



Central Board of Secondary Education

**(An autonomous Organisation under the Union Ministry of Human Resource Development, Govt. of India)
'Shiksha Sadan', 17-Rouse Avenue, New Delhi – 110 002**

CBSE/EO(SD)/CIRCULAR/2009

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Circular No. 59

All Heads of Institutions
Affiliated to the Board

Dear Principal,

A guideline for Formative Assessment and Summative Assessment in **Foundation of Information Technology** for Class IX for 2010 examination is placed at Annexure - I

This may be brought to the notice of all the teachers and the students involved in the teaching and learning for Class IX.

Yours faithfully,

**(C. GURUMURTHY)
DIRECTOR(ACADEMIC)**

Copy to :

1. The Commissioner, Kendriya Vidyalaya Sangathan, 18-Institutional Area, Shaheed Jeet Singh Marg, New Delhi-110 016.
2. The Commissioner, Navodaya Vidyalaya Samiti, A-28, Kailash Colony, New Delhi.
3. The Director of Education, Directorate of Education, Govt. of NCT of Delhi, Old Secretariat, Delhi-110 054.
4. The Director of Public Instructions (Schools), Union Territory Secretariat, Sector 9, Chandigarh-160 017.
5. The Director of Education, Govt. of Sikkim, Gangtok, Sikkim – 737 101.
6. The Director of School Education, Govt. of Arunachal Pradesh, Itanagar-791 111
7. The Director of Education, Govt. of A&N Islands, Port Blair-744 101.
8. The Secretary, Central Tibetan School Administration, ESSESS Plaza, Community Centre, Sector 3, Rohini, Delhi-110 085.
9. All the Regional Officers of CBSE with the request to send this circular to all the Heads of the affiliated schools of the Board in their respective regions.
10. The Education Officers/AEOs of the Academic Branch, CBSE.
11. The Joint Secretary (IT) with the request to put this circular on the CBSE website.
12. The Library and Information Officer, CBSE
13. EO to Chairman, CBSE
14. PA to CE, CBSE
15. PA to Secretary, CBSE
16. PA to Director (Acad.)
17. PA to HOD (AIEEE)
18. PA to HOD (Edusat)
19. PRO, CBSE

DIRECTOR(ACADEMIC)

Foundation of Information Technology (Code: 165)

Second Term (October 2009 to March 2010)

In the Second Term there will be two formative tests (FA3 and FA4) and one Summative test for class IX.

The syllabus and design of the question paper for Summative Assessment II which is to be held in March 2010 is as follows :

Syllabus

Unit I

- Computing Technology
- Communication Technology

Unit II

- Operating System - Basic Concepts
- Word Processing Tools
- Presentation Tools
- Spreadsheet Tools

Design for Summative Question Paper

Maximum Marks : 80

Duration: 2 ½ Hours to 3 Hours

Sno	Type of Questions	No.of Questions	Marks for Each Question	Total Marks
1	MCQ (Practical Skills)	12 (Unit I - 2 Ques Unit II 10 Ques)	2	24
2	Very Short Answer (Theory)	10 (Unit I - 2 Ques Unit II - 8 Ques)	1	10
3	Short Answer - Type I (Theory)	8 (Unit I - 2 Ques Unit II - 6 Ques)	2	16
4	Short Answer - Type I (Theory)	10 (Unit I - 2 Ques Unit II - 8 Ques)	3	30
		40		80

FA3 should be finished by 20th December. FA4 should be finished by 10th February.

Formative Assessment

- A** As the name suggests the assessment is taken during the formative stages of concept formation. It broadly classifies into
- Entry level assessment to know the readiness,
 - Assessment during the transaction of a concept/lesson at definite stages which varies with situations,
 - Assessment at the exit level for ascertaining the level of learning outcome.
- B** Its functionality is characterized by diagnosis and remediation for continuous betterment of quality.
- C Parameters for assessment:**
- Student receptivity to accept assignments for diagnosis and amenability to remediation procedures.
 - Drive to prove mettle and achieve expected quality.
 - Ability to transfer potential through one achievement to another.
 - Ability to self assessment and peer group interaction.
- D Teacher's tasks:**
- Identify pre-requisites to learning a concept(s)
 - Break the process of learning into sub stages
 - Enumerate learning outcomes.
 - Prepare suitable test items for diagnosis of each of the above stages.
 - Prepare suitable remediation tasks in anticipation of lacunae normally occurring leaving flexibility of individual alterations.
 - In order to have a variety of testing methods understand students' individual interests, aptitudes, family background etc. and maintain detailed profiles beforehand.
 - Have reasonable varieties of testing tools to sustain learner's interest and at the same time that would successfully provide the required feed back.
 - When adopting different methods of testing don't lose sight of the actual component being tested. For instance if it is to test the student's ability to handle a grammar item of direct-indirect speech and if an exercise of converting a story in dialogue form is adopted the teacher should not be distracted into assessing the histrionic talent of the child.

- Give importance to individual's pace of learning and maintain infinite patience, constant liaison with parents and immediate authorities, empathy and sense of accountability.
- Maintain portfolios of different trials in each individual's case and record justification for any particular assessment. Need not be too quantitative. The method of estimation for possible results over a period of appreciable time should be adopted.
- Use effectively home assignments to support class room teaching, peer activities and self assessment to optimize time vis-à-vis curriculum completion and to promote personality development as well as to reduce the correction work load.

Some suggestive activities for Formative Assessment are outlined below:

Set A: (Based on Spreadsheets and Presentation tools)

School & Class Results Weather Forecasting Report Trends in Technology Poster Making

Set B: (Based on Societal Impacts)

IPR issues Information Security Ethics in IT Careers in IT

Teachers to give track that the students should follow while working for the project. Two groups opting for the same topic may be assigned **different aspects of the same topic** by the teacher in the manner given below:

Mail Merge (Word Processing)

A number of events are organized in your school as a part of Golden Jubilee celebration. Sridhar Sharma is the cultural secretary in your school and he is given the responsibility of inviting schools from all over India to be part of a number of Inter School competitions.

You are asked to help Sridhar to draft the invitation letter and to create a database containing the mailing address and the contact person for all the schools to be invited. Use the facility of mail-merge and print out the invitation letters to all invitees.

Greeting Card (Word Processing)

Every year your parents spend a lot of money and time in selecting and purchasing greeting cards for the year. This year it was decided that all cards are going to be designed and printed by you. Use your expertise in word processing to create any type of greeting card. (eg: New Year, Diwali , Merry Christmas, Birth Day)

Teaching Aid (Problem on Presentation)

Mr. Pavan Desai is a Physics teacher teaching class VIII in your school. As he was teaching the chapter on Stars and Solar System, he realized that a presentation with few animation and pictures should be shown to the students for better understanding and retention. Since Mr. Pavan Desai is not conversant with the presentation tools, You are asked to create a presentation that will help the teacher to use it as a teaching aid. Use the properties of animation of Text and Pictures with sound effects.

Product Advertisement(Problem on Presentation)

Your neighbor Mr. Adhikari owns an automobile spare part manufacturing unit. He employed three sales men to market the product in Kanpur. After three months of work, the salesmen felt that Mr. Adhikari should provide each one with a Laptop and a presentation kit to make the sales more productive. Since Mr. Adhikari is not computer savvy, he had asked you to help him out to develop a presentation for his product. Use the properties of animation of Text and Pictures with sound effects.

A report presentation to be prepared on any one of the topics.

Ethics in IT

A friend of yours is always found spending long hours using Internet. When asked about it, he showed the content of his harddisk, having pirated software. The ethical questions that arise from software piracy are: Is it immoral or wrong to copy software, music, or movies? If so, why? What are the other computer ethical issues that prevail today and any solutions to it?

Careers in IT

Gopal is a student of X , who has not decided what subject to be taken along with Science stream when he joins class XI. Even though his teachers in school and parents at home are advising him to opt for

Computer Science, he is not completely convinced with their idea. You are required to make a study in the market and create a report on Careers in IT in the coming years to help him out to decide on the subjects.

Information Security Question 1:

What is meant by Information Security? What are the various Information security methods (like Encryption methods) used by organizations (for example Military) that need Information security of the highest level? Also explore the methods which were used in the past times? For example during World War II, encoding machines were used. What type of code was used during those times? How was the encoded information decoded? Various movies have been made on this topic. What all movies have dealt with this topic? What are the future needs and trends? Collect Information by visiting various websites and create a Presentation.

Information Security Question 2:

SuperFine Corporation has developed software that monitors and records all activities done by any person on a computer. A lot of companies have bought this software. Why are companies eager to purchase it? What problems can be solved by this software? It is being reported that some people are offended by the companies using it. Who can get offended and why. Collect Information about such software, their functions, organizations that buy such software etc and create a Presentation.

Example Question based on Intellectual Property Rights issues

What is Intellectual Property? How is it different from other material possessions like house, car etc of a person How is a person or an organization harmed when someone steals their Intellectual property? What are the Cyber laws of our country that protect a person's Intellectual Property rights? What all violations do students of your class do w.r.t. Intellectual Property? Collect Information including these aspects and create a Presentation.

Example Question based on Presentation Skills (Trends in Technology)

You are one of the advisors in the Government. You have been given a task of developing a presentation on "Trends in Technology" to be presented in the next meeting of all the ministers of the country. Design a 8 slides or longer presentation. Include the following:

- Text depicting future predictions based on the current trends.
- interesting relevant pictures to liven up your presentation.
- Graphs like line graph, pie chart etc.

Example Question based on Spreadsheets(School Results)

You are responsible for processing Results of your School. Build worksheet(s) to tabulate marks secured in different subjects like English, Hindi, Mathematics, Science, Social studies and Information Technology by each student. Enter formulas to calculate Total marks scored by each student, Average Total Marks, Highest marks, Lowest Marks, Average marks in each subject. Embed appropriate charts in your worksheet .Format the worksheet to make it look attractive.

Example Question based on Spreadsheets(Weather forecast)

The Meteorological Department stores data about temperature, humidity, rainfall over the past few days. Suppose you are responsible for tabulating and processing the data. Build a worksheet to show the data and do appropriate calculations required.

Project guidelines

1. Students are required to work in groups of 3 -4 members each (preferably 3 members) ,for projects listed above
2. Each group will present their project (seminar) in front of all the students of their class.
3. Each group may choose any one project from each of the above mentioned 2 sets.
4. The members of the group should be reshuffled for working on each set.
5. Each member has to create a separate Project Report.
6. Both the projects will be separately assessed by the teacher.
7. Each group will present their project in front of the entire class. The other students of class will ask queries based on the presented Project; the answers to which will be given by the Project group members.
8. The teacher should evaluate each member of the group and other students for raising relevant queries.
9. The criterion of Project assessment is as follows:

Content	50%
Lab Activity, Consistency in working and Contributions made towards the project	15%
Presentation Skills	10%
Query handling	25%