



INDIAN ACADEMY OF SCIENCES

SCIENCE EDUCATION PANEL

Guidelines for Two-week Refresher Courses

Preamble

Two-week Refresher Courses form an important segment of the activities of Science Education Panel. The primary focus is to enhance the quality of science education at undergraduate and graduate levels. Refresher Courses are thus primarily aimed at helping teachers to add value to their teaching. The Course content thus needs to be designed to meet the above need. While discussion of modern areas of topical interest is important, the Course should be so designed as to have direct relevance to the materials covered in the graduate and undergraduate programmes in universities and institutions in the country and are not necessarily meant to be at an advanced research level.

Planning a Course

1. Topics should be chosen so as to be directly useful in teaching at BSc and MSc levels.
2. Course Director must be a Fellow. If possible, several of the resource persons should also be Fellows. If the Director needs further assistance, a faculty member of the host institution may be invited to be Coordinator to help the Director.
3. Ideally, the number of Resource persons **should not exceed 6 or 7** in the normal course so as to provide maximum interaction between teacher-participants and resource persons.
4. All resource persons — as far as possible — should be from institutions in the vicinity of the venue, so as to minimize on travel expenses.

5. Participants should be selected from all over the country, though there may always be several local participants. Ideally, outstation teachers should be informed of their selection at least 60–75 days before the start of the course so that they have two clear months to book their train tickets.
6. Travel expenses for all participants (three-tier AC fare), and for all resource persons (by two-tier AC fare or in unavoidable circumstances by air availing concessional fares with prior approval) will be met by Academy.
7. Local hospitality — transport, accommodation, food — for all participants and resource persons will be met by Academy.
8. Course Director to open a separate bank account in the name “Academy Refresher Course on”. Academy will release funds for the course as follows: 25% before 6-8 weeks, 65% before 2 weeks; 10% after receiving statement of accounts. The Course Director to inform the Academy about the details of the bank account.
9. In all publicity material such as programme sheet, invitation cards, etc. the name of “Indian Academy of Sciences” should be given reasonable prominence comparable to that given to the host institution.

During the Course

10. Books relevant to the subject worth upto Rs. 1000/- per participant (either bought by the Course Director and distributed at the Course or to be purchased by participants, and bills later reimbursed by the Academy).
11. Experimental kits to participants — depending on particular course (approximately Rs. 1 lakh to Rs. 1.5 lakhs for 20–25 participants).
12. Cost of a half-day or 1-day excursion (preferably on the intervening Sunday) about Rs. 7500/-.
13. One or two special dinners, mid-way and/or at end with any special local invitees.
14. A form (to be provided by Academy) to obtain feedback on the Course to be distributed to teachers and got back before the end of the Course.
15. Participants to be given a certificate by the Course Director (specimen enclosed).

After the Course

16. Lecture honorarium to resource persons: Rs. 750/- for each lecture. These should form part of the budget of the local hosts and can be disbursed to the resource persons after the programme along with a letter of thanks from the Course Director.
17. Honorarium (not exceeding Rs. 1500/- per person) may be paid by the Course Director to 4 or 5 supporting staff who helped in the conduct of the Course.
18. Token honorarium to Course Director (Rs. 3000/-) and the Course Co-Ordinator, if any, (Rs. 2000/-) will be paid directly by the Academy.
19. A copy of the full programme (with time table), the list of participants and resource persons with full address and copies of photographs/group photograph if any taken to be sent by Course Director to Academy.
20. A report (in 2 pages) may be sent by Course Director or Course Co-ordinator to Academy containing such information as number of applicants, number selected, number finally participated including local participants, subjects covered, a summary of views by teachers/resource persons and any other useful information.
21. A statement (along with supporting vouchers) giving break-up of expenditure on items such as (a) travel (b) lodging (c) food (d) books/exp. kits to participants (e) contingencies etc. may be sent by Course Director to Academy.

Sample budget

(for 25 outstation teachers, 10 local teachers and 5 Resource Persons)

	Rs. in lakhs
1. TA to participants including minor incidental expenses (Rs. 3500/- per head. Academy TA forms can be photocopied, specimen enclosed)	1.05
2. Lodging, Breakfast, lunch, dinner, coffee/tea between sessions on each working day @ Rs.250/- per head for 14 days	1.25
3. Honorarium for lectures @ Rs.750/- for each lecture	0.40
4. Books for participants @ Rs. 1000/- per participant	:
5. Contingency (postage, stationery, excursion, photocopying charges and honorarium to supporting staff)	:
	<u>0.30</u>
	3.30
6. Experimental kit (only in case of Experimental course)	1.50

Total	4.80
