

PROJECT PROPOSAL

FOR

ESTABLISHING CO-ED

POLYTECHNIC COLLEGE

AT

**ANOOPPUR, DATIA, KATNI,
MANDSOUR, RAISEN, REWA,
SHAJAPUR (M.P.)**

WITH CENTRAL ASSISTANCE

2007-08

**Proposal Submitted by
Technical Education & Training Department,**

Government of Madhya Pradesh

1. **Diploma level institutions in Madhya Pradesh:** Madhya Pradesh has 44 Polytechnic Colleges having intake capacity of 9094 seats for Diploma in Engineering/Technology/Architecture/Vocational and Occupational Technology Courses. Out of the total 44 Polytechnics, 13 Women's Polytechnic Colleges conduct Diploma courses exclusively for women students having a capacity of 1595 seats.
2. **Justification for starting Polytechnics at 07 Districts** Central government is providing assistance to establish new polytechnics in special focus districts based on the criteria of educationally backward minority concentration / schedule V areas/ schedule VI areas and / SC female literacy rate less than 10% etc. where no polytechnic level institute exists as of now. Based on above criteria, the Central government has asked to indicate the names of districts where no polytechnic exist as of now. The deptt. has identified 12 such districts out of which 05 districts have been identified in phase-I of NCM Programme, already in the process of establishing polytechnics with central govt. assistance under NCM programme. The remaining 07 places are: Datia, Rewa, Shajapur, Raisen, Katni, Anuppur, Mandsoor.
3. **Courses Proposed:**

| S.No. | Name of the Place | Proposed Courses | | Intake |
|--------------|--------------------------|-------------------------|---------------------------------|---------------|
| 1. | Datia | I | Packaging Technology | 60 |
| | | II | Sugar Technology | 60 |
| | | III | Multimedia Tech. & Animation | 60 |
| | | IV | Electronics and Telecom. | 60 |
| 2. | Rewa | I | Civil Engg. | 60 |
| | | II | Fire Tech. & safety | 60 |
| | | III | Computer Hardware & Maintenance | 60 |
| | | IV | Multimedia Tech. & Animation | 60 |

| S.No. | Name of the Place | Proposed Courses | | Intake |
|--------------|--------------------------|-------------------------|--------------------------------------|---------------|
| 3. | Shajapur | 1 | Solvent Extraction Technology | 60 |
| | | II | Electronics and Telecom | 60 |
| | | III | Computer Sc. & Engg. | 60 |
| | | IV | Computer Hardware & Maintenance | 60 |
| 4. | Raisen | 1 | Medical Electronics | 60 |
| | | II | Laboratory Operation and Maintenance | 60 |
| | | III | Computer Sc. & Engg. | 60 |
| | | IV | Pharmacy | 60 |
| 5. | Katni | 1 | Maintenance Engg. | 60 |
| | | II | Fabrication Technology | 60 |
| | | III | Chemical Engg. | 60 |
| | | IV | Computer Sc. & Engg. | 60 |

| S.No. | Name of the Place | Proposed Courses | | Intake |
|-------|-------------------|------------------|---------------------------------------|--------|
| 6. | Anuppur | 1 | Travel and Tourism | 60 |
| | | II | Hotel Management & Cattery Technology | 60 |
| | | III | Computer Sc. & Engg. | 60 |
| | | IV | Agriculture Processing | 60 |
| 7. | Mandsour | 1 | Library Information & Science | 60 |
| | | II | Electronics and Telecom. | 60 |
| | | III | Computer Sc. & Engg. | 60 |
| | | IV | Modern Office Management | 60 |

4. Infrastructure requirements (Typical for one polytechnic, as per AICTE norms modified and adopted by the state):

I. Land requirements: 5.00 acre of land is required to establish one polytechnic in non-metro areas. State government will provide land at no cost.

II. Civil Works:

a. Building: With intake of 60 students in each course, total student strength will be 720 for four courses of 3 years' duration. Therefore as per the norms for institution building @11.70 square meter per student, total built up area required will be 8672.80 sq. mt. The

approximate cost of construction for this area @ Rs. 5000.00 per sq. mt. works out to be Rs. 433.60 lakhs.

b. Residential Staff Quarters:

| S. No. | Description | Staff quarters for 50% of strength | Built up area of each quarter (in sq. mt.) | Total approximate cost @ 5000=00 per sq. mt. (in lakhs) |
|--------|----------------------|------------------------------------|---|--|
| 1. | Principal's quarters | 01 | 150 | 7.50 |
| 2. | HOD's flat | 04 | 120 | 24.00 |
| 3. | Warden's flat | 01 | 120 | 6.00 |
| 4. | Lecturer's flat | 08 | 100 | 40.00 |
| 5. | Administrative staff | 04 | 65 | 13.00 |
| Total | | 83 | - | <u>90.50</u> |

c. Hostel-

- Boys: Hostel accommodation for 200 boy students should be provided. Taking an area of 14 sq. meter per student. Total area required for 200 students will be 2800 sq. mt. Taking cost of construction @ Rs. 5000 per sq. mt. Cost of construction for 200-seated hostel will be Rs. 140.00 lakhs.
- Girls: Hostel accommodation for 100 girl students should be provided. Taking an area of 14 sq. meter per student. Total area required for 100 students will be 1400 sq. mt. Taking cost of construction @ Rs. 5000 per sq. mt. Cost of construction for 100-seated hostel will be Rs. 70.00 lakhs.

Total costs of civil works: Rs. 734.10 lakhs.

III. Computer centre:

| Sl. No. | Particulars | Norms for Engg./Tech. | Requirement | Approximate Cost (in lakhs) |
|---------|-----------------------------|-------------------------------------|---------------------------------|-----------------------------|
| 1 | No. of Computer terminals | Terminal-Student Ratio=1:4 | 180 (@ Rs. 25,000 per computer) | 45.00 |
| 2 | Hardware specification | P4 Processor (latest configuration) | - | - |
| 3 | No. of terminals on LAN/WAN | 50% of no. of terminals | 90(LS rate) | 1.40 |

| | | | | |
|-------|-------------------------|--|-------------------------------|--------------|
| 4 | Relevant legal software | At least 2 (two) system software packages and 8 (four) Application Software Packages | sufficient quantity | 4.00 |
| 5 | Peripheral(s) | Printer: Computer Terminal ratio=1:10 | 18 (@ Rs. 10,000 per printer) | 1.80 |
| Total | | | | <u>52.20</u> |

IV. Library:

| Description | No. of Books for Technical Subjects | | No. of Books for Sc.& Humanities | No. of Journals and periodicals | Photocopier |
|-------------------------------|-------------------------------------|-----------------------------|----------------------------------|---------------------------------|--------------------|
| | No. of titles | No. of Volumes | (Volumes) | | (Nos.) |
| | 375 per Course | 1500 per Course | 600 | 05 per course | 1 |
| Requirements for four courses | 6000 volumes | | 600 | 20 | 1 |
| Costs (in lakhs) | 15.00 (@ Rs. 250 per volume) | 1.50 (@ Rs. 250 per volume) | 0.50 (@ 2500 per journal) | | 1.00 |
| Total | | | | | <u>18.00</u> lakhs |

V. Staff requirements:

a) Faculty and other staff:

| Sl. No. | Description and scale | Required quantity for 720 students of four courses (Minimum required Teacher-student ratio 1:20) | Average Salary (per month per person) | Approximate yearly expenditure (in lakhs) |
|---------|--|--|---------------------------------------|---|
| 1. | Principal (16,400-20,000) | 01 | 29,300 | 3.52 |
| 2. | Head of deptt. (12,000-18,300) | 04 | 24,084 | 11.56 |
| 3. | TPO (12,000-18,300) | 01 | 24,084 | 2.89 |
| 4. | Lecturer (Technical - 22 Humanities & Science- 05) (8,000-13,500) | 27 | 12,980 | 42.05 |

| | | | | |
|-------------|--|----|--------|--------------|
| 5. | Astt. Workshop Supdt. (8,000-13,500) | 01 | 12,980 | 1.55 |
| Total | | 34 | - | 64.24 |
| Other staff | | | | |
| 6. | Librarian (8,000-13,500) | 01 | 12,980 | 1.56 |
| 7. | PTI (8,000-13,500) | 01 | 12,980 | 1.56 |
| Grand Total | | | | <u>67.36</u> |

b) Technical staff:

Number of laboratories for four courses = 20
(Taking 5 per course)
Science = 02
(one for Physics and one for Chemistry)
Total = 22

| S. No. | Staff required | Nos. required | Average Salary (per month per person) | Approximate yearly expenditure (in lakhs) |
|--------|--|---------------|---------------------------------------|---|
| 1. | Workshop Instructor/ Technical Assistant (4,500-7,000) (Four per course i.e. one for two labs) | 12 | 7,380 | 10.62 |
| 2. | Computer Operator (4,500-7,000) | 04 | 7,380 | 3.54 |
| 3. | Maintenance Technician (4,000-6,000) | 01 | 6,400 | 0.76 |
| 4. | Laboratory technician (4,000-6,000) One per course | 04 | 6,560 | 3.16 |
| 5. | Instrument repairer (4,000-6,000) | 01 | 6,560 | 0.78 |
| 6. | Electrician (3,050-4,590) | 01 | 5,002 | 0.60 |
| 7. | Skilled Assistant (3,050-4,590) One per course | 03 | 5,002 | 1.80 |
| Total | | 26 | -- | <u>21.26</u> |

c) Office staff:

| S. No. | Description | Required quantity for 720 students of four courses | Average Salary (per month per person) | Approximate yearly expenditure (in lakhs) |
|--------|--|--|---|--|
| 1. | Head Clerk (4,500-7,000) | 01 | 7,380 | 0.88 |
| 2. | Stenographer (4,500-7,000) | 01 | 7,380 | 0.88 |
| 3. | Library Clerk (4,500-5,200) | 01 | 7,380 | 0.88 |
| 4. | Assistant Grade-II (4,000-6,000) | 01 | 6,560 | 0.78 |
| 5. | Record keeper (4,000-6,000) | 01 | 6,560 | 0.78 |
| 6. | Caretaker (4,000-6,000) | 01 | 6,560 | 0.78 |
| 7. | Matron (4,000-6,000) | 01 | 6,560 | 0.78 |
| 8. | Accountant (4,000-6,000) | 01 | 6,560 | 0.78 |
| 9. | Steno-typist (3,050-4,590) +125 p.m. special pay | 01 | 5,127 | 0.61 |
| 10. | Assistant Grade-III (3,050-4,590) | 04 | 5,002 | 2.40 |
| 11. | Store Keeper (3,500-5,200) | 01 | 5,740 | 0.68 |
| 12. | Peon (2,550-3,200) | 04 | 4,182 | 2.00 |
| 13. | Sweeper | 04 | Fixed 2500 (on collect orate rate) | 1.20 |
| 14. | Chowkidar | 04 | Fixed 2500 (on collect orate rate) | 1.20 |
| 15. | Gardner | 01 | Fixed 2500 (on collect orate rate) | 0.30 |
| 16. | Waterman | 01 | Fixed 2500 (on collect orate rate) | 0.30 |
| 17. | Hammal | 02 | Fixed 2500 (on collect orate rate) | 0.60 |
| Total | | 30 | -- | <u>15.83</u> |

VI. Furniture requirements:

- a. College building: @ Rs. 2500 per student. For total 720 students, the approximate cost of furniture will be Rs. 18.00 lakhs.
- b. Boy's hostel: @ Rs. 2000 per student. For 200 students, the approximate cost of furniture will be Rs. 4.00 lakhs.
- c. Girl's hostel: @ Rs. 2000=00 per student. For 100 students, the approximate cost of furniture will be Rs. 2.00 lakhs.

Total costs of furniture = Rs. 24.00 lakhs

VII. Equipment requirements: @ Rs. 37.50 lakhs per course. For four courses, the approximate cost of equipments will be Rs. 150.00 lakhs.

VIII. Miscellaneous fund: Miscellaneous fund for purchase of raw materials and consumables, training expenses, payment of electricity/water/telephone charges, POL and stationary will be required. Taking these charges @ Rs. 3,000=00 per student. For total 720 students, miscellaneous expenditure will be Rs. 21.60 lakhs per annum.

IX. Desirable requirements:

- a. Digital Library: Approximate cost of setting up digital library will be 3.00 lakhs.

Financial Proposals at a glance for establishing seven Polytechnic:

| <u>(A). Non-recurring expenditure:</u> | | |
|---|--|---|
| S. No. | Item | Amount (in lakhs) |
| 1. | Land | To be provided free by state government |
| 2. | Civil construction work i. College Building – 433.60 lakhs ii. Principal & Staff quarters – 90.50 lakhs iii. Boy's hostel - 140.00 lakhs iv. Girl's hostel - 70.00 lakhs | 734.10 |
| 3. | Computer Centre | 52.20 |
| 4. | Library i. General – 18.00 lakhs ii. Digital services - 3.00 lakhs | 21.00 |
| 5. | Furniture i. College – 18.00 lakhs ii. Hostel - Boys- 4.00 lakhs iii. Hostel - Girls- 2.00 lakhs | 24.00 |
| 6. | Equipment | 150.00 |
| Total (one polytechnic only) | | 981.30 |
| Total for 07 polytechnics (A) | | 6869.10 |
| <u>(B). Annual Recurring expenditure:</u> | | |
| 1. | Salaries i. Faculty & other staff – 67.36 lakhs ii. Technical staff – 21.26 lakhs iii. Office staff – 15.83 lakhs | 104.45 |
| 2. | Miscellaneous fund (Water/Electricity/Telephone/Raw materials and consumables etc.) | 21.60 |
| Total (one polytechnic only) | | 126.05 |
| Total for 07 polytechnics (B) | | 882.35 |
| GRAND TOTAL (A+B) | | 7751.453 |