



St. Joseph's Degree College
(Affiliated to Rayalaseema University, Kurnool)
Sunkesala Road, Kurnool-518004, AP



Department of Biotechnology

Academic Year 2019- 2020
Certificate Course

Stem Cells in Health Care

COURSE CODE: 19-20/BT/CC/001

Duration – 30 hrs./4 weeks

Course objectives:

- ❖ The objectives of this course is to familiarize the students with stem cell technology and its applications for betterment of the society.
- ❖ The course is designed to give a broad view of mammalian stem cells, renewing where they are found in the body, the different types and how they are cultured.
- ❖ The topics will cover basic biology of stem cells its bioengineering and applications to stem cells to potential treatments of human diseases.

Course outcomes:

- ❖ Acquire knowledge on stem cells and their existence in the body, biotechnological applications in stem cell technology.
- ❖ Ability to unravel the culture techniques and manipulate them for stem cell research.

- ❖ Characterize cells for sustaining life process in disease treatments and producing industrial biological products.

Course contents:

MODULE I: Introduction to stem cells – Stem cells and their role in development.

MODULE II: Stem cell characterization and types, Hematopoietic stem cells, induced pluripotent stem cells, stem cells extraction.

MODULE III: Stem cell collection and storage, Stem cell – Banks-types, Bioethics.

MODULE IV: Genetic diseases – Stem cells, Applications of Stem cells – in treatments and Bioengineering.

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DEPARTMENT OF BIOTECHNOLOGY
IQAC LETTER

Kurnool
Date: 16.06.2019

From,

Mrs.L.M. Vinathi Priyadarshini
Head of the Department,
Department of Biotechnology,
St. Joseph's Degree College,
Sunkesula Road, Kurnool-4

To,

Dr.C.V. Sathyanarayana
Vice- Principal,
Co-Ordinator - IQAC,
St. Joseph's Degree College,
Sunkesula Road, Kurnool-4

Sir,

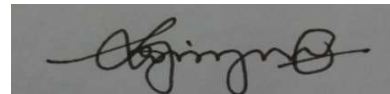
Greetings of the day....!

Sub: Request to accord permission to offer a certificate course for students in ay 2019-2020.

The Department of Biotechnology has decided to offer a certificate course titled "Stem cells in health care" for BMC students. Hence, we request you to accept our proposal and process our letter of intent.

Awaiting for a positive response,

Yours Sincerely,



Mrs.L.M. Vinathi Priyadarshini,
HOD - Dept of Biotechnology

CERTIFICATE COURSE
Organized by
DEPARTMENT OF BIOTECHNOLOGY
St. Joseph's Degree College
(Affiliated to Rayalaseema University, Kurnool)
Sunkesula Road, Kurnool

Participants: Students of II BSc (BMC) - G
Course title : Stem cells in Health care

The Department of Biotechnology organized a certificate course for BMC students on "Stem cells in Health care". The students were provided knowledge on the stem cells basics, diseases which can be treated by stem cell therapy, advancements in stem cells research. Students were benefited from the course. The course was delivered by Mrs. L.M.V Priyadarshini, lecturer and head of Biotechnology and also cleared doubts. Around 53 girls' students were present in the class.

OUTCOMES:

1. Attained basic knowledge on Stem cells.
2. Students develop awareness on several types of disorders and their clinical treatments.
3. Established awareness in successful clinical trials and their present research.



St. Joseph's Degree College
Sunkesula road , Kurnool.



CERTIFICATE
OF
EXCELLENCE

THIS CERTIFICATE IS AWARDED TO

Addakula Uma Devi

on the completion of certificate course in

STEM CELLS IN HEALTH CARE

organized by

DEPARTMENT OF BIOTECHNOLOGY in 2019 -2020

I.M.Vinathi Priyadarshini
HOD
DEPT.OF BIOTECHNOLOGY

Dr.K. SHANTHA
Principal