would enjoy if you love working with young people.
6) **Informatics Pharmacist :** As a informatics pharmacist,your job would be centered on designing and managing electronic health records especially in relation to patient's medications.
7) **Veterinary Pharmacist :** You can work at veterinary clinic or even set up your own pharmacy to cater to livestock farmers ,pet parents, wildlife conservation centers,petting zoo and other establishment that cater to animals.
8) **Nuclear Pharmacist :** Nuclear pharmacist help to oversee preparation and administration of radioactive drugs.They also help to prepare patients before administering the drugs to them and also monitor patient for adverse reactions.
9) **Social Worker :** Pharmacists are passionate about other people's well being. Social worker work with families and help them treat their various social and emotional issues.
10) **Addiction Counselor :** You already have in depth professional knowledge about drugs. So you will be in best position to counsel drug addicts and abusers. So that they can drop the harmful habits and embrace a healthy lifestyle.
11) **Mobile Crisis Specialist :** Mobile Crisis specialist help to respond to emergency situations and provide help to people who may be in critical situations.
12) **Academic Researcher :** You can help to carry out relevant research to improve the pharmaceutical industry.
13) **Mental Health Case Manager :** Mental health case managers help to develop and implement care plans for their patients under supervision of a physician.
14) **Pharmacogenomics :** Your job would be to study and provide helpful guidance about how genes affect a patients response to drug therapy.

15) **Pharmacy Benefits Manager :** You can work with insurance companies and companies that provide health care services to their employees to help process claims, negotiate with drug manufacturer and give relevant advice to your employers to help them cut costs.

16) **Mail Order Pharmacists :** You can helps to supply and refill prescription medications for their patients via mail/courier services.

17) **Certified Diabetics Educator :** The job of certified diabetics educator is to enlighten patients on necessary steps to take. So as to avoid diabetes,and also help patient who are already suffering from diabetes to manage their case.

18) **Nutritionist :** You can help to guide and advice people on best ways to eat and also help them plan their meals to be healthy and nourishing.

19) **Telepharmacist :** You can offer consultations, advice and guidance to patients via telephone or over the internet.

20) **Recruiter :** You can also work as head hunter to help companies fill their medical related vacancies. You can earn a sizable commission for each vacancy you are able to help fill.

21) **Blogging :** You can start your own WebMD or medical blog. Many people make use of these information to learn more about their health, the effects of drugs they use,drug interactions they may find helpful when they have no immediate access to medical doctor.

22) **Nanotechnologist:** Nanotechnologist work in food and beverage manufacturing companies to help formulate powders, chemicals and drugs to help enhance humans health.

23) **Product Development Scientists :** You help to ensure that right chemicals are used in manufacturing these products and that products are of highest quality.

24) **Health And Safety Inspector :** You work to that companies adhere to health and safety rules that would keep their employee safe and secure.

25) **Herbal Medicine :** You can work as herbal doctor,or you can start formulating your own herbal products that people can use to treat diverse disease.

- Ashwini Shewale
Final year B.Ph.

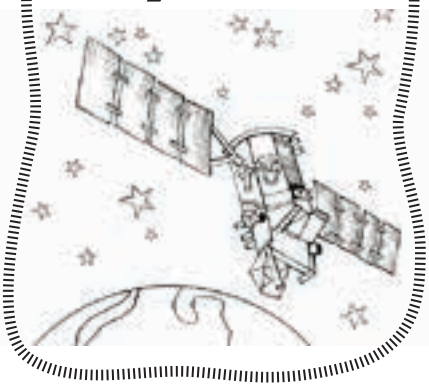
वैज्ञानिक उपकरणे व त्यांचे उपयोग

शास्त्रीय नाव (मराठी नाव) व उपयोग :

1) कार्डिओग्राफ (हृदयतपासणी) : हृदयाची जागरूकता आजमावणारे उपकरण
2) लॅक्टोमीटर (दूधकाटा) : दुधाची शुद्धता व पाण्याचे प्रमाण मोजू शकणारे उपकरण
3) मॅनोमीटर (वायुदाबमापक) : वायुदाब मोजू शकणारे उपकरण
4) फोनोग्राफ (फोनोग्राफ) : आवाज लहरी निर्माण करणारे यंत्र
5) पायरो मीटर (उष्णतामापक) : 500' सेंटीग्रेडपेक्षा जास्त तापमान दूर अंतरावरून मोजू शकणारे उपकरण
6) बॅरोमीटर (वायुभारमापन) : वातावरणातील हवेचा दाब मोजणारे यंत्र
7) स्फिरोमीटर (गोलाकारमापी) : पृष्ठभागाची वक्रता मोजणारे उपकरण
8) सॅकरीमिटर (शर्करामापी) : रासायनिक द्रव्यातील साखरेचे प्रमाण मोजणारे उपकरण
9) ऑडिओमीटर (ध्वनीमापक) : आवाजाची तीव्रता मोजणारे उपकरण
10) क्रोनोमीटर (वेळदर्शक) : आगबोटीवर वापरले जाणारे घड्याळ

- Onkar Gaikwad, Final year B.Ph. (Source : Google)

चांद्रयान 2



चांद्रयान २ ही मोहीम चांद्रयान १ नंतरची भारताची दुसरी चंद्रमोहीम आहे. हे यान इस्रोने बनवले असून, ते दिनांक २२ जुलै २०१९ रोजी श्रीहरीकोटा अवकाश केंद्रातून Geosynchronous Satellite Launch Vehicle मार्क ३ (GSLV MK III -M1)द्वारे प्रक्षेपित करण्यात आले. या यानात कक्षाभ्रमर (Orbiter), लँडर (Lander) व रोव्हर (Rover) यांचा समावेश असून त्यांना देशातल्या देशात विकसित करण्यात आले आहे.

इतिहास : १२ नोव्हेंबर २००७ रोजी, रशियन सांघिक अवकाश संस्थेच्या व इस्रोच्या प्रतिनिधींनी 'चांद्रयान २' या महत्त्वाकांक्षी प्रकल्पावर एकत्र कार्य करण्याचा करार केला होता. या प्रकल्पात इस्रोने कक्षाभ्रमर, रोव्हर तर रशियन सांघिक अवकाश संस्थेने लँडर तयार करण्याची मुख्य जबाबदारी स्वीकारली होती. पंतप्रधान मनमोहन सिंग यांच्या अध्यक्षतेखाली १८ सप्टेंबर २००८ रोजी घेण्यात आलेल्या बैठकीत भारत सरकारने या मोहिमेला मंजुरी दिली. या यानाचा आराखडा दोन्ही देशांतील वैज्ञानिकांच्या एकत्रित बैठकीने ऑगस्ट २००९ मध्ये पूर्ण करण्यात आला.इस्रोने या यानावरील भार (payload) वेळापत्रकाप्रमाणे निश्चित केला, मात्र ही मोहीम जानेवारी २०१३ पर्यंत स्थगित करून पुन्हा २०१६ साली करण्याचे ठरवले. कारण रशियन सांघिक अवकाश संस्थेला लँडर वेळेत पूर्ण करणे शक्य नव्हते. २०१६ असणाऱ्या मोहिमेकरिता २०१५ पर्यंत सुद्धा रशियन अवकाश संस्थेला हा लँडर, काही अंतर्गत तांत्रिक अडचणींमुळे पूर्ण करणे शक्य झाले नाही. मग मात्र भारताच्या इस्रो संस्थेने ही चांद्रमोहीम स्वतंत्रपणे पार पाडायचे निश्चित केले. या सर्व गोष्टींची पूर्तता झाल्यानंतर मार्च २०१८ला चांद्रयानाचे प्रक्षेपण करण्याचे नक्की करण्यात आले. मात्र सुरुवातीला एप्रिलपर्यंत आणि नंतर ऑक्टोबरपर्यंत काही अन्य अंतराळ वाहनांची चाचणी करण्याकरिता ही मोहीम स्थगित करण्यात आली. २०१९च्या पहिल्या अर्धवर्षात ह्या मोहिमेच्या चौथ्या सर्वसमावेश तांत्रिक चर्चामंडळाच्या सभेनंतर यानाच्या संरचनेत व अवतरण क्रमात काही बदल करण्यात आला. फेब्रुवारी २०१९च्या चाचणीत, लँडरच्या दोन पायांना अल्पप्रमाणात हानी पोहोचली होती. ती दुरुस्ती झाल्यावर चांद्रयान २ चे प्रक्षेपण १४ जुलै २०१९ला ठरवण्यात आले. मात्र पुन्हा काही तांत्रिक गोंधळामुळे प्रक्षेपण पुढे ढकलण्यात आले. शेवटी १८ जुलै रोजी, इस्रोने २२ जुलै २०१९ हा दिवस चांद्रयानाच्या प्रक्षेपणासाठी जाहीर केला. अशाप्रकारे, चांद्रयान २ 'GSLV MK III' ह्या प्रक्षेपकाद्वारे नियोजित वेळापत्रकाप्रमाणे २२ जुलै २०१९ रोजी भारतीय प्रमाणवेळेनुसार दुपारी २:४३ (जागतिक प्रमाणवेळेनुसार सकाळी ९:१३) वाजता अखेरीस प्रक्षेपित झाले.

- अविनाश सादिक मस्के
तृतीय वर्ष बी.फार्म.

(Source- Wikipedia)

इंजिनिअरिंग केलेला एक मुलगा बराच वेळ गच्चीवर उभा होता.
शेजारचे काका- काय बेटा पुढे काय करायचं ठरवलं आहेस?
मुलगा- काही नाही. टाकी भरली की मोटार बंद करेन.

बसमध्ये एका प्रवाशाने खिडकी उघडी ठेवली होती.त्यामधून खूप जोराचा वारा येत होता. त्याच्या मागील सीटवरील एक मुलीने त्याला विनंती केली "प्लिज, जरा मिनीमाईज करता का विंडो"

पुणे "स्मार्ट सिटी"बनवायची घोषणा हास्यास्पद आहे.
हजारो वर्षा पासून "over smart"
असलेल्या या शहराचा अपमान आहे हा.

पुण्यात नव्यानेच आलेल्या एका मुंबईकराने बस स्टॉपवर उभ्या असलेल्या अस्सल पुणेकरला विचारले, "का हो कॅम्पमध्ये जायला कोणती बस पकडू..?"
पुणेकर- "वीस नंबरची पकड..."
मुंबईकर- "आणि ती नाही मिळाली तर..?"
पुणेकर-" दहा-दहाच्या दोन पकडल्या तरी चालतील."

मॅडम- हा मुलगा बघा. खूप शिकलेला आहे. मुंबईमध्ये वन बीएचके घर आहे. एक लाख रुपये पगार आहे, गाडी आहे, पण, जरा सावळा आहे. चालेल का?
मुलगी- ह्याच पॅटर्नमध्ये दुसरे रंग दाखवा ना.

योगेश पहिल्यांदाच मुलगी बघायला गेला...
मुलीचा बाप- बेटा, दारू पितोस का?
योगेश- ते नंतर ! आधी पोहे ,चहा आणि मुलगी बघणे तर होऊ द्या... मग बसू !!!

पुणेकर- नवीन सूनबाईच नाव काय ठेवलं?
मुंबईकर- श्यामला...! थोडी सावळी आहे ना ती म्हणून.
पुणेकर-बर झालं सावळी आहे.गोरी असती तर गोरिला ठेवलं असत.

कर्मचारी बॉसला फोन करून :- खूप पाऊस आहे इथे काय करू ?
पुणेरी बॉस :- माझ्या हाताखाली काम करायचे आहे की घरी बायकोच्या हाताखाली ? ते तूच ठरव.
कर्मचारी:-2 मिनिटात येतो सर.

- Mr. Adhik Kadam (Sr. Clerk)

कॉलेज

कँटीन मधला चहा आणि चहा सोबत वडापाव,
पैसे कुठले खिशात उधारीचंच खात राव!
कट्ट्यावर बसणं लेक्चर चुकवून आणि पोरिंची चेष्टा करणं,
दिसलीच एखादी चांगली तर तिला लांबूनच बघुन झुरण!
बसलोच चुकून लेक्चरला तर शेवटचा बाक ठरलेला,
कुणाच्या तरी वहीतलं पानं आणि पेन सुद्धा चोरलेला!
परिक्षा जवळ आली की मात्र रात्री जागायच्या
डोळ्यात स्वप्नं उद्याची म्हणून झोपाही शहाण्यासारख्या वागयच्या!
पूर्ण व्हायचं एक वर्तुळ एक वर्ष सरायचं,
पुन्हा नव्या पाखरांसोबत जुनं झाड भरायचं!
अशी वर्तुळ भरता भरता कळलं अरे कागदच भरला !
वर्तळ झाल्या कागदाला फक्त सलाम करायचा उरला !
पुन्हा नविन रस्ता
पुन्हा नविन साथी,
जुन्या रस्त्याच्या आठवणीच हाती!!!!!

- **विराज देशमुख,** तृतीय वर्ष बी.फार्म.

"शब्द" बदलला की "अर्थ" बदलतो...

गरिब माणूस दारू पितो.
मध्यमवर्गीय मद्यपान करतो...
तर श्रीमंत लोक Drinks घेतात....

काम केल्यावर गरिबाला मजुरी मिळते.
काम केल्यावर मध्यमवर्गीयाला पगार मिळतो...
तर, काम केल्यावर ऑफिसला Salary मिळते....

गरिब करतो ते लफडं
मध्यमवर्गीय करतो ते प्रेम..
तर, श्रीमंत करतो ते Affair

शब्दाबरोबर शब्द मांडला की कविता होते,
शब्दाने शब्द वाढला की भांडण होते.....
शब्दाने शब्द वाढत गेला की लेखकाची Royalty वाढते..

पैशाने गरिब असला तरी चालेल पण,
मनाने श्रीमंत रहा कारण गरिबाच्या घरावर
लिहलेलं असतं "सुस्वागतम्" !
आणि
श्रीमंताच्या घराबाहेर लिहलेलं असतं
"कुत्र्यापासून सावधान " !!

आयुष्य आईसक्रीम सारखं आहे,
" Test " केलं तरी वितळतं
आणि
"West" केलं तरी वितळतं....

- **विराज देशमुख,** तृतीय वर्ष बी.फार्म.

प्रेम म्हणजे नक्की काय?

अध्यर्वावरच साथ सोडणार नाही तर शेवटपर्यंत साथ देणार...
प्रेम म्हणजे नक्की काय?
इतरांपासून लपवण्यासारखं नाही अभिमानानं सांगण्यासारखं...
प्रेम म्हणजे नक्की काय?
जीवन संपवायला लावणार नाही तर नव्याने जगायला शिकवणार..
प्रेम म्हणजे नक्की काय?

-**अनुया बाबर,**
तृतीय वर्ष बी.फार्म.

Spatula
तुला काय सांगू आता...

दिवस तो आठवतो जेव्हा ॲडमिशन फार्मसीला मिळाले.
फार्मसी असते काय हे त्या दिवशी कळाले.
काय होती ती फ्रेशर्स पार्टी नावातच दडलेल सारं
कॉलेजच्या पहिल्या दिवशी मग लागलं फुल कॉलेजच वारं
कॉलेजच्या या आमच्या गमतीशीर गाथा
Spatula तुला काय सांगू आता.....

चार भिंतीच्या पलिकडच शिक्षण मित्रा मिळाली ही अनुभवाची पेटी
सुख दुःख नाती सारी टेन्शनची तर गोष्टच छोटी
Medichem कधी कळले नाही, ना जमले कधी cognosy चे T.S.
कामं मात्र केली सारी मनाने अपेक्षा नव्हती कधी होण्याची G.S.
वाचून वाचून दु:खु लगतो माथा
Spatula तुला काय सांगू आता.....

वेड लावलं cology ने, ceutics मात्र नेहमीच आवडलं
PA ला लागला condol, पण NSS camp ने आम्हाला घडवलं
Practical ची तर मजाच न्यारी
कधी product स्वत:ला तर कधी मित्रांकडून उधारी
Practical ची ही अशी सगळी गाथा
Spatula तुला काय सांगू आता.....

Syrup ला हा वास कशाचा ampoule ला भार तो पाण्याचा
Sieve च्या मशीनवर मात्र मित्रांनो सूर माझ्या गाण्याचा
अशी ही सारी Practical ची गाथा
Spatula तुला काय सांगू आता.....

बघता बघता चार वर्षे सरले
रक्तच्या नाही पण मैत्रिच्या नात्याने धरले
वाटलं नव्हतं कधी संपेल हा प्रवास
आता वाटतय सारं जीवनच उपवास
ओळख ठेवा मित्रांनो जरी झालात कितिही मोठे
सगळं यश असेल मग त्या मैत्रिच्या नात्यापुढे छोटे.

- पराग नाखरे, एम.फार्म

बापाचं मन...

दूर बघून मालकाला,
हंबरते गोठ्यात गाय।
वळवळ करते जागीच,
तान्ह्या वासराची माय।
वासराच्या आधी चाटे,
ती मालकाच्या ऊराला।
पण ती माया कळत नाही,
पोटच्या त्या पोराला।

बांधा वरचा बैल सूद्धा,
हाक ऐकून परत वळतो।
रागाची हाक असुनही,
गप गुमान रानात पळतो।
आपुलकीचा राग सुद्धा,
कळतो मुक्या ढोराला।
पण तो राग कळत नाही,
पोटच्या त्या पोराला।

जीव लावला जनावराला,
लेकरावानी वागत आली।
पोटची लेकरं मात्र कशी,
परक्या वानी जगत आली।
बाप लेकाचा सुर कधीच,
जुळला नाही सुराला।
जीव लावनं कळलं नाही,
पोटच्या त्या पोराला।

बाप असतो जरा जरा,
नारळाच्या फळा वानी,
बाहेरून कठोर भासे,
आतमध्ये गोड पाणी।
पावसाचं महत्व सुद्धा,
कळेना झालंय मोराला।
तसाच बाप कळत नाही,
जीवंत पणी पोराला।

-अमित शेळके, एम.फार्म

2007 च्या वर्ल्डकपची आठवण...

कुरुम कुरुम पापड खात
ससोबा बसले टीव्ही पाहात
टीव्ही वर होती वर्ल्डकप ची मॅच
आंपायरने लावला शर्टवर बॅच
कॉईन उडवून झाला टॉस
हेड मागून लंकेचा झाला लॉस
धोनीने घेतली पहिली बॉलिंग
सुरु झाली लंकेची बॅटिंग
ससोबांशेजारी होती डॉल
भुवीने टाकला पहिला बॉल
दिलशान संगकारा झाले आऊट
भारतीयांनी केला शाउट
भुवीच्या विकेटची संख्या 2 झाली
हॅट्रिकची आता वेळ आली
बॅट्समनने उडवला लोअर सिक्स
विराटच्या कॅच ने विकेट फिक्स
कॅच मूळं भुवीची हॅट्रिक झाली
छोट्या ब्रेकची वेळ आली
बघता बघता संपली इनिंग
सुरु झाली इंडियाची बॅटिंग
लंकेनी दिले 285 रन्स चे लक्ष
पूर्ण करण्यासाठी आहे आम्ही दक्ष
राहणे नि धवन ने केली सुरवात
रहाणेची विकेट गेली 10च्या आत
मैदानात झाली विराटची एन्ट्री
पेचात पडली श्रीलंका कंट्री
तेवढ्यात पडली धवनची विकेट
युवी आला खेळायला क्रिकेट
विराटची धावसंख्या 100 झाली
तेवढ्यात युवी ची विकेट पडली
मैदानावर आला सुरेश रैना
लंकेच्या टीम ची झाली दैना
रैना नंतर आला गौतम
लनकन्स झाले खूप गंभीर
पुढे विकेटला आला कॅप्टन कुल
दोघांनी रचला धावांचा पूल
बॉलिंगला आला मलिंगा
धोनी म्हणाला घेऊ नको पंगा
शेवटच्या बॉलवर मारून सिक्स
माहीने केला वर्ल्डकप फिक्स
मॅच जिंकून केला भारताने दंगा
प्रेक्षक म्हणले भारताशी
घेऊ नका पंगा
क्रिकेटमध्ये धरायचा नाही भारताचा हात
लंकेवर केली सहा विकेट्स
नि मात...

-**अनुया बाबर,** तृतीय वर्ष बी.फार्म.

चॉईस तुमचा आहे...

दिव्याची अमावस्या कि गटारी अमावस्या
चॉईस तुमचा आहे ।
पुरणाचे दिंड कि गाढवावरून धिंड
चॉईस तुमचा आहे ।
दिवे उजळायचे कि दिवे पाजळायचे
चॉईस तुमचा आहे ।
प्रकाशात न्हायचं कि गटारात लोळायचं
चॉईस तुमचा आहे ।

दीपज्योती नमोस्तुते कि चिअर्सची गीते
चॉईस तुमचा आहे ।
संस्कारांचं दिवाळं कि मदिरापानाचं सोहळं
चॉईस तुमचा आहे ।
दिव्यांची आरास कि बाटली आणि गिलास
चॉईस तुमचा आहे ।
अंधाराला जिंकायचं कि टाईट्ट होऊन झिंगायचं
चॉईस तुमचा आहे ।

- **सौरभ सूर्यवंशी,** तृतीय वर्ष बी.फार्म.

शेवटचा निरोप...

जा तू प्रिये.. जा तू माझी होऊ नकोस,
स्वप्नातही तू आता मला पाहू नकोस..

तुला जे हवं ते आज नाही मजपाशी,
प्रेमाचे शब्द भरविन पण, तरी राहशील उपाशी..

त्या प्रेमळ शब्दाने पोट भरेल,
ना मिळेल सुखाचा निवारा..

मी राहीन आड उभा पण मोडेलच झोपडी आणि बेभान वारा,
सोनं, दागिनं, पैसा याचे ना मिळेल सुख तुला..

आत्ताच घे सावरून, परत कळेल तुझी चूक तुला
देईल कोणीतरी हे सारं,
पण माझ्यासारखं प्रेम तुज वरी कोणी करेल का??

वेदना तुला होताना, तो डोळ्यात आसवं भरेल का..???

-- **निखिल पाटील,** एम.फार्म

सखे

आज अचानक जाणवला,
चार भिंतीतला एकटेपणा.
पाखर आली मोठी झाली,
पंख फुटले उडून गेली.
सोबत उरली फक्त एक
लेखणी अन डायरी.
घर होत भिंती होत्या,
जिवंत मात्र कोणी नव्हतं.
तू सोडून गेल्यानंतर आज कळलं
सखे माझं अस कोणीच नव्हतं
माझं अस काहीच नव्हतं...

-**अनुया बाबर,** तृतीय वर्ष बी.फार्म.

गपद्य . . .

बाई शिकली म्हणून शहाणी झाली नाही.
ती शहाणीच होती आधीपासून. आजही आहे.
उंबरठ्याच्या आत गुलाम असली तरी
सलामाची मानकरी होती ती, आजही आहे.
ओझी वाढलीत तिच्या पाठीवरची.
तरीही वाकली नव्हती ती. आजही नाही.
ती माऊली होती, सावली होती. आजही आहे.
पण बाहुली कधीच नव्हती. आजही नाही.
ती होती कणा. नसून मी पणा.
ती होती जिद्द. सांभाळून हद्द. आजही आहे.
ती नुसती अय्या - बय्या नव्हे, छय्या - पिय्या नव्हे,
नुसती शय्या तर नव्हेच नव्हे.
ती मनाचा हिय्या. होती आणि आहे.
ती पणती, तीच तेल, वात, ज्योत. तीच तेज, प्रकाश.
जळणारी आणि उजळणारी. तेव्हा आणि आताही.
मार्ग खडतर. आयुष्य दुस्तर. मात्र ती कणखर.
सुख कणभर, दु:ख मणभर.
तरी ती घरभर. आभाळ जशी.
आता ती उत्क्रांत. नाना क्षेत्रे पादाक्रांत.
खांद्याला खांदा. पावलासोबत पाऊल.
उज्वल उद्याची चाहूल...

- मयूर जोशी,
तृतीय वर्ष बी.फार्म.

आयुष्य

मनात प्रश्न ठेऊन चेहऱ्यावर
Smile ठेवण मला जमू लागलय
छोट्या गोष्टीचा बाऊ करून
त्यात आनंद शोधून मला जमू लागलय
सगळ्यांन सोबत राहून एकट्याने
स्वतःची कंपनी एन्जॉय करणं
मला जमू लागलय.
कोणी नाही विचारलं तर काय होतंय,
तू तुझ्यासाठी खूप महत्वाची आहेस.
हे स्वतःला समजावणं जमू लागलय
उगीच बालिश वागून
खूपशा गोष्टींकडे दुर्लक्ष करण
मला जमू लागलंय
दिवसेंदिवस माझ्यात होणारा बदल,
मला घडवतोय की बदलवतोय माहिती नाही,
पण हा बदल स्वीकारायला,
माझं मन आपोआप तयार होऊ लागलय..
हृदयाचे ठोके बनवून पाहिलं लोकांना,
पण तो ठोका चुकल्यावर
जीवघेणा त्रास पण बघितलाय,
एकटेपणाची भीती वाटणारी मी
आता एकटेपणाने राहणं मला जमू लागलय...

- **ऋतुजा यादव,** तृतीय वर्ष बी.फार्म.

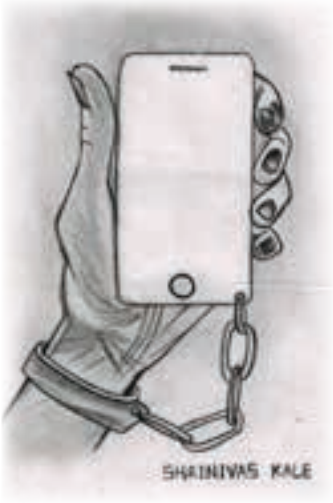
पिंजरा

पिंजरा तोडून मुक्त झालेला तो पक्षी,
जखमी पंखातील रक्ताने हिरव्या
भूमीवर लाल नागमोड उमटवीत
उडतो आहे आपल्या घरट्याकडे
कदाचित आपल्या मृत्यूकडेही
पण त्याच्याकडे करुणेने
पाहणारे सारे आकाशही
हिरावून घेऊ शकत नाही
रक्ताने माखलेला त्याचा आनंद
पिंजरा तोडल्याचा.

- **पूजा माळी,**
तृतीय वर्ष बी.फार्म.

मोहमाया

आजकाल जो तो।
पैशाच्या मोहमायेत अडकलेला दिसतो।
कष्ट, मेहनत, परिश्रमाला।
तो मात्र मागे सारतो।
माणसातील माणूसकी।
आज लोप पावलेली दिसते।
पैशाच्या मोहमायेपायी।
सर्वस्व गमवून बसते।
जिथे मिळेल पैसा।
तिथे तो धावत सुटतो।
सारासार विचार करण्याची।
शक्ती हरवून बसतो।
पैशच्या मोहमायेने।
सुंदर नाती गमावून बसतो।
आयुष्याच्या शेवटी मात्र।
एकटेपणा जणवून पश्चाताप करतो।
म्हणूनच अमुल्य वेळ वाया न घालवता।
पर्यावरण पूरक सुंदर जीवन व्यथीत करा।
कोणत्याही मोहमायेत न अडकता।
पहिले कर्तव्य कर्माला महत्व द्या



- **विक्रांत गुंजळे,** तृतीय वर्ष बी.फार्म.

नवलाई.....

अशी कशी ही मानवाची नवलाई.....
झाडं प्राणवायु देऊन।
मानवाला जगवतो।
पण माणूस मात्र।
झाडांवरच घाव घालतो।
अशी कशी ही मानवाची नवलाई..
झाडांपासून मिळते।
अन्न,वस्त्र, निवारा।
पण माणूस करतो।
निसर्गाला बेसहारा।
अशी कशी ही मानवाची नवलाई..
झाडांमुळे आपण जिवंत आहोत।
हे कळत नाही का मानसाला।
जेव्हा केव्हा कळेल त्याला।
तेव्हा वेळ गेलेली असेल।
अशी कशी ही मानवाची नवलाई.....
जेव्हा कोपेल निसर्ग।
तेव्हा माणूस होईल हतबल।
निसर्गाला वाचवण्यास।
आता तरी व्हा सबल।
अशी ही मानवाची नवलाई..
पर्यावरणाचं रक्षण।
जेव्हा तु करशील।
तेव्हाच तु आपले आरोग्य।
सुद्रुढ , सशक्त करशील।
अशी आहे मानवाची नवलाई..
निसर्गामुळेच आहे मानसाची।
आन, बान अन शान।
पर्यावरणाविषयी जागरूक राहून।
निसर्गाचा राखू मान।
अशी आहे मानवाची नवलाई..

- अक्षय पाटील, तृतीय वर्ष बी.फार्म.

दर्पणात मी...

बघता दर्पणात मी।
उरी आनंद दाटला।
तुझ्या रुपाचे दर्शन होता।
जणू आसमंत फुलला।
मनाला सुखवणारा तूच।
आनंद उर्मी देणारा तूच।
नवचैतन्याची बहर तूच।
जीवनात सुगंध पसरवणारा तूच।
दर्पणात मी बघता।
नित्य तुझेच रुप दिसावे।
जणू आकाशात तेजोमय।
शरदाचं चांदणे फुलावे।
माश्याचं जीवन जसं।
पाण्यातच आहे।
तशी मी तुझ्याचं।
हृदयात नित्य वसली आहे।
तुझ्यातचं मला।
साऱ्या विश्वाचं दर्शन होतं।
हृदयाच्या दर्पणात मला।
फक्त तुझेच चित्र रेखाटलेलं दिसतं।

- अनिकेत शिंदे
तृतीय वर्ष बी.फार्म.

वार्धक्य

वार्धक्यात पतीपत्नीने।
एकमेकांचा आधार बनावा।
जिव्हाळा, प्रेम,आपुलकीला।
भरभरुन नवा बहर यावा।
दोघांनीही अधिकाअधिक।
निसर्गाच्या सहवासात रहावं।
मनाला प्रसन्नता लाभून।
आरोग्यमय जीवन जगावं।
आपल्या फावल्या वेळात।
समाज कार्य करावं।
स्वतः ला कामात व्यस्त ठेऊन।
सुंदर जीवन व्यथीत करावं।
सुंदर कार्याने वार्धक्य है।
आपोआपच दूर होईल।
मन ताजेतवाने राहून।
दुःख दूर दूर जाईल।

- पंकज माने
एम.फार्म

जीवन-पतंग

जीवन म्हणजे पतंग आहे
धागा त्याचा मन आहे
वारा म्हणजे आयुष्य आहे
चालविणार भविष्य आहे.
पतंगाला पंख नसती
जीवनाला वाट नसती
पतंगाप्रमाणे जीवन असती
वाऱ्यासारखे झोके घेते.

आकाशात भरारी घेताना
विचार करावा वाऱ्याचा
जीवनात भरारी घेताना
विचार करावा परिस्थितीचा
पतंगाच्या काडीप्रमाणे
माणसाची दोन मने
अंतरमन बाह्यमन
बदलतात ते जीवन.

- धनश्री पाटील, तृतीय वर्ष बी.फार्म.

भाग्यशाली मी...

भाग्यशाली मी।
ज्यांनी मला जन्म दिला।
सत्य, शील, सुंदरता जपण्याचा।
बहुमोल मंत्र दिला।
भाग्यशाली मी।
ज्यांनी मला सुजान नागरिक बनवले।
ज्ञानाचे उत्तम धडे देऊन।
कर्तव्य कर्म त्यांनी बजावले।

भाग्यशाली मी।
ज्यांची मी अर्धांगिनी झाले।
न्याय, निती,प्रामाणिकपणाचे धडे।
त्यांनी माझ्या रोमरोमात वसवले।
भाग्यशाली मी।
निसर्गाने मला निस्वार्थी घडवले।
आजन्म सहवास लाभून।
मी आरोग्यमय जीवन जगले।
प्रत्येक गुरुच्या उत्तम मार्गदर्शनाने।
सुंदर जीवन मी व्यथीत केले।
खरचं भाग्यशाली मी।
मनातील भाव लेखणीतून
उतरवण्यास सज्ज झाले।

- गणेश पाटील,
तृतीय वर्ष बी.फार्म.

प्रेम म्हणजे तू...

प्रेम म्हणजे तुझा मेसेज
प्रेम म्हणजे माझा फोन
प्रेम म्हणजे रात्र वेडी
प्रेम म्हणजे वेडे दोन
प्रेम म्हणजे तुझा आवाज
प्रेम म्हणजे तुझं हसणं
प्रेम म्हणजे तुझं हसणं
प्रेम म्हणजे तुझं रुसणं
प्रेम म्हणजे बोल ना
प्रेम म्हणजे काय बोलू?
प्रेम म्हणजे माहित नाही
प्रेम म्हणजे काहीच नाही
प्रेम म्हणजे माझे प्रश्न
प्रेम म्हणजे तुझे प्रश्न
प्रेम म्हणजे उत्तर असणं
प्रेम म्हणजे शब्द नसणं

- विकास माळी
एम.फार्म

सासू

सारख्या सूचना देणारी का होईना
पण सासू सर्वांनाच असावी..
कुळाचार शिकवताना हळवी होणारी,
आपल्या संसाराची कहाणी सांगणारी,
तरीही त्यात मीपणा नसणारी,
प्रेमाने सर्वांना खाऊ घालणारी,
प्रेमळ सासू सर्वांनाच मिळावी..
स्त्री म्हणून मर्यादा शिकवणारी,
चुकलं तर शिक्षिकेसारखी समजावून सांगणारी,
ह्यात साखर नाही ग, ह्यात गूळ घालायचा,
त्यात पाणी नाही ग, वाफेवरच शिजवायचा,
अन्नपूर्णा गृही नंदण्यासाठी तरी,
सासू प्रत्येकीला मिळावी..
भाजलं, लागलं तर प्रेमाने कुंकर घालणारी,
वेळ प्रसंगी, असं चालत नाही म्हणून दटावणारी,
आईच्या मायेने सुनेला जवळ घेणारी,
दमलीस का गं.. म्हणून घोटभर चहा देणारी,
माया आईची, धाक बाबांचा असं अजब रसायन असणारी,
घरातली करती सासू सर्वांनाच मिळावी..
प्रेमाचा हा झरा प्रत्येकीच्या वाट्याला येत नाही,
सासूच्या रूपातील आई सर्वांनाच मिळत नाही,
असेल पुर्व पुण्याई तरच लाभते छत्रछाया तिची,
नाहीतर सासरी येऊन, सून कायमची पोरकी..

- अंकिता अणुरे, तृतीय वर्ष बी.फार्म.

ARMY

पुर आला Army बोलवा..
भुकंप आला Army बोलवा..
अतिरेकी आला Army बोलवा..
पोरगा बोर मधे पडला Army बोलवा..
मग 15 ऑगस्ट, 26 जानेवारी च्या कार्यक्रमात
प्रमुख पाहूणे म्हणून नेते कशाला बोलवता...???
Army च बोलवा की...

येत्या 15 ऑगस्ट ला एखाद्या
रिटायर्ड फौजी ला बोलवा
तिरंग्याची खरी किंमत
हि फौजी ला च कळते नेत्याला नाही।

|| जय हिंद ||

- **विकास माळी,** एम.फार्म

आठवणी...

असं नेहमी आपल्याबरोबरच का होतं..
पहिल्यांदा सर्वांप्रमाणेच कॉलेज बोअर वाटतं..
अचानक एक दिवस तो गोड चेहरा वर्गात येतो..
आणि अख्खी कॉलेज लाईफ बदलवून जातो..
मग पकाऊ लेक्चर असले तरी बसावेसे वाटते..
नसेल येत रिझल्ट तरी प्रॅक्टिकल करावेसे वाटते..

लायब्ररी मध्ये तासनतास भुर्रकन उडून जातात..
पुस्तकातील नाही तरी मनातील पाने वाचून होतात..
एक्सट्रा लेक्चर ठेवले तरी त्याला आपली ना नसते..
आता रविवारी पण कॉलेज ला यायची ओढ असते..
असे करता करता कॉलेज ची सगळी वर्षे निघून जातात..
जाता जाता डोळ्यामध्ये मात्र विरहाची आसवं देऊन जातात...!!!

- **निखिल पाटील,** एम.फार्म

माणसं

- **ज्योती म्होप्रेकर,** तृतीय वर्ष बी.फार्म.

लाख मोलाची असतात माणसं
अन रडत, कुढत जगणारी ही माणसं
यशशिखरावर पोहचवणारी ही माणसं
तेथून खाली खेचणारी ही माणसचं !!
सारं काही कळूनसुद्धा न कळून घेणारी ही माणसचं
डोळ्यासमोर घडताना डोळं मिटणारी ही माणसचं
न बोलता बरंच सांगणारी माणसं
बोलता बोलता बरीच गुपितं ठेवणारी माणसं

किड्यांप्रमाणे वागवणारी ही माणसचं
कस्तुरीचा सुगंध जोपासणारीही ही माणसचं
माणसाला वेडं ठरवणारी ही माणसचं
वेड्याला माणूस बनवणारीही माणसचं
माणुसकीला काळीमाही फासणारी ही माणसचं
माणसाला माणुसकी देणारी ही माणसचं
फरक एवढाच की संस्काराच बीज जेथे रुजते
तेथे असतात माणुसकीची माणसं !!

शिकूया शाळा

हसत खेळत शिकूया शाळा
राम्या , गोम्या शाळेला चला
गिरवा आता गणिताचा पाढा
लिहायला आणि वाचायला शिका

नको बुडवू शाळा आता
म्हशी चारायच्या नको बाता
अंगठा दाखवण्यात बरं आहे काय ?
शिकल्याशिवाय आपलं खरं आहे काय ?

शिकलेले लोक आता साहेब झाले
गरीबीतून लोकं पुढे गेले
आपलं मागं राहनं बरं आहे काय ?
शिकल्याशिवाय आपलं खरं आहे काय ?

खेडयातले मागास राहून चालणार नाही
आम्ही पण मागे नाही दाखवू चला
शाळेला चला आता शाळेला चला

शिकून सवरून पुढे जाऊन
करा उध्दार गावाचा
अडाणी राहणं बरं आहे काय ?
शिकल्या शिवाय आपलं खरं आहे काय ?

- वैजनाथ पंडीत राठोड,
प्रथम वर्ष बी.फार्म.

bEst fRiEnd...

मला वाटायचं तिचं माझ्यावर
जिवापाड प्रेम आहे,
फक्त मी विचारायची देरी आहे...
मलाही ती प्रचंड आवडायची
जेव्हा ती मला आपला
" bEsT fRiEnD " म्हणायची,
मनातलं गुपित फोडायची,
लाडात येऊन बोलायची,
लटकं रागावायची,
माझ्याशी भांडायची,
गप्पा मारयची,
माझ्या कविता ऐकायची,
त्यांना उत्स्फुर्त हाद द्यायची.
माझ्यावर प्रेम करायची..
पण मला माहित नव्हतं, ती मला
फक्त आपला
"bEsT fRiEnD" मानायची,

- किरण मेटकरी
तृतीय वर्ष बी.फार्म.

वाट

न्हाऊन जावे मन
या चिंब पावसात
कधीतरी कोसळेल
ह्या माझ्या अंतरात
वाट पाहतोय ऐसा
जणू श्वास दाटलाय
येऊनी बरस तू
माझ्या या अंगणात
थेंब ओघळावा
गाली नकळत
दुःख ही भिजावे
तुझ्या आलिंगनात
सांग कधी येतेस
मिठीत मज घ्याया
सुगंध मातीचा
पुन्हा दरळणारा
आतुरलेले मन
तहानलेले रान
डोळे लावुनी
वाटेवर हे माळ रान...

- विकास माळी,
एम.फार्म

ओढ

तुला भेटण्याची भीती वाटते
रडू फाटण्याची भीती वाटते
कधी तोल जाईल असे वाटते
असे वाटण्याची भीती वाटते

खुल्या काळजाची मुखी ओढ तू
तुझे नाव माझ्याशी जोड तू
गर्दीत मी एकटा वाटतो
असे वाटण्याची भीती वाटते

कसे सांग प्रेम विसरीन ग
तुला मागतो हात पसरून ग
धुके दाट होईल असे वाटते ग
असे वाटण्याची भीती वाटते

तुला शोधून जीव ओढवला
तुझा श्वास श्वासात गंधावला
तुला अजमावे असे वाटते
तुझे आज व्हावे असे वाटते

असे वाटणे ही कसे वाटते
पुन्हा घट्ट व्हावी मिठी वाटते

एकटाच हसतो आज काल मी
तुझ्याच विचारात दिसतोय मी
तुला विसरण्याची भीती वाटते
मना मनात अशीच साचते

- रोहन सूर्यवंशी
तृतीय वर्ष बी.फार्म.

आई तुझ्या ग कुशीत

आई तुझ्या ग कुशीत झोपायचं राहून गेलं
खेळायच होत ग अंगणात
पाण्यासोबत सार वाहून गेलं
पोरं जायची शाळेला
मलाही दप्तर घ्यायचं होतं
आई तुझ्या ग कुशीत झोपायच राहून गेलं
पावसात ओलं चिंब
मलाही व्हायच होत
चिखलाच्या डबक्यात मलाही पडायचं होत
बघ नदी आली घरापर्यंत पण
तुझ्यासोबत खेळायचं राहून गेलं
आई तुझ्या ग कुशीत झोपायचं राहून गेलं
आई आज किती ग मारते मला मिठी
पी घेऊन मला हसवत होती
अग आज मला दूध पाजायच राहून गेलं
आई तुझ्या ग कुशीत झोपायचं राहून गेलं
आई किती ग पाणी होत अंगणात
मला जहाज बनवायचं राहून गेलं
आई तुझ्या ग कुशीत झोपायचं राहून गेलं
खेळायचं होतं ग अंगणात
पाण्यासोबत सार काही वाहून गेलं
सार काही वाहून गेलं

- ऋषिकेश शेवाळे
तृतीय वर्ष बी.फार्म.

साथ माझी असेल

तुझ्या त्या
नजरेतील नजाकतीला
कसलीच तोड नाही
मला आता तुझ्याशिवाय
दुसरी कसलीच ओढ नाही...

तुझ्या निखळ मनात
अडकून राहायला होत
तुझ्या निरागस हसण्यात
हरवून जायला होत...

तुझ्या आवाजातील बंदिश
जीव ओढून नेते
तुझ्या डोळ्यातील अश्रू
माझे प्राणच घेते...

या वेड्याचे प्रेम फक्त
तुझ्यावरच असेल
तू प्रेम दे अथवा नको देऊ
पण साथ मात्र माझी असेल...

- विकास माळी, एम.फार्म

कधी कधी...

कधी कधी जमवावी
स्वतःशीच गट्टी
कधी कधी स्वतःपासून
द्यावी स्वतःलाच सुट्टी

स्वतःलाच म्हणायचं
जा... कर जा मजा..!
काही मिळवायचं म्हणलं
की करावं लागत वजा

कधी कधी सोडून द्यायचं
दर वेळच कॉम्प्रमाईज...!
कधीतरी द्यावं अचानक
स्वतःलाच सरप्राइज...!

कधी कधी कुठेतरी
स्वतःलाच हरवून जायचं
अन् स्वतःलाच स्वतः
आपसूक गवसायच...

-अंकिता अणुरे
तृतीय वर्ष बी.फार्म.

बहिणीची साथ

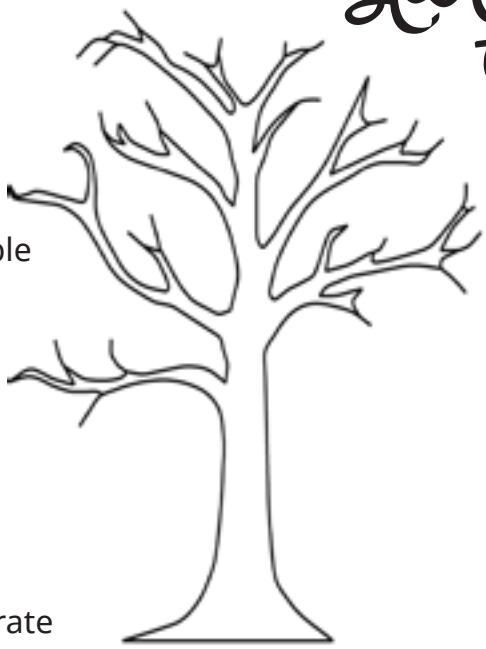
- दिव्या कदम,
तृतीय वर्ष बी.फार्म.

आयुष्यभर सोबत असून
जवळीक कधीच भासत नाही,
एकाच घरात राहून आम्ही
एकमेकांस दिसत नाही,
हरवला तो जिव्हाळ्याचा संवाद
एकमेकांस दोष देऊन चाले वादविवाद,
अशी असते का जुळ्या बहिणीची साथ?
समोर बघून पण स्वतःशी संवाद...

देह वेगळे पण जीवनभर साथ,
तुझ्यात मी का माझ्यात तू,
जीवनाच्या संघर्षात फक्त तूच तू,
फक्त माझीच ग बहीण तू,
देतेस पाठीवर मायेची थाप तू...

दु:ख --------- Delete
आनंद ---------- save
नाते ---------- Recharge
मैत्री ---------- Download
शत्रुत्व ---------- Erase
खरे ---------- Brodcast
खोटे --------- Switch off
तणाव ---------- Not Reachable
प्रेम --------- Incoming
दुस्वास ---------- Outgoing
हास्य --------- Inbox
अश्रु ---------- Outbox
राग --------- Hold
स्मितहास्य ---------- Send
मदत --------- Ok
मन ---------- Vibrate
मग बघा आयुष्यातील "RING TONE"
किती मधुर वाजते ते ----------

- रविना विष्णोई, तृतीय वर्ष बी.फार्म.



अखेरचा प्रवास...

राजा शिकारी गेला
आम्ही शिकारी झालो
प्राण प्रेमी गेला
जंगल प्रेमी गेला
आम्हाला वाली कोण
या जनतेला वाली कोण
शांततेचा धनी गेला
प्रतिष्ठेचा वाली गेला
अहंकाराचा नाश केला
आम्हाला उपदेश देईल कोण
राजा शिकारी गेला
आम्ही शिकारी झालो
वाघ गर्जतो, चाबूक कडाडतो
बिजली चमकते, अंधार जातो,
राजा शिकारी गेला
आम्ही शिकारी झालो

- व्यंकटेश शेडगे, तृतीय वर्ष बी.फार्म.

आयुष्यात दोन व्यक्तींची काळजी घ्या...
पहिली म्हणजे तुम्ही जिंकण्यासाठी
"आयुष्यभर हरत आलेले तुमचे " बाबा "
आणि दुसरी व्यक्ती म्हणजे तुमच्या हरण्याला
जिंकणं मानत आलेली तुमची " आई . "....."

- रविना विष्णोई, तृतीय वर्ष बी.फार्म.

बाप...

काही वर्षांपूर्वी अमेरिकेत मुलांसाठी एक निबंध स्पर्धा घेण्यात आली.
निमित्त होते "Father's Day". विषय अर्थातच "वडील".
खूप जणांनी एकेक/ दोनदोन पानं वडिलांबद्दल भरभरून लिहिले.
एका मुलीने दोन ओळींचाच निबंध लिहिला. अन् तिलाच पहिले बक्षिस मिळाले.
तिने लिहिले होते.....
"बाबा म्हणजे फार वेगळे काहिच नसते, फक्त शर्ट पँट घालणारी ती दुसरी आईच असते."

- पंकज जाधव,
तृतीय वर्ष बी.फार्म.

शिकवून गेलेला महापूर

हा पूर बरच काही शिकवून गेला.
जगण्याच्या मुलभूत गरजा किती हे सांगून गेला.
अबोल लोकांना बोलका करुन गेला.
फेसबुकशिवाय फेस टू फेस संवाद देऊन गेला.
अनोळखी असणाऱ्या फ्लॅटमधील शेजाऱ्यांची ओळख करुन गेला.
विना मोबाईल/सोशल मीडिया कस कनेक्टेड रहायच याच अपडेट देऊन गेला.
वाहनाचे इंधन थांबले तरी माणूस थांबू शकत नाही याची जाण देऊन गेला.
हजारो लीटर पाण्याची टाकी असुनही पावळणी/बोरवेलच्या पाण्याचे महत्त्व सांगून गेला.
संपत्ती कितीही असली तरी सहकार्य मोठी ही संपत्ती दाखवून गेला.
लाइट नसली तरी जीवनात प्रकाश कसा ठेवायचा सांगून गेला.
ज्या चुका निसर्गानियमा विरुद्ध मानवाने केल्या त्या अधोरेखित करुन गेला.
आरत चाललेल्या माणुसकीच्या जगात माणुसकीचा महापूर आणून गेला.
जात धर्म पंत गरीब /श्रीमंत भेद मिटवून गेला.
स्वत:चे अश्रू लपवून इतरांचे अश्रू पुसण्याची हिम्मत देऊन गेला.
हा पूर खूप शिकवून गेला.

- **आसिफ अत्तार,** तृतीय वर्ष बी.फार्म.

मैत्रीचे प्रेम...

- धनश्री कोळेकर
द्वितीय वर्ष बी.फार्म.

तुझ्या हसण्यान
मनाला बर वाटतं...
तुझ्या डोळ्यातून पाणी काढायला
मला नकोस वाटतं...
तुला नेहमी हसत बघावस वाटतं..
आयुष्याचा प्रत्येक क्षण
तुझ्यासोबत जगावस वाटतं...
तुला त्रासात बघायला
मला नकोस वाटतं...
तू लांब गेलास या विचारानं मरावं वाटतं....
पण मरण्यापेक्षा पण
तू परत येणार ह्या विचाराने,
तुझ्या आठवणीत परत जगवस वाटतं...

संघर्ष...

जीवन एक आहे संघर्ष,
तुझ्या मनात जागू दे उत्कर्ष।
अंगी बाळग तू त्यागाचा फटकार
विसरू नको तू आई बाबाचे उपकार।
बुद्धीत येऊ दे तुझ्या शिक्षणाचा आधार ,
दाखवून दे तू या जगाला तुझ्या लेखणीचा प्रहार।
साठवून ठेव मनात तुझ्या दुःख,
पुढे मिळेल तुला सुख ।
घाव घाल मनावरती
तुला जायचय यशाच्या शिखरावरती।

- **अश्विनी शेवाळे,**
चतुर्थ वर्ष बी.फार्म.

लेखणी...

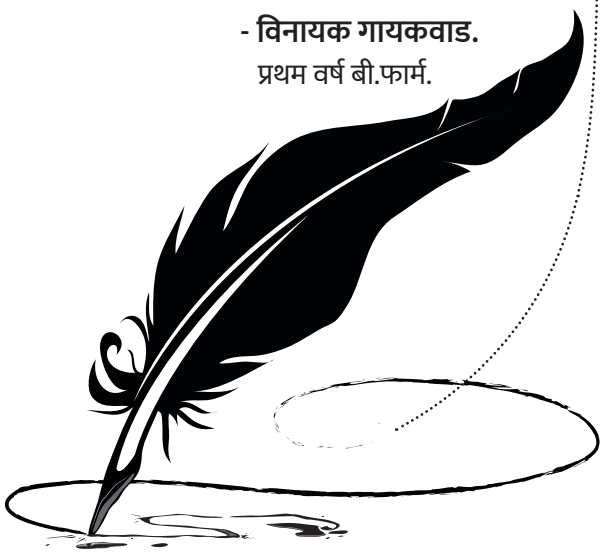
तु आहेस सैनिक, तु आहेस योद्धा,
तु आहेस लढवय्या, तु आहेस मावळा,
तु आहेस बाजीप्रभु, तु आहेस तानाजी,
तु आहेस संताजी, तु आहेस धनाजी.

तुझ्या मुठीतील तुझी तलवार,
ती आता बोटांत धर.
चालून जा शत्रुवर
आणि शत्रुचा खात्मा कर.
तुझ्या तळपत्या तलवारीतून,
पडु दे शत्रुचे काळे-निळे रक्त.

तुझी लेखणी हिच तुझ्या बोटातील तलवार,
कर युद्धाला सुरूवात.
एक युद्ध जिंकल म्हणुन शांत नाही व्हायचं,
एक-एक युद्ध जिंकत जिंकत आपलं यश गाठायचं.

युद्ध जिंकण शक्य नाही आता मुठीत तलवार घेऊन,
युद्ध जिंकायच आपण आता बोटांत तलवार पकडून.

- विनायक गायकवाड.
प्रथम वर्ष बी.फार्म.



अपयशावर यश

म्हणतात अपयश ही यशाची पहिली पायरी
मी अपयशाचा अख्खा जिना चढून बसलो
आई म्हणाली जन्म झाला तुझा बऱ्याच नवसाने
अरे जन्मा पूर्वी पासूनच अपयशाच्या पायऱ्या चढत होतो...

भाकरीचे शिक्षण पूर्ण केले आषाढी एकादशी करता करता
जेव्हा फिरू लागलो नोकरीसाठी सारस्वतंच्या दारी
तेव्हा आवाज आला ओळखीचा आहे का कुणी
अन मी अपयशाच्या पायऱ्या चढत होतो....

इतभर पोटाची आभाळ भर भूख शमवण्यासाठी फिरत राहिलो
बुडत्या काडीचा आधार शोधत राहिलो
माझ्या बेरोजगारीवर प्लेसमेंटवाल्यानी स्वताची खळगी भरली
अन मी अपयशाच्या पायऱ्या चढत होतो....

अंधार पसरला, खचून गेलो,पदरी आली निराशा
संसारच्या राहाटगाड्यामध्ये अभिमन्यू बनत गेलो
काय करावे काही कळेना परिस्थितिचा गुलाम झालो
अन मी अपयशाच्या पायऱ्या चढत होतो.

वाचला इतिहास महापुरुषांचा ज्यांनी खेचून आणली विजयश्री
अन मी अपयशाच्या पायऱ्या चढत चढत,
यशाच्या शिखरावर पोहोचलो ।।

- अश्विनी शेवाळे,
चतुर्थ वर्ष बी.फार्म.

जागे व्हा...

युवकांनो जागे व्हा
आहात तुम्ही भविष्य उद्याचे
नशेच्या आहारी जाऊ नकात
वाटोळे करू नका जीवनाचे....॥

ठेवा तुमच्या मनात आत्मविश्वास
तुमच्यात आहे शक्ति युक्ती...
स्वप्नांसाठी मेहनत करा
वावरू द्या चोहीकडे ज्योती....॥

येणारी पिढी आदर घेईल
अशी काहीतरी गोष्ट करा...
ठेऊ नका मनात लाभ
सत्य अहिंसेचा मार्ग स्वीकारा...॥

नियोजन करा सर्व गोष्टीचे
वेळेचे तुम्ही सदुपयोग करा
अंधाराला सोबती नका करू
उजेडाची तुम्ही साथ धरा....॥

- अश्विनी शेवाळे,
चतुर्थ वर्ष बी.फार्म.

यश

विचार काय करतोस।
काहीतरी करून दाखव
वेळ जाईल निघून
प्रवाहा मध्ये तरुन दाखव..

लाखो आले आणि गेले
बोलून उपदेश सगळे,
स्वतः काही नाही केले
फक्त उपदेश दिले

उपदेशाचे कडू तू पिऊन तरी बघ
हिम्मत आहे तुझ्यात
आयुष्याचा शिखर चढण्याची
स्वतः वर विश्वास ठेवून तर बघ

हीच वेळ आहे
योग्य पाऊल पुढे टाकण्याची
काहीतरी करून दाखवण्याची
घाबरू नकोस, निर्णय घे
यश तुझ्याच हातात आहे....

- अश्विनी शेवाळे,
चतुर्थ वर्ष बी.फार्म.

जीवनात आपलं फक्त लक्ष्य नसतं...

संकटांना कधी कंटाळायचं नसतं ।
त्याला सामोरे जायचं असतं ।।

कोणी नावे ठेवली म्हणून परतायचे नसतं ।
आपलं चांगल काम करायचं असतं ।।

अपमानाने कधी खचायचं नसतं ।
जिद्दीने बळ वाढवायच असतं ।।

नाराज मुळीच व्हायचं नसतं ।
चैतन्य सदा फुलवायच असतं ।।

पाय ओढले म्हणून परतायचे नसतं ।
पुढे अन पुढे जायच असतं ।।

लोकनिंदेला कधी घाबरायच नसतं ।
आपलं चांगल काम करायचं असतं ।।

रागात कोणाला बोलायचं नसतं ।
प्रेमाने मन जिंकायचं असतं ।।

जीवनात खूप करण्याजोगे असतं ।
आपलं फक्त तिकडे लक्ष्य नसतं ।।

- अश्विनी शेवाळे,
चतुर्थ वर्ष बी.फार्म.

जिंदगी और मौत

कल ही की तो बात है
एक तरफ थी ज़िंदगी
एक तरफ थी मौत खड़ी
एक तरफ था पतझड़
एक तरफ था सावन खड़ा
और काल मानो आंधी बन कर
सब कुछ बहा ले जाने को आतुर था
पास थी तो सिर्फ खामोशी
जिसने लपेट रखा था सब कुछ
अपनी अंतहीन चादर में
आंधियों के आने से पहले सब खामोश थें
हाँ बहुत देर तक खामोश रहा सब कुछ
ठीक उसी तरह जिस तरह
किसी तेज आंधी में
बड़े बड़े दरख्त उजड़ जाने के बाद
खामोशी छायी रहती है
फिर तेज आंधियां आयीं
आंधी आने से पहले जो खामोशी थी
आंधी जाने के बाद और भी खामोश हो गए

दर्द जो अभी तक दिल में था
उभर कर चेहरों पर आ गया था
सिसकियों का आलम बढ गया था
दर्द जवान हो गया था
फिर भी जख्मों के सेज पर
खामोशी खामोश थी
निशब्द होकर
कुछ कह रही थी
शायद जीस्त उसकी इंतहा ले रही थी
और वहीं बेबसी खामोश होकर
सिसकियाँ ले रही थी
मगर साँसों ने उम्मीद का
दामन नहीं छोड़ा था

धड़कने अब भी अपनी
रफ्तार से चल रही थीं
हाँ वक्त जरूर कुछ पल को
ठहर सा गया था
पर जिंदगी भी कहाँ हार मानती है
खड़ी रही राहों में मौत के
साँसों की जीवन ज्योति को
हाथों में जकड़े हुये
साथ में दुआओं भरे
कई हाथ जीवन लौ को घेरे
प्रज्वलित कर रहे थे
और ज़िंदगी मुस्कुरा रही थी
यह देखकर कि कई जिंदगियां
उसके साथ खड़ी हैं
कई रंगो की रोशनी में लिपटी
आखों में अनगिनत सपने लिए
जीवन के एक नये सफर पर चलने के लिए
साथ-साथ एक साथ...!!

- **अकिब मोमीन,** तृतीय वर्ष बी.फार्म.

एक बचपन का जमाना था ,
जिस में खुशियों का खजाना था
चाहत चाँद को पाने की थी ,
पर दिल तितली का दिवाना था .....
खबर ना थी कुछ सुबहा की ,
ना शाम का ठिकाना था .....
थक कर आना स्कूल से ,
पर खेलने भी जाना था .....
माँ की कहानी थी ,

परियों का फसना था .....
बारिश में कागज की नाव थी ,
हर मौसम सुहाना था .....
रोने की वजह ना थी ,
ना हँसने का बहाना था.....
क्यूँ हो गऐ हम इतने बडे ,
इससे अच्छा तो वो बचपन का जमाना था.....
वो बचपन का जमाना था .....

- **रविना विष्णोई,** तृतीय वर्ष बी.फार्म.

माता-पिता

मत भूलो माता-पिता की ऐहमियत
दुनिया में हमें उन्होंने बुलाया
उन्होंने हमें खिलाया-पिलाया
उन्होंने हमें पढाया-लिखाया
दुनिया के काबिल उन्होंने बनाया
मत भूलो माता-पिता की एहमियत ॥

उन्होंने हमें जनम दिया है,
हमारा जीवन उनके लिये है,
हम जो करें उनके लिये वो कम है,
यहि हमारा करम, यहि हमारा धरम है
मत भूलो माता-पिता की एहमियत ॥

अपनी सारी जरूरते पूरी होती जहाँ,
माता-पिता का ही आँगन वहां,
सूनना उनकी बातों को,
न करना अनसूना उनको
क्यों कि, माँ स्वर्ग है तो
पिता स्वर्ग का द्वार है
मत भूलो माता-पिता की एहमियत ॥

- निखिल पाटील, एम.फार्म

माँ

माँ एक विश्वास है
मै सोचती हूं
अगर यह विश्वास नही होता ।
तो हम इतने बड़े नहीं होते।
अपने ही पैरो पर खडे नही होते ।
वह माँ है
जीसमे हमे।
गीर-गिरकर उठना सिखाया ।
उठ-उठकर चलना सिखाया ।
चल-चलकर जो हम
सभ्यता के चरम शिखर पर आए है ।
ये सारे रास्ते
हमे उस माँ के ममत्व ने ही बताए है।

- अरुंधती गिरी, तृतीय वर्ष बी.फार्म.

खाकी

खाकी वर्दी वालो पर देश की जिम्मेदारी होती है,
युं ही नही इस वर्दी में इतनी खुद्दारी होती है!!

शहर मै कभी दंगा जब जारी होता है,
एक पुलिस वाला ही कहियोंपर भारी होता है!!

वर्दी उसकी शान है और वर्दी उसकी जान है,
उनके दिल में बस्ता सारा हिंदुस्थान है!!

जो बिना डरे ही दुश्मन से लड जाते है,
ऐसे वीर सिपाही ही भारत की शान बढाते है!!

-शुभम भुसारी,
तृतीय वर्ष बी.फार्म.

13 Funny Meanings of Places in English

1. Large State "Maha-Rashtra"
2. Place of Kings "Raja-Sthan"
3. Mr. City "Shri-Nagar"
4. Rhythm of Eyes "Nayni-Tal"
5. Face "Surat"
6. Unmarried Girl "Kanya-Kumari"
7. No Zip "Chen-Nai"
8. Come In Evening "Aa-Sam"
9. Go And Come "Go-Aa"
10. Answer State "Uttar Pradesh"
11. Make Juice "Bana-Ras"
12. Do Drama "Kar-Natak"
13. Green Gate "Hari-Dwar"

Amazing India !

- Kolekar Dhanashree N.
Second Yr. B.Ph.

My Exam Fear...

My exam was near
I was full of fear
I studied until late at night
For my answer to be right
I was frightened as never
Because i know I wasn't cleaver
I couldn't sleep a wink
All i did was think & think.
If i didn't pass
I would repeat the class
The next day was very creepy
And I was very sleepy
Finally. At the exam table
I tried to be stable
I was very shocked
To see the clock.
For I had slept all through
that silly exam !!!

- Shravya Reddy
Final year B.Ph.

Never Say Never

Try, try but don't cry
If you cry
You will fail to fly..
Trust your work with possible deal
Do anything but from the core of heart,
Don't trust destiny but your work
Work creates your destiny
And not destiny creates work
Nothing is impossible if you plan
Everything is easy, if you are busy
Nothing is easy, if you are lazy ..
So always be in work.
Success will guide your path
So, friends, never say Never..

Nilambari Jadhav, T.Y.B.Ph.

Girls

One of the most creation of the god u can
Feel her "innocence" in the form of daughter
Feel her "care" in the form of sister
Feel her "warmth" in the form of friend
Feel her " Passion" in the form of beloved
Feel her " Dedication" in the form of wife
See her "Divinity" in the form of mother
So thats why
Girls are not liabilites, they are assets.
Female are not emails, don't delete them.

Nilambari Jadhav, T.Y.B.Ph.

7 GREAT QUOTATIONS

1. If you BORN poor, it's not your mistake,
   But if you DIE poor, it's your mistake!
2. Born with personality is an accident,
   By dying in a personality is an achievement!
3. Your birth may be normal,
   But your death should be history!
4. Follow none
   But learn from everyone!
5. Practice like a Devil,
   And play like an Angel!
6. Do or Die is an old concept,
   Do it before Die is new concept!
7. Like all , TRUST Few!

- Jyoti Mali
T.Y.B.Pharm

'CAN' is Word of POWER...

Did is the word of achievements,

Won't is a word of retreat,

Might is word of bereavement,

Can't is a word of defeat,

Should is the word of duty,

Try is the word of each step towards sucess,

Will is the word of volition.

Can is the word of "Power"

- Ms. Aishwarya Patil
T. Y. B.Pharm

PHARMACIST

Any name you dabble in
drugs in a constructive way...
Filling prescription most of the day !!

Painkillers and pills,
to make us well...
Antibiotics that make
our ankles swell !!

Your pharmacist know
how helps us understand...
And you save us money
with your own brand !!

- Ashwini Shewale
Final year B.Ph.

What is Life

Life is an opportunity, grab it
Life is beauty , admire it
Life is blessing, take it.
Life is a challenge, meet it
Life is dream, realize it.
Life is game, play it
Life is promise, fulfill it
Life is sorrow, overcome it
Life is song, sing it.
Life is a struggle, accept it
Life is an adventure, dare it
Life is luck, make it
Life is too precious, do not destroy it...
Life is life , fight it ...

Nilambari Jadhav, T.Y.B.Ph.

EFFECTS OF DRUGS

Over dose of histamine causes histamine block,
Nifedipine, verapamil causes calcium channel block.

Caffeine is a CNS stimulant,which stimulate our brain,
Antipyretic and analgesic cure fever and relief our pain.

Sedatives and hypnotic causes CNS depression,
Heroin,cocaine increase our tension

Levodopa, sinmet give anti parkinsonism effect,
For treatment of psychosis, tranquilizer are perfect.

Autoimmune disease that causes myasthenia gravis,
Excessive doses of anti cholinesterase causes cholinergic crisis.

Angina pectoris creates pain over the chest,
As an anti angina drugs nitro glycerin is best.

Atenolol, propranolol can decrease hypertension,
Atropine, morphine used in pre anaesthetic medication.

Salbutamol used to treat asthma and also heart block,
Adrenaline reduces hypoglycemic and anaphylactic shock.

- Ashwini Shewale
Final year B.Ph.

What is Life ?

Something we like....
But just to live
Is not life
Life has emotion
Both happy & Sad
But just emotions
Is not life.....
Success and failures
Is the way of life.
It makes life complete
But its just a way
Not life...
Love & respect
The main element of life
Makes us to lead life
but just this
Is not life
Then,
What is life?
We don't know
But we still live it
This question
Remains a question
That's why life is?

- Shravya Reddy
Final year B.Ph.

MY INDIA

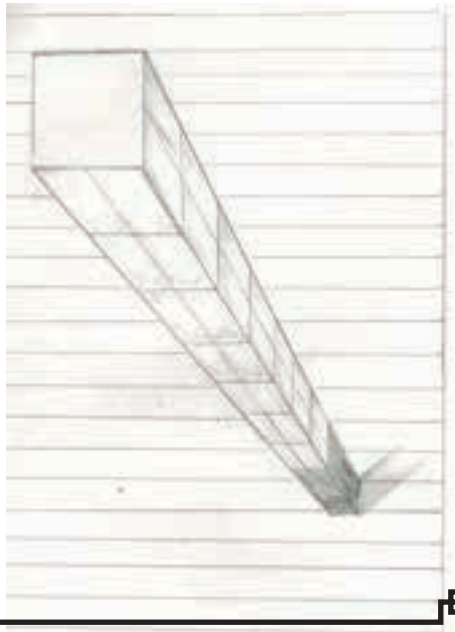
Kashmir for looking
Madras for working
Kerala for dance
Mysore for romance
Ahemadabad for mills
Nagaland for hills

Gulmarg for beauty
Delhi for majestry
Bengal for writing
Punjab for fighting
Bihar for mines
Himachal for pines

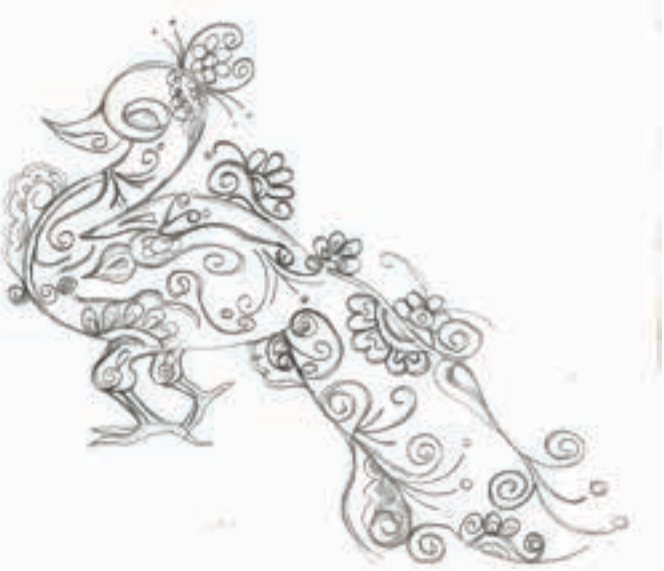
Gujarat for wealth
M.P. for health
U.P. for readers and Finally
Maharashtra for leaders.

- Jyoti Mali
T. Y. B.Pharm

Mr. Adhik Kadam, Sr. Clerk



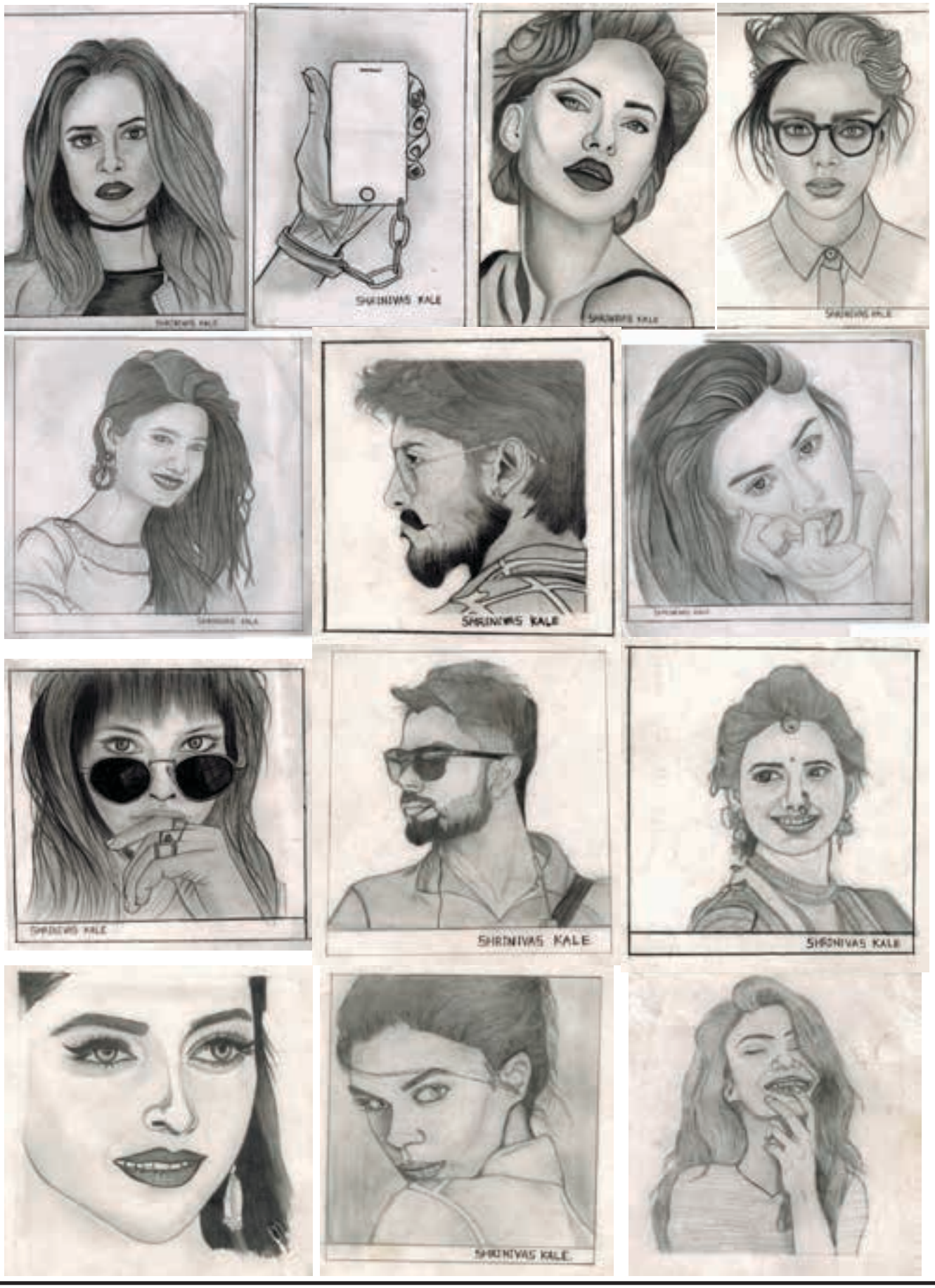
Mr. Yogesh Shete, T. Y. B.Pharm



Ms. Pranali Jadhav, T. Y. B.Pharm

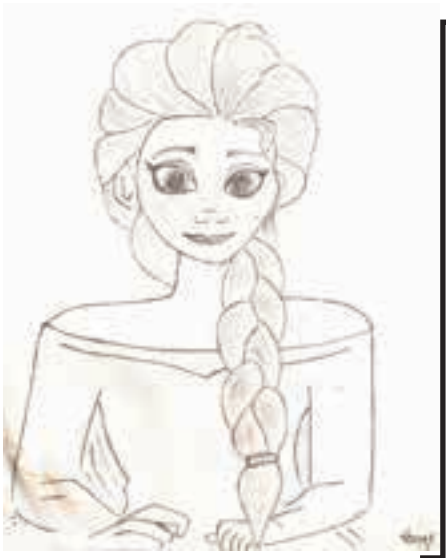
Ms. Ashwini Shewale, T. Y. B.Pharm

Mr. Shrinivas Kale, T. Y. B.Pharm



Ms. Neha Babar, T.Y. B.Pharm

Ms. Vidya Kheradkar, T.Y. B.Pharm



Mr. Vinayak Gaikwad, F.Y. B.Pharm

Ms. Aturta Sawant

T.Y. B.Pharm

Activities in Academic Year 2018-19

Celebration of Yoga Day
on 21-06-2018

Tree Plantation Programme
on 05-07-2018

Guest Lecture by Dr. Akshay Baheti
on 21-07-2018

Celebration of Guru Pournima
on 27-07-2018

Parents Meet
on 28-07-2018

Parents Meet
on 28-07-2018

Campus Placement by 3-Gen Pharma
on 04-08-2018

Blood Donation Camp
on 13-08-2018

Cookery Competition
on 14-08-2018

Celebration of Independance Day
on 15-08-2018

Inaguration of Gymkhana : Pharmafest
on 15-08-2018

Rangoli Competition
on 15-08-2018

Guest Lecture by Mr. Shankar Manjare
on 28-08-2018

Induction Programme
on 29-08-2018

Fresher's Party
on 31-08-2018

Celebration of Dahi Handi
on 01-09-2018

Celebration of Teacher's Day
on 05-09-2018

Guest Lecture on GPAT Guidance
on 11-09-2018

PHARMACIST DAY
on 25-09-2018

Swachh Bharat Mission
on 02-10-2018

Industrial Tour to Biozeen India Pvt. Ltd.,
Bengaluru on 12-12-2018

Visit to Malkapur Nagarparishad
on 24-12-2018

Inspection of Animal House by CPCSEA
Nominee on 06-01-2019

Inaguration of Lead College Competition
on 08-01-2019

Lead College Chess Competition
on 08-01-2019

Lead College Carrom Competition
on 09-01-2019

Cancer Awareness Rally
on 04-02-2019

Guest Lecture by Mr. Rahul Pol
on 09-02-2019

Inauguration of NSS Camp in Ghogaon
on 11-02-2019

NSS Activity
Swacchata Abhiyan in Ghogaon

Visit of Hon. Vice-Chancellor Dr. D. B. Shinde
to College on 27-02-2019

Seminar on Gender Sensitisation
on 06-03-2019

Celebration of Women's Day
on 08-03-2019

Graduation Day Ceremony
on 22-03-2019

Parents Meet
on 23-03-2019

Parents Meet
on 23-03-2019

Farewell Function
on 05-04-2019

Ms. Pooja S. Yadav
Best Outgoing Student 2018-19

Ms. Ankita Hogale & Mr. Pankaj Mane
Winner in Poster Presentation Competition
in Pharma Talent Hunt-2019

Signing MoU with 3-Gen Pharma

Signing MoU with S. G. Phyto Pharma

Dr. Sachin Patil, Mr. Atul Kadam with
M.Pharm students at 3rd Pharm. Tech. IAPST
International Conference in Bhubaneswar

M.Pharm students Industrial Visit at
Mistair Health & Hygiene Pvt Ltd., Kolhapur

M.Pharm students Industrial Visit at
S.G. Phyto Pharma Pvt Ltd., Kolhapur

Mr. Atul Kadam delivering Guest Lecture at
Channabasweshwar Pharmacy College, Latur
on 15th March 2019.


Happy Republic
Proud To Be An Indian
PHARMAfest
2018-19

PHARMAFEST : 2018 – 2019 Sports Activities

Sr. No.	Name of Event	Runner	Winner
1.	Carrom Singles (Girls)	Amruta P. Umardand	Payal J. Pujari
		Second Year B.Pharm	Third Year B.Pharm
2.	Carrom Singles (Boys)	Abhishek R. Patil	Pradip H. Shewale
		Final Year B.Pharm	Third Year B.Pharm
3.	Carrom Doubles (Girls)	Deepali R. Patil	Purva V. Bhosale
		Priyanka V. Dhalkar	Rutuja R. Dhanawade
		Final Year B.Pharm	First Year B.Pharm
4.	Carrom Doubles (Boys)	Abhishek R. Patil	Asif K. Attar
		Amar D. Jadhav	Pradip H. Shewale
		Final Year B.Pharm	Third Year B.Pharm
5.	Chess (Girls)	Rutuja V. Yadav	Ayesha A. Mulla
		Third Year B.Pharm	Second Year B.Pharm
6.	Chess (Boys)	Aniket S. Shinde	Akshay D. Thorat
		Third Year B.Pharm	Final Year B.Pharm
7.	Shot Put (Girls)	Rafiya M. Mulla	Tejaswini B. Patil
		Final Year B.Pharm	Final Year B.Pharm
8.	Shot Put (Boys)	Vikas K. Mali	Sankest V. Desai
		M.Pharm II Year	Third Year B.Pharm
9.	Disc Throw (Girls)	Tejaswini B. Patil	Rutuja S. Mohite
		Final Year B.Pharm	Second Year B.Pharm
10.	Disc Throw (Boys)	Vikas K. Mali	Sankest V. Desai
		M.Pharm II Year	Third Year B.Pharm
11	Badminton Single (Girls)	Snehal D. Kank	Apasana J. Shaikh
		Final Year B.Pharm	Final Year B.Pharm
12	Badminton Single (Boys)	Prafull P. Kolekar	Abhijit P. Khude
		Third Year B.Pharm	Final Year B.Pharm
13	Badminton Double (Girls)	Samartha J. Katkar	Prajakta B. Atkekar
		Dhanashree N. Kolekar	Shraddha D. Kale
		First Year B.Pharm	First Year B.Pharm

14	Badminton Double (Boys)	Abhishek R. Patil	Abhijit P. Khude
		Yash D. Oswal	Aniket K. Patil
		Final Year B.Pharm	Final Year B.Pharm
15	Running (100 M) (Girls)	Tejaswini B. Patil	Prajakta B. Atkekar
		Final Year B.Pharm	First Year B.Pharm
16	Running (100 M) (Boys)	Vinayak D. Gaikwad	Prasad K. Shiralkar
		First Year B.Pharm	Second Year B.Pharm
17	Relay (4x100) (Girls)	Nilambari T. Jadhav Shravya T. Lokawad Afrin N. Naikawadi Dhanashree B. Suryawanshi	Prajakta D. Mohite Tejaswini B. Patil Vidya A. Patil Aishwarya S. Thorat
		Third Year B.Pharm	Final Year B.Pharm
18	Relay (4x100) (Boys)	Prathmesh V. Deshmukh Amar D. Jadhav Abhijit P. Khude Aniket K. Patil	Harshawardhan D. Patil, Rohan S. Patil Prasad K. Shiralkar Akshay S. Todkar
		Final Year B.Pharm	Second Year B.Pharm

Sr. No.	Name of Event	Runner	Winner
19	Throw ball (Girls)	First Year B.Pharm	Final Year B.Pharm
20	Volley Ball (Boys)	First Year B.Pharm	Final Year B.Pharm
21	Kho- Kho (Girls)	First Year B.Pharm	Final Year B.Pharm
22	Kho- Kho (Boys)	Third Year B.Pharm	Final Year B.Pharm
23	Cricket (Girls)	Final Year B.Pharm	Third Year B.Pharm
24	Cricket (Boys)	Second Year B.Pharm	Third Year B.Pharm

PHARMAFEST : 2018 – 2019 Cultural Activities

Sr. No.	Name of Event	Runner up	Winner
1	**Face Painting Day**	Ms. SwapnaliPatil Second Year B.Pharm	Mr. Shrinivas Kale Third Year B.Pharm
2	**Sketch Competition**	Ms. RutujaYadav Third Year B.Pharm	Mr. Shrinivas Kale Third Year B.Pharm
3	**Flower Decoration**	Ms. AkshataChalake& Ms. Priya Mane Final Year B.Pharm	M. DeepaliPatil& Ms. AsmitaSonawale Final Year B.Pharm

4	**Mehendi Competition**	Miss. PranaliJadhav Third Year B.Pharm	Miss. PranaliThorat Second Year B.Pharm
5	**Antakshari**	Miss. AnuradhaJadhav Miss. Sushant Babar Miss. SnehalGaikwad Second Year B.Pharm	Miss. TejasviniPatil Miss. MayuriYadav Miss. DipaliPatil Final Year B.Pharm
6	**Cookery Competition**	Miss. SnehalGaikwad Second Year B.Pharm	Miss. AishwaryaPatil Third Year B.Pharm
7	**Rangoli Competition**	Miss. AmrutaUmardant Miss. SwarupaShirtode Miss. Anuja Veer Miss. SonalGharage Second Year B.Pharm	Ms. AkshataChalake Ms. Priya Mane Miss. SnehalKank Miss. SonaliRaut Final Year B.Pharm
8	**Twins Day**	First Year B.Pharm	Final Year B.Pharm
9	**Singing Solo**	Ms. SharayuGharage Final Year B.Pharm	Mr. ParagNakhare First Year M.Pharm
10	**Singing Duet**	Dhanashree Kolekar& Shivani Kolekar First Year B.Pharm	Sushant Babar & MuskanMulani Second Year B.Pharm
11	**Solo Dance**	Ms. PrajaktaBankar Second Year B.Pharm	Ms. VidyaPatil Final Year B.Pharm
12	**Duet Dance**	Sonam Gavali & Snehal Gaikwad SecondYear B.Pharm	SnehalKank&Apsana Shaikh Final Year B.Pharm
13	**Mime**	Final Year B.Pharm (Akash Veer Group)	First Year B.Pharm (ShivaniKolekar Group)
14	**Musical Drama (Cock-Tail)**	Final Year B.Pharm (Shutter Group)	Second Year M.Pharm (Master Pattern)
15	**Fashion Show – Traditional**	Second Year B.Pharm (SayaliNikam Group)	Final Year B.Pharm (Akash Veer Group)
16	**Fashion Show – Western**	First Year B.Pharm (SiddharthThorat Group)	Third Year B.Pharm (Dinesh Gavali Group)
17	**Group Dance**	Third Year B.Pharm (RituTaralekar Group)	Final Year B.Pharm (VidyaPatil Group)
18	**Traditional Day**	Second Year B.Pharm	Final Year B.Pharm
Winner of General Championship = Final Year B.Pharm			

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सकाळ

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पुढारी

संतकृपाच्या माजी विद्यार्थ्यांचा मेळावा

श्री संतकृपा गुणवत्ता पुरस्कार विद्यार्थ्यांसाठी दिशादर्शक - नवनाथ ढवळे

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बेटी बचाओ-बेटी पढाओ हा संदेश तळागाळापर्यंत पोचवा -गावडे

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लोकमत

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