

## DR. JADUNATH COLLEGE, RASALPUR, BALASORE DEPARTMENT OF ZOOLOGY

DATE: 30/10/2020

TOPIC: "Understanding the role of GPCR"

PLATFORM: Google Meet

NO. OF PARTICIPANTS: 42

## **Activity Report**

- Welcome Address: Sri Dayanidhi Mahapatra, Principal
- Keynote Address: Sri Asim Kumar Roy, HOD Zoology
- 3. Paper Presentation: S. Umashankar, BS-20- 053
  Niharika Mandal, BS-20- 080
- 4. Address by Resource Person: Dr. Govinda Chandra Biswal , Reader in Zoology , Siddheswar Degree College , Amarda
- Question and Answer Session
- 6. Rapporteur: Sri Asim Kumar Roy, HOD Zoology
- 7. Vote of Thanks: Miss Soumya Samal, Lecturer in Zoology
- 8. End of Webinar

## **Outcome Report**

G protein-coupled receptors (GPCRs) are the membrane receptors that act through heterotrimericG proteins (guanosine nucleotide-binding proteins). The human genome encodes over 800 GPCRs for detecting various signals, such as hormones, growth factors, endogenous ligands, light, etc. More than 100 GPCRs are still "orphan receptors" without any known ligands. GPCRs share a common structural arrangement of seven transmembrane helices. An external signal (first messenger) activates a GPCR from outside the cell; it activates the G-protein which produces second messengers. The role of GPCRs in vision, olfaction, gustation and many common human conditions (allergies, depression, cancer, cardiovascular defects, etc.) have been discussed. The overall outcomes were satisfactory.

Signature of HOD

Signature of Principal
Dr. Jadunath College
Rasalpur