

# ICT & 21<sup>st</sup> CENTURY SKILLS RUBRICS

**TOTAL NUMBER OF PARTICIPANT/STUDENTS : 40**

**CLASS: IX-X**

CRITERIA of Evaluation	BEST(5)	BETTER(3)	GOOD(2)	Score
<b>ICT SKILLS</b>				
1 Computer Orientation	35	2	3	A
2 Window o/s(WIN-7,8,8.1)	34	3	2	A
3 Microsoft office-3	33	2	5	A
4 Microsoft office-7	36	3	1	A
5 Microsoft office-10	30	6	4	A
6 Microsoft office-13	32	5	3	A
7 WORD-DOC	36	4	0	A
8 EXCEL	30	4	6	A
9 POWERPOINT	32	3	5	A
10 INTERNET EXPLORER	40	0	0	A
11 SEARCH ENGINE	36	4	0	A
12 BING	22	2	14	B
13 GOOGLE(map,translate,sites,search)	26	10	4	B
14 WINDOW MOVIE MAKER	24	12	4	B
15 SLIDE SHOW /PRESENTATION	30	6	4	A
16 SOCIAL SITES/NETWORKING	36	2	2	A
17 EMAIL	28	9	3	B
18 BLOG	14	22	4	C
19 USE OF EDUCATIONAL WEB BROWSER	23	12	15	B
20 VIDEO CREATIONS/EDITING	21	13	6	B
21 Movie player	23	10	7	B
22 USAGE OF WEB 2.0	27	5	8	B
<b>21<sup>st</sup> CENTURY SKILLS</b>				
1 Collaboration	32	6	2	A
2 Knowledge Construction	31	5	4	A
3 Real-World Problem Solving	28	10	2	B
4 Innovation	15	16	9	C
5 Self-Regulation	26	9	5	B
6 Skilled Communication	32	5	3	A
7 Critical Thinking	19	18	3	C
8 Return on Investment(ROI)	16	16	8	C

Grade Score: 30-40 (A) ; 20-30(B) ; 10-20(C)

## Learning Outcomes

### PROJECT TITLE

#### PROJECT BRIEF: Performance Problem

In Government schools of Uttarakhand, Mathematics is a compulsory subject. Due to its importance the government is committed to ensuring the provision of high quality mathematics education. Various attempts have been made in the past to improve the LEARNING and TEACHING for optimum achievement in mathematics. As part of the reforms the curriculum places a lot of emphasis on Information and Communication technology (ICT) as a tool for teaching mathematics. As per survey and observations it has been noticed that teacher and student are

- rarely able to differentiate geometrical shapes and size of an object
- don't have enough idea about 2D and 3D
- don't explore available resources to develop ACTIVITIES on 2D and 3D objects.
- using conventional approaches but not aware about ICT.

#### Aim of Study

The use of ICT in Developing and linking of Geometrical Shapes (2D and 3D) in mathematics can make the learning process more effective as well as enhance the student's capabilities in understanding basic concepts. Here, ICT is used to support the textbook, blackboard, teacher or examiner. The study offer many advantages, such as aids to visualization, self-paced learning, instant feedback

#### Objectives of Learning Unit

Learning Unit 1: To Measure Availability and accessibility of ICT.

Learning Unit 2: To visualize 2D and 3D objects

Learning Unit 3: To explain 2D and 3D objects/shapes using ICT-Tools.

Learning Unit 4: To investigate AREA and VOLUME of 2D and 3D objects

Learning Unit 5: To develop shapes(2D to 3D) using web tools,browsers.

Learning Unit 6: To Link these structure in science and daily life

Learning Unit 7: To evaluate impact of the task performed

Learning Unit 8: Use ICT to Represent and Interpreting problems from text book

- using ICT ; learning by doing reflects the confidence in understanding of 2D and 3D.
- Enable to access webpage/ search engine/educational software tool.
- Enable to do shape analysis and applying logical thinking.
- Working as a group and asking each group member to establish the result.
- Enable to apply ICT to reach the goal.