# ANNOUNCEMENT

### IAPT National Competition on Essay Writing in Physics (NCEWP - 2023)

Writing makes one perfect, essay writing more so.....

NCEWP is one of the three national competitions being held by IAPT every year. The competition is open to participants in two categories viz., students and teachers (including Science Communicators).

Category A - students of Higher Secondary /Jr. College, UG and PG levels;

**Category B** - *teachers* of Higher Secondary/Jr. College, UG and PG institutions, also Science Communicators working in recognized institutions.

Essay topic for both the categories is:

## **"PHYSICS IN FORENSIC SCIENCE"**

Forensic science or forensics is the scientific processing of information found at the crime scene. The facts derived from the analysis can be used as evidence in the justice system. Forensic Physics is the application of physics for purposes of civil or criminal law. General Physics in forensic science involves electrical, mechanical, chemical and laboratory analysis as well as mathematical formulations based on recognized principles of fundamental physics. The fundamental physics like conservation law of momentum, collision and Newton's laws of motion are having a great and vital application in reconstruction of scene of crime. All the fundamental laws of Physics are very much helpful in analyzing available evidence and drawing appropriate conclusion

Your essay may be written considering the following points:

- (i) How Physics is used in crime detection?
- (ii) The details of the Instruments/technique used in detection process e.g.,
  - (a) microscope/electron microscope
    (b) the mass spectrometer
    (c)use of the photoluminescence phenomenon
    (d)use of ultraviolet light
    (e) use of X-rays etc.(f) software-based imaging methods for facial reconstruction etc.
    (g) Measurement of density (soil & glass examination)
    (h) Refractive index of materials
    - and birefringence for fiber analysis List the types of crimes e.g., road accidents, fire and burns, drowning in water, falling
- (iii) List the types of crimes e.g., road accidents, fire and burns, drowning in water, falling from height, sudden explosion/blast, injuries due to fighting/shooting, other medico legal cases etc.,
- (iv) You may have the data of last five years of various crimes in your area from the Government Hospital / District Police( Forensic) Office, this will give an idea which crimes are having a large no. and what is the growth rate of these during the last five years
- (v) Conclusion

## **General Instructions:**

The essay will be limited to 08 pages including figures/tables etc. type-written in the Times New Roman 11-point fonts, with 1.15 spacing. A format is given below:

#### IAPT National Competition on Essay Writing in Physics: 2023 (NCEWP – 2023)

## **Topic: - "PHYSICS IN FORENSIC SCIENCE"**

Tick Category:ABAuthor's Details (with Affiliation & Signature):-Total No. of Words:-Key Words (Maximum Five)Total No. of Words:-Important Changes in the IAPT Essay Competition NCEWP-2023

All the RC's will conduct the regional level essay competition digitally. Students at all the levels i.e. Higher Secondary/UG/PG can submit their essays through e-mails to President/Secretary/EC member of the respective regional council. Only two entries per institution may be submitted in a category.

- (1) Students will send their entries duly forwarded through respective school/college/institute to the appropriate Regional Council (RC) with all contact details clearly. The RC's will have the initial scrutiny at their level. They will select 2 best essays from each level. Thus each RC will submit 6 best entries to the national competition. RCs may award certificate etc., for their participants. Even the RCs may issue a certification of Participation to those whose Essays are sent to the National Competition.
- (2) For the regional competition, students may write their Essays in Hindi or their regional languages. If such entries are forwarded for the National Competition, then the concerned RCs will translate the Essay in English (with the help of Google translator etc.) <u>Only English Version</u> will be submitted for National Level Competition.
- (3) Similarly, Teachers & Science Communicators will send their entries through e-mails duly forwarded directly to the Coordinator/Member. Retired teachers can self-attest their entry. All entries (in English only) will be scrutinized. All entries will be subjected to the online plagiarism test. All entries will be assessed by three evaluators.

## The last date for essay submission is 30<sup>th</sup> July, 2023

Final entries for the national competition must be submitted in PDF format by e-mail to any one of the following:

- 1. Prof. S. K. Joshi, Coordinator, NCEWP, Mail id:- joshisantoshk@yahoo.com
- 2. Dr. Himanshu Pandey, Member, NCEWP, Mail id:- himanshukrpandey@gmail.com
- 3. Dr. Shivanand Masti, Member, NCEWP, Mail id:- shivanandmasti@yahoo.co.in

\*\*\*\*\*

#### Prof. S. K. JOSHI (Coordinator, NCEWP-2023)