

**AS PER LATEST
CBSE CURRICULUM**

**TEACHER'S HANDBOOK
SCIENCE**



TEACHERS HANDBOOK-SCIENCE

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Who is a Teacher?

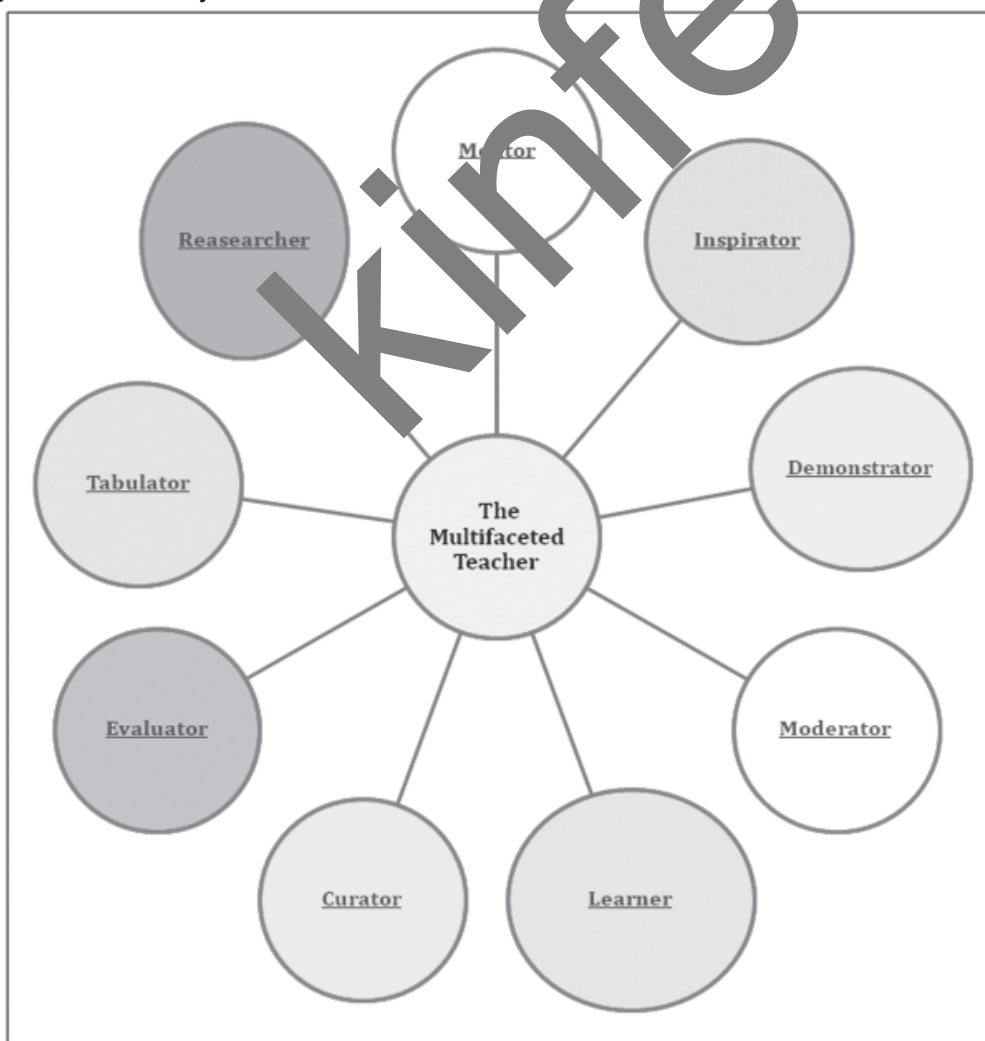
Education is the most important factor in a country's progress. CBSE envisages the following educational aims to be fulfilled at its schools and a teacher is the fundamental medium to fulfil all these aims:

Nurturing students' personality through a stimulating environment in such a manner that they develop into conscientious citizens who realize their rights and duties towards the nation

- Ensuring that learning is shifted away from rote methods
- Enrichment of the curriculum to ensure children's overall development with competencies that will make them future-ready, rather than remaining textbook centred
- Making assessments more flexible and integrated into classroom life
- Connecting knowledge with life outside the school and making children learn how to learn so that they become lifelong learners.
- Ensuring inclusivity and equity, taking into account diversities and differences Empowering and enabling marginalised learners to develop their capacity to realize their full potential
- Providing a safe and secure environment and ecosystem for the child to learn
- Ensuring continuous augmentation of standards of teaching and learning through continuous self-evaluation, innovation and planning in advance

Roles Played by a Teacher:

A teacher has to play several roles. A multi-faceted teacher may have multiple roles as given below, though these are only illustrative roles.



Teachers Responsibilities Towards Colleagues:

Respect your colleagues' professional standing and opinions and maintain relations with them in accordance with the highest standards of professional courtesy.

Be prepared to help junior colleagues in every way.

Accept senior professional colleagues' authority while retaining the right to express personal professional opinions.

Recognize the duty to promote the causes of education and, therefore, the causes of the teaching profession.

Recognize the duty to improve as a teacher, becoming efficient in every way possible.

Assessment and Evaluation Practices of the Board

National Education Policy 2020 has affirmed the need to move from rote to competency based learning. This will equip the learners with key competencies to meet the challenges of the 21st century proactively. Accordingly, the Board has taken multiple steps towards the implementation of Competency Based Education (CBE) in schools. These range from aligning assessment to CBE, development of exemplar resources for teachers and students on CBE pedagogy and assessment and continued teacher capacity building.

In this context the Board has released Circular No. Acad -05/2019 dated 18.01.2019; Circular No. Acad - 11/2019 dated 06.03.2019; Circular No. Acad - 18/2020 dated 16.03.2020; Circular No. Acad - 32/2020 dated 14.05.2020 and Circular No. Acad - 31/2020 dated 22.04.2021. In continuation to these circulars, the Board is initiating further corresponding changes in the Examination and Assessment practices for the year 2022-23 to align assessment to Competency Based Education. Therefore, in the forthcoming sessions a greater number of Competency Based Questions or questions that assess application of concepts in real-life/ unfamiliar situations will be part of the question paper.

The changes for classes IX -XII internal year-end/ Board Examination are as detailed:

Classes IX - XII		
Particulars	Academic Session 2022-24	Academic Session 2024-25
Composition of question paper for year-end examination/ Board Examination (Theory)	<ul style="list-style-type: none"> ■ Competency Focused Questions in the form of MCQs/ Case Based Questions, Source-based Integrated Questions or any other type = 50% ■ Select response type questions (MCQ) = 20% ■ Constructed response questions (Short Answer/ Long Answer Type Questions, as per existing pattern) = 30% 	<p style="text-align: center;">Competency Focused Questions in the form of MCQs/Case Based Questions, Source-based Integrated Questions or any other type = 50%</p> <ul style="list-style-type: none"> ■ Select response type questions (MCQ) = 20% ■ Constructed response questions (Short Answer/ Long Answer Type Questions, as per existing pattern) = 30%

(Classes XI - XII)		
Particulars	Academic Session 2023-24	Academic Session 2024-25
Composition of question paper for year-end examination/ Board Examination (Theory)	<p>Competency Focused Questions in the form of MCQs/ Case Based Questions, Source-based Integrated Questions or any other type = 40%</p> <p>Select response type questions (MCQ) = 20%</p> <p>Constructed response questions (Short Answer Questions/ Long Answer type Questions, as per existing pattern) = 40%</p>	<p>Competency Focused Questions in the form of MCQs/ Case Based Questions, Source-based Integrated Questions or any other type = 50%</p> <p>Select response type questions (MCQ) = 20%</p> <p>Constructed response questions (Short Answer Questions/ Long Answer type Questions, as per existing pattern) = 30%</p>

Curriculum document released by the Board for the Academic Session 2024-25 and the Sample Question Papers may also be referred to for details of the QP design of individual subjects

ASSESSMENT STRUCTURE

Class IX-X

CBSE has revised the assessment structure for Academic year 2024-2025 by incorporating diverse strategies. Weightage of Board Exam/Year End Exam(80 marks) and Internal Assessment (20Marks) remains the same. Internal Assessment consists of Pen Paper Test- 5 marks , Multiple Assessment -5marks , Portfolio -5marks and Subject Enrichment Activities -5marks.Details are given below.

MARK DISTRIBUTION: SCHOLASTIC ASSESSMENT

TOPIC	BOARD EXAM / HALF YEARLY/ YEAR END EXAMINATION 80 Marks	INTERNAL ASSESSMENT 20Marks
Components of Assessment	32 Marks (Subjective) +16 Marks(Objective type + 32 marks (Case studies Multiple Choice Questions)	Pen Paper Test (5marks) + Multiple Assessment (5marks) + Portfolio (5marks) + Subject Enrichment (5marks)

INTERNAL ASSESSMENT

SUBJECT	Pen Paper Test 5 Marks	Multiple Assessment 5Marks	Portfolio 5Marks	Subject Enrichment Activity 5marks
Languages English, Malayalam, Hindi, Tamil	Class Test/Unit Test	Quizzes Oral Test Concept Map Exit Cards Visual Expression	Class Work + Peer Assessment, Self Assessment, Achievements of Students in the subjects, Reflections, Narrations, Journals	Listening & Speaking Test
Science & Mathematics	Class Test/Unit Test	Quizzes Oral Test Concept Map Exit Cards Visual Expression	Class Work + Peer Assessment, Self Assessment, Achievements of Student in the subjects, Reflections, Narrations, Journals	Practical Work/Lab Work
Social Science	Class Test/Unit Test	Quizzes Oral Test Concept Map Exit Cards Visual Expression	Class Work + Peer Assessment, Self Assessment, Achievements of Student in the subjects, Reflections, Narrations, Journals	Project Work

Note: Class I-VIII will be having Half yearly and Year End examination. For each Term, 80 marks for Term exam and 20 marks for internal assessment