केन्द्रीय माध्यमिक शिक्षा बोर्ड
(मानव संसाधन विकास मंत्रालय, भारत सरकार के अधीन एक स्वायत्त संगठन)

CENTRAL BOARD OF SECONDARY EDUCATION
(An Autonomous Organisation under the Ministry of Human Resource Development, Govt. of India)

CBSE/DIR./SE./TRNG./JuniorSkills/2021   15.01.2021

Circular No. ACAD-07/2021

All the Heads of Schools affiliated to CBSE

Subject: JuniorSkills Championship in collaboration with NSDC

National Skill Development Corporation (NSDC), like Central Board of Secondary Education (CBSE), is an affiliating agency for the training centers that run short-term courses under the National Skills Qualification Framework (NSQF). NSDC is also the implementing agency for PMKVY, one of the largest government initiative in the social sector with the additional obligation of preparing the youth to represent the nation in international skills competitions.

What CBSE is to schools, in the school education eco-system, NSDC is to the Skills eco-system of the country. Thus, collaboration between CBSE and NSDC has special significance in view of the newly launched National Education Policy (NEP).

Various School-level Competitions are being planned with the objective to blur the ostensible separation of 'vocation' and 'academics' as envisioned in the recently launched National Education Policy (NEP).

It may be appreciated that in today's context, education is not just about learning to know, but also about learning to do, which necessarily means, 'acquiring not only an occupational skill but also the competence to deal with many situations and work in teams, and a package of skills that enables one to deal with the various challenges of working life'.

In this regard, CBSE in partnership with NSDC shall be conducting the Junior Skills Championship – **JuniorSkills - 2021** and contribute in disrupting the vocational and academic landscape of India and drive the youth of the nation towards self-reliance at an early stage so that they can contribute towards 'Make in India' while focusing on 'Atma Nirbhar Bharat'.

This competition envisages introducing the dignity of labor and inculcating the philosophy of 'Work is Worship' in school children. It is an initiative to 'increasingly incorporate elements of vocational education into the school curriculum to expose children to its utility and its value as art' as envisioned in the new National Education Policy.

The format of competition, filtration process and timelines are enclosed at **Annexure A** for reference. Brief summary about various skills to be taken up in this competition is at **Annexure B**.

More details about the competition and Registration form are available on https://worldskillsindia.co.in/juniorskills2021

For more queries and feedback, the schools may contact
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1st JUNIORSKILLS CHAMPIONSHIP 2021

Background

WorldSkills International
WorldSkills International (WSI) is a membership organization like International Olympics Association established in 1950 to promote vocational education and skill training in countries across the globe. Every two years, it holds the largest skill competition in the world- **WorldSkills Competition** in one of the WSI member countries. The competition is equivalent of Olympic Games for skills.

The primary objective is to promote world class standards in over 50 skills. **The competition is for youth below the age of 23 years and performance in the competition is judged on the basis of a project which has to be completed over four days. Next competition is in October 2022 in Shanghai, China.**

WorldSkills India
WorldSkills India, an initiative of National Skill Development Corporation (NSDC) working under the Ministry of Skill Development and Entrepreneurship has been leading the country's participation at WorldSkills International competitions since 2011. At WorldSkills Kazan 2019, **India won one Gold, one Silver, two Bronze medal and fifteen Medallions of Excellence.**

IndiaSkills Competition
Similar to WorldSkills Competition, IndiaSkills Competition is held every two years at national level by NSDC in partnership with state governments and industries. Skilled youth from across the nation compete against each other in their respective skills and the winners of the national competition further nurture their skills over the next one year and prepare themselves to represent India at WorldSkills Competition.

IndiaSkills Competition 2018
The first IndiaSkills Competition was held at Pragati Maidan, New Delhi in 2016. It was inaugurated by the former President of India, *Shri Pranab Mukherjee*. The second IndiaSkills Competition was organized from 2nd to 6th October 2018 at Aerocity Ground, Aerocity, New Delhi.

22 states took up skill competitions at district and state levels. In order to create capacity, initially over 150 workshops were held by NSDC with help of Corporates and SSCs and 200+ sample test project were created in more than 45 job roles aligned to WorldSkills norms. More than 100 Corporates have come forward to work with States and NSDC for competitions and this connect has helped further a Government – Industry – SSC connect. 2

Outcomes and Objectives of IndiaSkills & WorldSkills Competitions

- **Advocacy:** Popularize skills at grassroots levels through the medium of skill competitions.
- **Capacity Building:** Through workshops – trainers and subject matter experts from states were coached by industry and other experts.
  o Over 200 sample test projects were developed for 45 job roles
  o Several past competitors have taken up jobs as trainers and are helping transfer their learning to future generations.
- **Benchmarking:** With skill competitions, States were able to benchmark skill levels and training infrastructure available for different job roles as per international standards
- **Creation of role models:** Winners at different levels become role models for other peers to follow. Several competitors are from very humble backgrounds where parents are small farmers, coolies, drivers, carpenters, small businessmen etc.
- **Performance in World levels:** IndiaSkills Competition helps to identify competitors with talent who can represent India in Worldskills Competitions.

JuniorSkills Championship

The main mission of the JuniorSkills Championship will be to provide school children an opportunity to explore and make informed career choices in a rapidly changing world and contribute to the economic growth of India through their skills. This will build aspiration among the youth towards Vocational/Skill Education.

Eligibility

JuniorSkills Championship will be for competitors below the age of under 16 years. They can compete in skills as per IndiaSkills and WorldSkills standards.

Partnership with Central Board of Secondary Education (CBSE)

CBSE through its affiliated schools shall play an important role in promoting and setting benchmarks for the skill competitions. The contribution of CBSE and its affiliated schools shall help in creating value for skills in the whole ecosystem which will help in the overall development of the Nation.

JuniorSkills Championship has been envisaged from this year onwards will be conducted in CBSE schools across country. This activity has been envisioned in line with latest National Education Policy wherein emphasis is given to include vocational courses in schools.

The competition will be conducted at 4 levels – Screening, Qualifying, Pre-National & National. Considering Covid situation the competitions will be done online while it will be endeavored to conduct Nationals with a proper set up. The competition will be in 3 categories:

GROUPS	CLASS & ELIGIBILITY
1	6-8
2	9-10
3	11-12

In this initial cycle limited Skills will be taken up in conjunction with CBSE, list is as under among which shortlisting will be done:

1. Web Technologies
2. IT Software Solution for Business
3. Mobile Robotics
4. Digital Photography
5. Painting & Decorating
6. Fashion Technology
7. Visual Merchandising
8. Graphic Design
9. Innovative Business Idea
10. Solar Energy

Brief summary about various skills to be taken up in this competition is enclosed.

JuniorSkills Championship Kit for Schools
For promoting and creating awareness among the students, a skill competition kit will be sent to schools. This would help the school in creating adequate content and sensitize the stakeholders with right information.
The kit will include the following:
1. Posters
2. Videos
3. Brochure
4. WhatsApp Content
5. Information on webinars
6. Screen saver for laptops
7. Social Media Content
8. Letter

All the above e-collaterals will be shared with schools over email. The school would be able to add their logo and further promote them.

Further, NSDC through its social media channels will also support and acknowledge the initiatives taken up by school related to JuniorSkills Championship. This includes promoting their content, acknowledging the contribution by their leadership, inviting them for webinars and other formal events.

Filtration process

Level 1 – MCQ- Screening (1 hour)

Level 2- Qualifying (2-3 hours)

Level 3 – Pre Nationals (3-4 hours)

Level 4 – National – Physical (4-5 hours)

Skills, Partners & Categories for conduct

Sl.	Skill	Partners	Group 1 (Classes 6-8th)	Group 2 (Classes 9-10th)	Group 3 (Classes 11-12th)
1	Web Technologies	Smalt & Beryl	X		
2	IT Software Solution for Business	Smalt & Beryl	X		
3	Visual Merchandising	Pearl Academy	X		
4	Graphic Design Technology	Pearl Academy	X		
5	Mobile Robotics	D-link & Robot Guru	X		
6	Painting & Decorating	Pearl Academy			
7	Solar Energy	Green Jobs SSC	X	X	
8	Fashion Technology	Pearl Academy	X		
9	Innovative Business Ideas	SIDBI	X		
10	Digital Photography	National Film Development Corporation (NFDC)			

Other Partners

SN	Partner	Role
1	Qrencia	Online platform
2	iNurture	Outreach & industry connect

JuniorSkills Championship
(Brief Description)

- ✓ Graphic Design Technology
- ✓ Web Technologies
- ✓ IT Software Solution for Business
- ✓ Painting & Decorating
- ✓ Fashion Technology

- ✓ Mobile Robotics
- ✓ Visual Merchandising
- ✓ Solar Energy
- ✓ Digital Photography
- ✓ Innovative Business Ideas

Web Technologies

Summary
- Development and functioning of web-sites & code developments
- Use of special programs, programming languages, and tagging
- Web-pages, other web-sites, graphic elements, text, and the photos
- The computer programs, semis, and open electronic libraries are used as the technical basis.

Web Technologies could be for you if you like:
- Being creative
- Complex problems
- Fixing things
- Making things
- Using computers

Web developers need the creative skills for choosing the colours, fonts, and graphics.

Test Project

(Detection, research, analysis, solution, draping, user testing, and evaluation of results)

1. CMS Theme and Layout Implementation –using wordpress
2. PHP programming module
3. JavaScript front end programming with API.
4. Implementing the design into actual functional website using HTML, CSS, JavaScript and their libraries.

Graphic Design Technology

Summary

Combining the skills of design, art, typography, typesetting, illustration, printing, and publishing to create graphic designs for both online and printed publications.

Graphic Design Technology could be for you if you like:

- Being creative
- Complex problems
- Using computers

Software- Adobe Illustrator, Adobe Photoshop

Modules:

- Editorial design
- Advertising design
- Packaging

Test Project may include more than one of the items listed below.

- Editorial design and new media
- Packaging design
- Corporate and information design. Advertising and display design
- Colour formats & Printing formats may include offset, flexography, letterpress, silkscreen, digital or inkjet.

Mobile Robotics

Summary

- Robotics technologists must be familiar with logic, microprocessors, computer programming,
- Mechanical, electrical, and control system
- Design and prototype the right robot for each application.

Mobile Robotics could be for you if you like:

- Complex problems
- Fixing things
- Making things
- Things that move
- Using computers
- Using tools

Test Project

• A short company introduction of the identified customer and their products and/or services;

• A detailed description of the task the customer wants to be solved by a Mobile Robot System;

• All specifications needed about environment, products to be handled, accuracy, repeatability, efficiency, prescribed use of components where applicable, etc.;

• Criteria for assessment and the allocation of marks for each criterion;

• Specifications about the conduction and presentation of the solutions.

IT Software Solutions for Business

Summary

Creating a mobile application for given task in Test Project. Mobile Application development consists of:

- Building user-friendly interface
- Building functionality

This skill could be for you if you like:

- Solving challenging problems by building innovative solutions
- Helping people
- Using smart-phones

Rating Criteria

- User Experience
- Functionality, Efficiency and Creativity
- Task Completion
- Code Quality

Test Project

- Android App Development – build UI & backend API
- Database CRUD Operations performed using developed API
- Technologies & Tools: Java, MySQL, Android Studio

Visual Merchandising

Summary
- Creation of window and interior displays in shops i.e. 'look' of the retail outlet.
- A visual merchandiser communicates directly with the target audience through their designs and creates a positive impression which in turn impacts on the **sales revenue of the business**.

Visual Merchandising could be for you if you like:
- Being creative
- Craftsmanship
- Making things

Tools/Software: Paint brushes, Illustrator, Photoshop, CorelDraw

Brief about Test Project

The individual needs to know and understand:
- Applications of IT programs e.g. Photoshop and Illustrator
- Rendering
- Graphic design/2D design
- Design of props and spaces/3D design
- Competitors will undertake installing a self-made complete lifestyle or fashion window presentation, using a range of lifestyle or fashion products.

Painting & Decorating

Summary

A **painter** paints surfaces like walls, floors, ceilings, facades, fences, wooden and metal structures, for aesthetic and decorative purpose

A **decorator** decorates the interiors using paintings, graphics, fabric, equipment, and lighting.

Skilled painters and decorators have a set of skills required to perform interior and exterior finishing work.

Painting and Decorating could be for you if you like:
- Craftsmanship
- Helping people
- Using tools & Working outdoors

Test Project
- Materials/drawings,
- Advising on designs/colours,
- Painting & spraying
- Decorative coatings,
- Wallpapering & Gilding

Tools: Paintbrush, paint roller, paint pad, masking aids

Solar Energy

Brief Summary

India has an ambitious program to promote solar energy to replace conventional source of power generation. Solar Energy sector is a very fast growing sector and roof top solar PV power plants are becoming increasingly popular. **Solar Technologist** must be familiar with
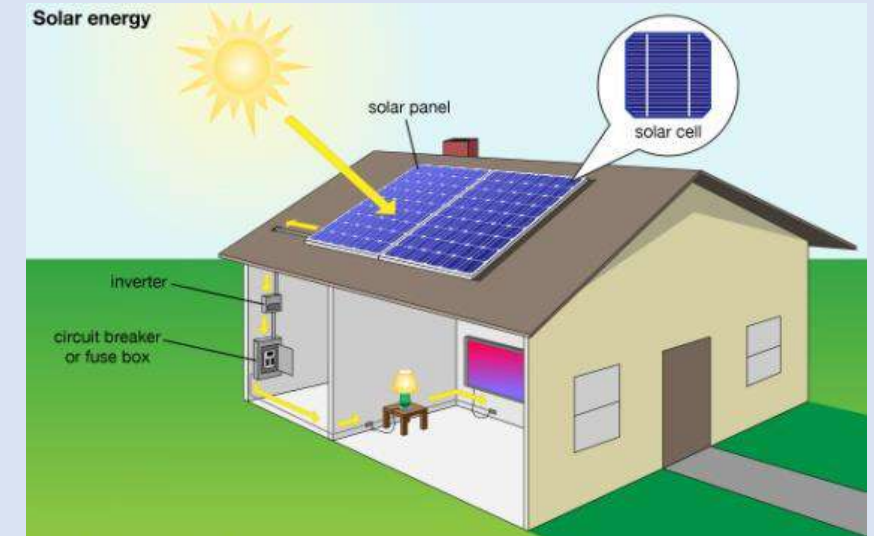
- components of a solar energy system,
- location suitable for solar installation ,
- basic electric connections and loads in houses
- should be able to calculate size of solar roof top system and
- identify appropriate components of solar power plant for roof top.

Solar Technologist could be for you if you like:

- Designing optimum solar systems
- Problem solving
- Fixing things and working with equipment & machines
- Using computers and tools

Test Project Summary:

- Basics of electric systems, power / load calculations of a house
- A detailed description of the task the customer wants to be solved by a solar system;
- Identification of a suitable space / location to put up solar rooftop plant
- Decide suitable size and components of solar plant as per customer requirement and space available
- Design configuration of the solar Plant to meet customer requirement

Skill India
कौशल भारत-कुशल भारत

N·S·D·C
National
Skill Development
Corporation
Transforming the skill landscape

world skills
India

Fashion Technology

Brief Summary

The Fashion Technology practitioner creates garments.
The technical skills involved include design, pattern construction,
cutting and garment manufacture:

- Materials/fabrics, their characteristics, properties, and uses
- Design elements and principles
- Interpret and create specialist technical drawings
- The use of IT and specialist software to produce images and designs
- Pattern construction and draping

Fashion Technology could be for you if you like:

- Being creative
- Using computers
- Using tools

Test Project Summary:

This Test Project may have 3 different modules
Module 1: Sketching: Design and sketch Technical drawings
Module 2: Pattern Making
Module 3: Construction

Digital Photography

Summary

Photography is not only a very popular hobby, but also a very rewarding profession. It is said, "A picture is worth a thousand words!" Even multitude of ideas can be conveyed by a single photograph. With immense opportunity of self-employment in the business of photography, it has great potential for primary as well as secondary income.

Photography could be for you, if you

- Have an aesthetic sense
- Have an eye for detail
- Are creative and imaginative
- Love to photograph people, places, and events

Test Project

1. Portrait Photography
2. Landscape Photography
3. Industrial Photography
4. Street Photography

Swavalamban - Innovative Business Ideas

Summary -
- Mission Swavalamban of SIDBI aims to induce entrepreneurship culture with theme Har Ghar Ek Swavalambi (Each House with one Entrepreneur).
- The first three identified role models are parents (within that mother first), Primary school teachers and college professors. The cultural journey starts from childhood and primes at Youth.
- Let's make it a joyful learning for aspirational India.

Innovative business idea is yours if you like:
- To be an entrepreneur- job creator as against being job seeker
- Planning to incubate and excel with your innovative idea
- Have passion to lead the change in society, surroundings and nation
- Be a role model for nation
- **Modules**
- Entrepreneurship- what, where, how , when ?
- Shape your idea into a business plan
- Innovation
- Business Management

Test Project/ Test Paper
- Psychometric test- Kaun Banega Entrepreneur (who will become an entrepreneur)
- Climbing the rope of Entrepreneurship
- Idea to business plan and presentation
- Virtual Journey- Think-Plan-Fund-Prepare-Buy-Market-Engage-Profit