

# **ACADEMICS 2013-14**

Academics Affair Cell  
Presidential Council,  
Students' Gymkhana, IIT Kanpur

## **Conduction Report**

### **Introduction:**

Academics' is an inter-pool event which holds a significant weightage of 18% in the General Championship.

The participating pool structure was:

Mauryans: Hall 3, Hall 7

Marathas: Hall 10, Hall 8

Mughals: Hall 5, Hall 11, Hall 6

Rajputs: Hall 2, Hall 4, GH 1

Hall 1 and Hall 9: Parent halls

### **Data Source:**

The data regarding the SPI of 2013-14(I) of the students (UG+PG) residing in the halls included in the event was required to assign each pool with a score. The data regarding the same was obtained from DOAA's database. The data regarding the hall of residence of all the students was taken from DOSA's database.

### **Methodology:**

The calculations were made in line with the recommendations of the committee for 'Inclusion of Academics in General Championship'. UG students of each pool were divided into different divisions. Each division consisted of all the students in that pool of a particular batch. In PG, division was based on their departments and not on their batches. Highlights of the calculations are as follows:

$$(\sum \text{SPI})/(\text{N}_{\text{Pool-1}}) = \text{SPI}_{\text{Pool-1}}$$

$$\text{SPI}_{\text{Pool-1}}/\text{SPI}_{\text{Year-1}} = \text{Score}_{\text{Pool-1}}$$

$$\sum \text{Score}_{\text{Pool-i}} * \text{N}_{\text{Pool-i}} / \sum \text{N}_{\text{Pool-i}} = \text{Score}_{\text{Pool-Net}}$$

The report submitted by the committee is available in the appendix for quick reference.

### **Assumptions:**

Due to data unavailability, following restrictions were imposed on the dataset.

1. UG Y10 and Y9 students were not included in the event because of their residence in Parent Halls and unavailability of the data regarding their past halls of residence.
2. Since the data regarding thesis credit successful was not made available by the DOAA, the PG students who received the successful thesis credit as a measure of their performance in last semester were not included in the event.

### **Final Results:**

<b>Name of the Pool</b>	<b>Score of the Pool</b>	<b>Rank of the Pool</b>
<b>Mauryans</b>	<b>0.998024277</b>	<b>3rd</b>
<b>Marathas</b>	<b>1.020574319</b>	<b>1st</b>
<b>Mughals</b>	<b>1.005701036</b>	<b>2nd</b>
<b>Rajputs</b>	<b>0.972610105</b>	<b>4th</b>

### **Recommendations:**

1. A Procedure must be initiated by Students' Senate for regularly updating the status of the students to create a consolidated data set containing personal and academic information about the students for whole of their stay in IIT Kanpur.
2. A committee should be formed to look into the pros and cons of the involvement of the PG and 2 Yr. Degree students (MTH/STA/PHY/MTH) in the event. Since the distribution of these students belonging to any academic branch (or year) among the pools is not even, the results are obtained using a small sample for some branches in some pools. Hence due to small sample bias, results might not be the correct manifestation of the academic performance of these students of the particular branch (or year) in the pool.
3. Number of students included in the event in each pool vary significantly. It might have given biased results. Hence Pool structure must be considered keeping in mind the 'Academics' event to get consistent results.
4. Since the calculations do not account for the variance in the samples, the calculation procedure can be revised by constituting a committee under the supervision of a statistician.

## APPENDIX:

### Report

#### Committee for Inclusion of Academics In General Championship

##### Members:

Ayush Gupta (Convener)  
Ankit Bhutani  
Anurag Sahay  
Jyoti Gupta  
Sarthak Chandra  
V Srinivasan

The committee met twice and decided that academics should be included in General Championship. It considered various methods for inclusion and suggests the following:

UG students of each pool shall be divided into different divisions. Each division will have all students in that pool of a particular batch. In PG, division will be based on their departments and not on their batches.

$$(\sum \text{SPI})/(\text{NPool-1}) = \text{SPI}_{\text{Pool-1}}$$

$$\text{SPI}_{\text{Pool-1}}/\text{SPI}_{\text{Year-1}} = \text{Score}_{\text{Pool-1}}$$

$$\sum \text{Score}_{\text{Pool-i}} * \text{NPool-i} / \sum \text{NPool-i} = \text{Score}_{\text{Pool-Net}}$$

For Thesis we consider the ratio of Thesis Credits Successful to Thesis Credits Registered as their

SPI. Thesis score will not be considered for divisions with compulsory courses. The committee recommends the following distribution for GC:

Academics : 20% (*This has been changed to 18 % by the senate*)

Inferno : 18%

Takneek : 18%

Spectrum : 18%

Galaxy : 18%

Green Opus : 10%