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AIT/0323/CNO/Prin

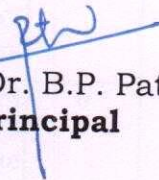
16 Jan 2020

OFFICE OF PRINCIPAL

STANDARD OPERATING PROCEDURE (SOP)

REVISED SOP FOR "BEST RESULT AWARD"

1. SOP for "Best Result Award" is revised.
2. Copy of the same is attached for reference.
3. This policy will be effective for the calculations from AY 2018 - 19.
4. This SOP will be reviewed as and when required.


(Dr. B.P. Patil)
Principal

Copy To -

Director }
Jt Dir } for information please.

HOD Mech }
HOD Comp }
HOD E&TC } for information and needful action please.
HOD IT }
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Army Institute of Technology, Pune-411015
Committee Report for - Review of SOP for Best Result Award

Introduction

- 1) Committee, as under, was constituted vide letter no AIT/0323/CNO/Prin dated 28th Aug 2019 for review of SOP for the best result award.
 - a) Dr J D Patil - Presiding Officer
 - b) Dr (Mrs) Renuka Bhandari - Member
 - c) Prof (Mrs) Geeta Patil -Member
 - d) Prof Praveen Hore - Member
- 2) The recommendations of the committee are based on the feedback received from the principal and HODs (through department representatives) about the lacunas of existing SOP.
- 3) The committee has taken utmost care to give justice to all feedback/guidelines received from the principal and HODs. Notwithstanding, the present or any future revision of the examination process and/or publication of marks and/or credits from SPPU authority, the SOP is subjected to revise.

Recommendations

- 1) **This SOP has been revised by considering following key points/criteria.**
 - a) This SOP is applicable to all UG and PG courses.
 - b) Subjects having theory papers are considered for the best result award including Elective.
 - c) For obtaining result index, 50% weightage is given to quantitative result and 50% weightage is given to qualitative result.
 - d) FE and other branches having intake more than 60, analysis is to be done on division basis
 - e) Level of difficulty of the subject is decided based on average result of the same subject for last three years.
 - f) As the results of revaluation and rechecking are not declared in the specified time period from SPPU authority, the result index is calculated from result of students without revaluation and recounting.
 - g) The analysis is based on the actual marks (not credit) obtained by the students in different subject.

- h) Condition of minimum number of students for recommendation of best result award in case of elective subject of under graduation and all subjects of post-graduation is as follows.
- i. For an elective subject, minimum number of student opts for a particular elective should be one third of sanction intake (i.e. greater than or equal to 20).
 - ii. Similarly for post-graduation class minimum number of students should be one third of sanction intake (i.e. greater than or equal to 6).
- i) In case of newly added subject who doesn't have any equivalent subject, average result of the last three years of that class is to be taken for calculation of the level of the difficulty of the subject.
- j) As this award is given for every year based on result index obtained by given formula award may go to the same subject and/or same teacher.
- k) Teacher who received an award in two consecutive years for the same subject will not be eligible for the best result award for the same subject for third year. In this situation the award will be go the next teacher as per order of merit.
- l) Teacher who has taught a particular subject for that class for more than $\frac{3}{4}$ of the semester is eligible for this award.
- m) The result index is to be roundup up to two decimal numbers.
- n) If the result index of more than one subject in a particular category is same then both of these subject teachers shall be awarded.
- o) As this award was for subject tough in a last academic year, therefore teacher who left the college is also eligible for this ward.

- 2) **Number of Awards** : 05
- Best FE Result : 01
- Best SE Result (All branches) : 01
- Best TE Result (All branches) : 01
- Best BE Result (All branches) : 01
- Best ME-I and ME-II Result : 01
- 3) **Nature of Award** : Prize Money and Certificate
- 4) **Period Under Consideration** : One Academic Year (Two Semester)
- 5) **Performance Evaluation Parameter** : Result of Theory Subject Taught in any One Semester.

6) **Method of Evaluation:**

Quantitative results index (A): Percentage of student's passing in a theory subject (based on total class strength and not on the actual number of appeared students).

$$A = (S_p/S) * 100$$

Where, S = Total class strength

S_p = Number of students passed

Qualitative results index (B) = (B₁ + B₂ + B₃ + B₄ + B₅ + B₆)

Where,

Number of students acquired marks between 90% to 100% = S₁, then

$$B_1 = (S_1 * 1.0) / (S / 100)$$

Where, S = Total class strength

Number of students acquired marks between 80% to 89% = S₂, then

$$B_2 = (S_2 * 0.9) / (S / 100)$$

Number of students acquired marks between 70% to 79% = S₃, then

$$B_3 = (S_3 * 0.8) / (S / 100)$$

Number of students acquired marks between 60% to 69% = S₄, then

$$B_4 = (S_4 * 0.7) / (S / 100)$$

Number of students acquired marks between 50% to 59% = S₅, then

$$B_5 = (S_5 * 0.6) / (S / 100)$$

Number of students acquired marks between 40% to 49% = S₆, then

$$B_6 = (S_6 * 0.5) / (S / 100)$$

Average of quantitative and qualitative result (C) = (A+B) / 2

Index for level of difficulty (D) of subjects based on percentage average result of same subject of the three preceding academic years (based on class strength)

Final Result Index (R) = C/D

Teacher with highest result index 'R' in any one of the subject in any semester may be awarded 'Best Result Award' for FE/SE/TE/BE/ME-I/ ME-II

Minimum cut off for 'Best Result Award' is a Result Index of 60

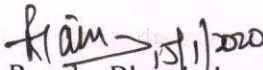
7) **Procedure of evaluation of award:** following procedure is used to decide the best result award

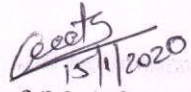
a) Principal will appoint a committee of staff to analyses result for deciding the best result award


- b) Department heads will be asked to submit result analysis (if required excel sheet will be made available to HODs) of different subject of their departments to the committee considering recommendations 1 to 6 mentioned above.
 - c) HODs are required to submit certified hard copy of recommendations along with a soft copy of analysis for verification and validation of all members of the committee.
 - d) Finally, the committee will recommend the list of staff having the best results in a particular class to the Principal.
- 8) The best result will be announced and delivered in a AIT day ceremony.

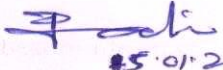
Enclosed:

- a. Present Best Result Policy
- b. Sample Calculations


Dr (Mrs) Renuka Bhandari
Member


Prof (Mrs) Geeta Patil
Member


Prof Praveen Hore
Member


Dr J D Patil
Presiding Officer

Sample Calculations

In order to compare and validate values of result indices calculated by using present SOP and proposed SOP, two case studies are analyzed as follows.

CASE STUDY: 1

In this case result indices are calculated for following assumptions

Assumptions:

- a) Quantities Result: 100 %
- b) Last Three Years Average Result: 100%
- c) Qualitative Result
 - i. All students obtained marks between 90 to 100
 - ii. All students obtained marks between 80 to 89
 - iii. All students obtained marks between 70 to 79
 - iv. All students obtained marks between 60 to 69
 - v. All students obtained marks between 50 to 59
 - vi. All students obtained marks between 40 to 49

Based on above assumptions calculations for result indices as per present SOP and Proposed SOP are done as follows:

1. Result Index using Old SOP

Sr No	Assumption no :3 Marks of all students between	Quantities Result	Avg. Result of Last 3 Years	% Passing Index	% of students ≥ 60	Result Index (Present SOP)
		A	B	$C=(A/B)*100$	D	$R=(C+2D)/2$
i.	90-100	100.0	100.0	100.0	100.00	150.0
ii.	80-89	100.0	100.0	100.0	100.00	150.0
iii.	70-79	100.0	100.0	100.0	100.00	150.0
iv.	60-69	100.0	100.0	100.0	100.00	150.0
v.	50-59	100.0	100.0	100.0	0.00	50.0
vi.	40-49	100.0	100.0	100.0	0.00	50.0

2. Calculations of Result Index using Proposed Revised SOP

Sr No	S	S _p	S ₁	S ₂	S ₃	S ₄	S ₅	S ₆	D	A	B	C=(A+B)/2	Result Index (Proposed SOP) C/D
i.	60	60	60	0	0	0	0	0	100	100	100	100	100.00
ii.	60	60	0	60	0	0	0	0	100	100	90	95	95.00
iii.	60	60	0	0	60	0	0	0	100	100	80	90	90.00
iv.	60	60	0	0	0	60	0	0	100	100	70	85	85.00
v.	60	60	0	0	0	0	60	0	100	100	60	80	80.00
vi.	60	60	0	0	0	0	0	60	100	100	50	75	75.00

3. Comparison of Both Result Indexes

Sr No	Result Indexes	
	Present SOP	Revised SOP
i.	150	100
ii.	150	95
iii.	150	90
iv.	150	85
v.	50	80
vi.	50	75

CASE STUDY: 2

In these case result indices of TE Sem I results of all subjects of all branches are calculated as per present SOP and proposed SOP and are compared.

1. Mechanical Engineering Department

Name of Subject	Result Indexes	
	Present SOP	Revised SOP
DME II	92.83	80.73
HT	96.12	86.83
TOM II	90.62	86.19
TM	50.54	60.48
MQC	130.99	87.02

2. Electronics and Telecommunication Department

Name of Subject	Result Indexes	
	Present SOP	Revised SOP
DC	141.33	102.729
DSP	111.84	88.60093
MCA	64.08	74.06236
EMTL	93.02	91.08135
MECH	142.21	98.921

3. Information and Technology Department

Name of Subject	Result Indexes	
	Present SOP	Revised SOP
TOC	54.34267	76.97
DBMS	117.5633	93.23
SEPM	132.9419	92.13
OS	129.6875	86.92
HCI	143.75	92.83

4. Computer Engineering Department

Name of Subject	Result Indexes	
	Present SOP	Revised SOP
DAA	146.6	92.46
SPOS	93.1	88.31
ES&IOT	118.1	85.99
ISEE	134.51	127.41
WT	116.5	85.55