Sanction of the Governor of Haryana is hereby accorded for the new scheme "Accreditation of Govt. Polytechnics in the State of Haryana under Swarn Jyanti Scheme" amounting to ₹ 115.00 Crore. The accreditation of all 23 existing Govt. Polytechnics functioning from their own campuses has to be taken up in a phased manner over a period of 4 years from 2016-2017 to 2019-2020 as per the details given below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Expenditure (₹ in Crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-17</td>
<td>5.00</td>
</tr>
<tr>
<td>2017-18</td>
<td>40.00</td>
</tr>
<tr>
<td>2018-19</td>
<td>40.00</td>
</tr>
<tr>
<td>2019-20</td>
<td>30.00</td>
</tr>
<tr>
<td>Total (₹ in Crore)</td>
<td>115.00</td>
</tr>
</tbody>
</table>

This scheme for accreditation of 23 Govt. Polytechnics will run under the existing scheme namely "2203-Technical Education-105-Polytechnic-59-Development of Govt. Polytechnics" and the required funds will be met from this scheme. The details of the scheme are annexed as Annexure - I.

This issues with the concurrence of Finance Department as conveyed vide their U.O. No. 37864-4FD-11/2016, dated 08.12.2016.


Anil Malik
Principal Secretary to Govt. Haryana,
Technical Education Department, Chandigarh

Endst. No. 35/112/2016

A copy of the above is forwarded to the following for information & necessary action:

1. The Principal Accountant General (Audit), Haryana, Sector 33-B, Chandigarh.
2. The Principal Accountant General (A&E), Haryana, Sector 33-B Chandigarh.
3. The Director General, Technical Education Haryana, Panchkula w.r.t CFMS No. 6363 dated 18.11.2016.
4. The Additional Secretary, Haryana State Board of Technical Education, Panchkula.
5. The Additional Director (Training), Directorate of Technical Education, Haryana, Panchkula.
6. Joint Director (Procurement), Directorate of Technical Education, Haryana, Panchkula.
8. Treasury Officer Panchkula, Haryana.

Superintendent,
for Principal Secretary to Govt. Haryana,
Technical Education Department, Chandigarh

A copy is forwarded to the Additional Chief Secretary to Govt. Haryana, Finance Department, Chandigarh in aforesaid reference for information.

Dated: 30 - 12 - 2016

Superintendent,
for Principal Secretary to Govt. Haryana,
Technical Education Department, Chandigarh

To

The Additional Chief Secretary to Govt. Haryana,
Finance Department, Chandigarh

U.O. No. 35/112/2016

Dated: 31-12-2016
Annexure-I

Name of the Scheme: Accreditation of Govt. Polytechnics in the State of Haryana under Swarn Jyanti Scheme.

Background

Technical Education plays a very vital role in Human Resource Development of the country by creating skilled manpower, enhancing industrial productivity and improving the quality of life. The aim of the Polytechnic education in particular is to create a pool of skill based manpower to support shop floor and field operations as a middle level link between technicians and engineers. The pass-outs of Diploma level Institutions in Engineering & Technology play an important role in managing shop-floor operations. It is further an established fact that small and medium Industry prefer to employ Diploma Holders because of their special skills in reading and interpreting drawings, estimating, costing and billing, supervision, measurement, testing, repair, maintenance etc.

During the last decade, there is tremendous increase in the number of technical Institutions including Polytechnics in the country as well as in the Haryana State.

Over the years, the diploma programmes have deteriorated losing the skill components, which has resulted in their being just a diluted version of degree education. The organizations employing them have to train them all over again in basic skill. Major problems being faced by the Polytechnic education system are:

1. Non - availability of courses in new and emerging areas.
2. Inadequate infrastructure facilities and obsolete equipment.
3. System unable to attract quality teachers.
4. Inadequate financial resources.
5. Inadequate training and retraining of faculty and staff.
6. Antiquated Curricula.

The unprecedented expansion of the technical education sector in recent years has brought in its wake questions about the quality of education imparted, the competence of the Diploma Holders and their relevance to the current technical manpower needs of our country. The challenge is to ensure its quality to the stakeholders along with the expansion. To meet this challenge, the issue of quality needs to be addressed, debated and taken forward in a systematic manner.

Accreditation:

Accreditation is the principal means of quality assurance in technical education and reflects the fact that in achieving recognition, the institution or program of study is committed and open to external review to meet certain minimum specified standards and also seeks ways to enhance the quality of education.
The main objectives are:

a. Assess and grade the courses and programs offered by institutions.
b. Stimulate the academic environment and quality of teaching in these institutions
c. Contribute to the sphere of knowledge in its discipline.
d. Motivate institutions of technical to adopt teaching practices that groom their students for the innovation and development of leadership qualities.
e. Encourage innovations, self evaluation and accountability in technical education;
f. Promote necessary changes, innovations and reforms in all aspects of the technical institutions for the above purpose

g. Help institutions realize their academic objectives.

The benefits are:

- Demonstrates accountability to the public
- Facilitates continuous Quality Improvement
- Improves staff morale
- Recognizes the achievement and innovations
- Facilitates information sharing
- Priority in getting financial assistance helps the Institution to know its strengths, weaknesses and opportunities
- Initiates Institutions into innovative and modern methods of pedagogy
- Promotes intra and inter-Institutional interactions

1. In India, at present there are two agencies which grant accreditation:
   i) National Board of Accreditation (NBA) a body in ambit of AICTE
   ii) National Accreditation and Assessment Council (NAAC) is in the ambit of UGC.

   NBA accredits programmes while NAAC accredits institutions.

2. The eligibility conditions for Accreditation by NBA are as follows:
   i. The programmes of the institutions shall be declared for eligible for accreditation process provided the Institution and its programmes are AICTE approved.
   ii. The concerned institute is recognized either by AICTE or the state authorities (for example: State Directorate of Technical Education in respective states, or UGC in the case of deemed universities) or the institute has the requisite statutory existence.
   iii. At least two batches of the programme should have passed out.
   iv. The institute has to pay the requisite fees.
   v. There is no case or proceedings pending against the institute initiated by agencies such as CBI or the concerned State.
3. As per evaluation guidelines of NBA, the different aspects of an institute like Organization and Governance, Resources, Institution Support, Development and Planning, Evaluation and Teaching: Learning Process, students entry and outputs and so on have been quantified and points have been allotted to these aspects with maximum of 1000 points.

4. The programs gets the status **Accredited for next 5 years** from the date of issue of letter from NBA if it gets minimum score of 750 points and score of minimum qualifying maximum marks in the criteria specified.

5. The programs gets the status **provisionally Accredited for next 2 years** from the date of issue of letter from NBA if it gets minimum score of 600 points.

6. The programs gets the status not Accredited if it gets the score of less than 600 points.

7. The reason why institutions are not coming forward the accreditation is the cost involved to fulfill the parameters as stipulated in NBA guidelines and to maintain the standards for all times.

**Present status of Accreditation:**

The Haryana State Board of Technical Education (HSBTE), Panchkula has undertaken the process of Accreditation in Govt. / Govt. Aided Polytechnics of the State. National Institute of Technical Teachers Training and Research (NITTTR), Sector – 26, Chandigarh has been engaged as Mentor to assist the polytechnics for the Accreditation Project. An awareness workshop of all Polytechnics was organized by NITTTR on 27.09.2013. It has been decided that initially NBA accreditation of 5 Govt. / Govt. Aided Polytechnics namely GP Ambala / GP Nilokheri / GP Hisar / GP Manesar & SJP Damla( Govt. Aided) will be taken up in the first phase and rest of the polytechnics will be covered up in the next phases. NITTTR is providing assistance and guidance to the above 5 Polytechnics in filling up the Self Assessment Report (SAR). The major deficiencies pointed out by the polytechnics are upgradation of machinery and equipment for various Labs / Workshops, shortage of equipments in few labs, upgradation of Computers, shortage of teaching staff, revision of the curriculum, more emphasis should be on training of the faculty / staff, requirement of smart classrooms, requirement of digital library etc. Moreover, during recent inspections of Govt. Polytechnics, it has been observed that there are inadequate infrastructure facilities and obsolete equipments in almost all the Govt. Polytechnics and strong need is felt to up grade the machinery & equipments.

HSBTE will continue to be the executing Agency for the implementation of the Accreditation Project with the assistance of Directorate of Technical Education, Haryana and NITTTR, Chandigarh.

**Proposal:**

In the state of Haryana, at present none of the Govt. Polytechnic is having NBA / NAAC accreditation. NBA accreditation is necessitated in order to ensure the quality,
so that the output from the polytechnic system is effectively / immediately placed in the industry / market. At present, there are 28 Government Polytechnics functioning in the State of Haryana, out of which, 5 Polytechnics are running with guest classes. The accreditation of all 23 Government Polytechnics functioning from their own campuses, have to be taken up in phased manner for a period of 4 years from 2016-17 to 2019-20.

In order to effectively fulfill the parameters as stipulated in NBA guidelines and to maintain the standards for all times, there is a need for upgrading the existing machinery/equipment, training/retraining of the faculty/staff, updation of curricula/mentoring of institutions, strengthening of placements cells, updating learning resources, etc in all the Govt. Polytechnics.

**Funds requirement per Polytechnic:**

Funds to the tune of Rs. 5 crore per polytechnic will be required for strengthening the Govt. Polytechnics on various parameters as per details given below:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Parameters</th>
<th>Estimated requirement of funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Registration / Processing fee to be paid to National Board of Accreditation (NBA)</td>
<td>Rs. 10.00 Lac.</td>
</tr>
<tr>
<td>2.</td>
<td>Appointment of mentor for guidance and for liasoning: An academician from reputed Institutes like NITs, IITs, NITTRs shall be engaged as mentor for each polytechnic for providing guidance. They will mentor the institutions towards quality improvement and to achieve the parameters as stipulated in the NBA guidelines.</td>
<td>Rs. 10.00 Lac.</td>
</tr>
<tr>
<td>3.</td>
<td>Modernization and Strengthening of Laboratories/Workshops/ Computer Centres- Up gradation of Machinery and Equipment: The Institutions have not upgraded their equipments, laboratories / workshops for the last many years. This prevents the development of hands-on skills in Industry relevant technologies. There is need to upgrade infrastructure facilities of all 23 existing Govt. Polytechnics by providing financial assistance for modern equipments and by replacement of obsolete equipments and providing modern facilities for application of IT in teaching, learning and testing processes. The improvements in teaching, training and learning facilities has to be made by Modernization and strengthening of labs/ workshops, Modernization of classrooms, Up modernization of 5 Class rooms (one for each discipline) into Smart Class rooms in each Polytechnic. Classrooms will be equipped with Smart Boards and Computers linked to LCD Projectors. – 50.00 Lac</td>
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<td>(i) Modernization of 5 Class rooms (one for each discipline) into Smart Class rooms in each Polytechnic. Classrooms will be equipped with Smart Boards and Computers linked to LCD Projectors. – 50.00 Lac</td>
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<td>(ii) Up gradation of Machinery &amp; Equipment in each course like Civil/ Mechanical / Electrical/ Computers / Electronics/ Textile Technology / Instrumentation &amp; Control/ Plastic Technology etc (50.00 Lakh for each course) – 250.00 Lac</td>
<td></td>
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<tr>
<td></td>
<td>(iii) Up gradation of Computer Centers/ Labs with latest configuration of computer systems – Rs 50.00 Lac.</td>
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</table>
4. **Strengthening of Industrial Institute Interaction Cell (IIIC)/Placement cells** - At present, this collaboration between industry and institute is at a nascent stage and need to be enhanced. Increasing Industry-academia collaboration requires overcoming the distrust between the two partners. There is need to strengthen the placement cell in each of the Govt. Polytechnic by providing one vehicle, computerized support system, furnishing of TPO office/ conference/seminar room. More emphasis shall be made on Job fairs by involving industry associations/ campus interviews/ guest lectures by industry experts, etc.

5. **Up-gradation of Curriculum as per requirement of industry**: Each Institution should exercise innovative approach in undertaking periodic revision of curriculum every 2 to 3 years and an intensive revision every 4 to 5 years depending on the developments in the subject area. The main purpose of revision of curricula and syllabi for Engineering Education is to effectively prepare students to meet labour market requirements. Involvement of employers including core Industry in curricula reforms is an essential requirement.

6. **Training and retraining of the faculty / staff through Training Need Analysis (TNA)**: Faculty and Staff development for improved competence shall be based on Training Needs Analysis (TNA). The need for Pedagogical training using the latest teaching methodologies needed is strongly felt for improving the teaching and learning competency of faculty. The technical support staff in labs and workshops need to be trained in their functional areas including operation and routine maintenance of the equipments. The Administrative staff also to be trained in their functional areas particularly in the use of modern office equipments, software, office

(iv) Procurement of good quality furniture for labs/library/computer centres/smart class rooms - **Rs. 30.00 Lac**

(v) Providing/Up gradation of Language Lab – **Rs 20.00 Lac**

**Total : Rs. 400.00 Lakh**
7. **Updating of learning resources including E-Learning** : Modernization and strengthening of libraries and increasing access to knowledge resources. Updation of learning Resources via e-books, e-journals, CDs & professional software.

| Total estimated cost | Rs. 500.00 Lakh (5.00 Crore) |

**Risk Analysis:**

The Accreditation Project is designed with an objective to improve quality of Technical Education in Govt. Polytechnics and enhancement of existing capabilities of the Institutions to become responsive to the market / industry trends/ developments. The engagement of consultant / mentor for each of the Govt. Polytechnic will mitigate any risk involved in successful implementation of the Project. The risk involved in implementation of the Project is almost negligible as the aim of the Project is to improve the quality and maintain the standards for all times, which would ensure effective output from the Polytechnic system. A suitable mechanism will be developed by HSBTE with the assistance of NITTTR, Chandigarh for timely and successful implementation of the Project.

**Financial Implications:**

(i) Estimated cost per Polytechnic – 5.00 Crore.

(ii) Total project expenditure for 23 Polytechnics - Rs. 115.00 Crore.

(iii) Phasing of the expenditure -

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