1.	Can C-graded Scandinavian timber be marked T18 without any further classification?
	Yes
	No
	It depends on the quality
2.	Can A1-graded Scandinavian timber be marked T24 without any further classification?
	Yes
	No
	It depends on the quality
3.	Can 4. class timber from Russia be marked T18 without any further classification?
	Yes
	No
	It depends on the quality
4.	Does strength grading requirement for DK 18 strips contain a demand for rate of growth?
	Yes
	No
	Depends on where the timber is used
5.	What are the lowest standard that strips in a roof should meet?
	DK18
	T24
	No demands
6.	When strips are visual strength graded, are there any requirements concerning the location of the pith?
	Yes
	No
	Depends on the strength grading classification
7.	When beams are planed from 50X150 mm to 45X145 mm they should be strength graded as:
	Strips
	Boards
	According to special grading rules

8.	The label U on visual strength graded timber means:
	That moisture content is under 12%
	That when timber being strength graded the moisture content is over 20%
	That moisture content is under 16%
9.	The marking L30 implicates the visual stress graded class for:
	Strips
	Glued laminated beams
	Timber on stock
10.	When classifying DK18 are there any requirements for moisture content?
	Yes
	No
	It depends on the sides of the timber.
11.	The allowed negative size deviation is OK:
	In all pieces in every size of the shipment
	In 10% of pieces in every shipment
	In 10% of pieces in every size of the shipment
12.	If you import visual stress graded timber from other countries, can it be used as timber which has been visual strength graded by the standard ÍST DS 413?
	Yes
	No
	Yes, if it is classified and marked according to ÍST DS 413
13.	Machine strength graded timber is often with bigger knot than is allowed for visual graded timber
	Yes, that happens and is allowed
	No, that is not allowed
	Yes, that happens, but is not allowed
14.	Labelling of visual strength graded timber can only be performed by:
	Certificate grader
	Certificate grader and company
	Certificate grader or someone else under his control
15.	What is meant by moisture content?
	Water in ratio of dry timber
	Water in ratio of wet timber
	water in fails of wet timber

16.	If you are using finger joints timber for structural use:
	It should be labelled with the name of the one who jointed it
	The seller should guarantee the strength
	It should be market with a special signature
17.	For spars (square) the maximum width difference between faces are:
	0 cm
	7,5 cm
	5,0 cm
18.	Minimum width difference for spars (square) shall be:
	5,0 cm
	7,5 cm
	10,0 cm
19.	When spars are resawn how many beams will you get out of it?
	2 pieces
	4 pieces
	8 pieces
20.	When you cross cut spars how many beams will you get out of it?
	2 pieces
	4 pieces
	8 pieces
21.	The minimal thickness for a beam is:
	3,8 cm
	5,0 cm
	5,7 cm
22.	If you are going to grade beams where shall the pith be?
	In the half width cross-section from the centre
	In the one third width cross-section from the centre
	It does not matter
23.	The minimal thickness of a board is:
	1,0 mm
	1,9 mm
	2,0 mm

24.	Width of the annual rings are measured:
	Where the width of the annual rings is the biggest
	Where the radius is farthest away from the pith
	Greatest length possible and least 25 mm from the pith
25.	Slope of grain means difference on:
	Slope of grain parallel to the lengthways direction of the piece
	Slope of grain to the thickness
	Slope of grain to 3 m
26.	How is the bow measured?
	As the rise over a length of 3 m
	Compared with all the length
	Comparing the edge and the face
27.	Twist is assessed as distortion of:
	As the rise over a length of 3 m
	Fourth corner deviation from the other three corners
	As the rise over a length of 3 m
• •	
28.	Loose knots and open knot holes are measured as sound knots:
28.	Loose knots and open knot holes are measured as sound knots: Yes
28.	Loose knots and open knot holes are measured as sound knots: Yes No
28.	Loose knots and open knot holes are measured as sound knots: Yes No It depends on the size
28.	Loose knots and open knot holes are measured as sound knots:YesNoIt depends on the sizeKnots are not measured when they are:
28.	Loose knots and open knot holes are measured as sound knots: Yes No It depends on the size <b>Knots are not measured when they are:</b> Surrounded with bark
28.	Loose knots and open knot holes are measured as sound knots:YesNoIt depends on the sizeKnots are not measured when they are:Surrounded with barkUnder 8 mm
28.	Loose knots and open knot holes are measured as sound knots:YesNoIt depends on the sizeKnots are not measured when they are:Surrounded with barkUnder 8 mmUnder 9 mm.
28. 	Loose knots and open knot holes are measured as sound knots:YesNoIt depends on the sizeKnots are not measured when they are:Surrounded with barkUnder 8 mmUnder 9 mm.Where in the beams will you see a spike knot?
28. 29. 30. 29. 30.	Loose knots and open knot holes are measured as sound knots:YesNoIt depends on the sizeKnots are not measured when they are:Surrounded with barkUnder 8 mmUnder 9 mm.Where in the beams will you see a spike knot?On the inside face
28. 29. 30. 29. 30. 30. 28. 29. 30.	Loose knots and open knot holes are measured as sound knots:YesNoIt depends on the sizeKnots are not measured when they are:Surrounded with barkUnder 8 mmUnder 9 mm.Where in the beams will you see a spike knot?On the inside faceOn the edge
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28. 29. 29. 30. 31.	Loose knots and open knot holes are measured as sound knots:YesNoIt depends on the sizeKnots are not measured when they are:Surrounded with barkUnder 8 mmUnder 9 mm.Where in the beams will you see a spike knot?On the inside faceOn the outside faceOn the outside faceKnots are measured:
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28. 29. 29. 30. 31. 31.	Loose knots and open knot holes are measured as sound knots:YesNoIt depends on the sizeKnots are not measured when they are:Surrounded with barkUnder 8 mmUnder 9 mm.Where in the beams will you see a spike knot?On the inside faceOn the edgeOn the outside faceKnots are measured:At the lengthways direction of the timberWhere they are biggest
28. 29. 29. 30. 31. 1 1 1 1 1 1 1 1 1 1 1 1 1	Loose knots and open knot holes are measured as sound knots:YesNoIt depends on the sizeKnots are not measured when they are:Surrounded with barkUnder 8 mmUnder 9 mm.Where in the beams will you see a spike knot?On the inside faceOn the outside faceOn the outside faceKnots are measured:At the lengthways direction of the timberWhere they are biggestAt right-angled on the lengthways of the timber

32.	Knots in the inside face of beams are measured:
	Like other knots
	Are not measured
	By half the width of the knots
33.	Knots in wane:
	Are not measured
	Measured as face-knots, measured direct on the wane
	Measured as edge-knots, measured direct on the wane
34.	In knot cluster there should be a minimum of:
	2 knots
	3 knots
	4 knots
35.	Compression wood is the result of:
	When timber is stored in water
	Wrongly sawed timber
	Abnormal compression.
36.	Cross section is measured when the moisture content is maximum:
	18%
	20%
	24%
37.	Timber width that is more than 20 cm can be:
	3 mm negative size
	1 mm negative size
	2 mm negative size
38.	Which of the following timber can be strength graded after standard ÍST DS 413?
	All softwood
	Nordic spruce and pine
	Hardwood
39.	When you strength grade timber with 24% moisture content how will you mark it?
	With I
	With IU
	With IU With U

40.	Top rupture:
	Allowed width is 1/4 of width in middle
	Allowed width is 1/2 of width in middle
	Top rupture is not allowed
41.	How often shall the certification body visit the grader for inspection?
	Once a year
	Twice a year
	Never
42.	Who is responsible if DK18 timber is marked T24?
	The on who did the grading
	The company which sells it
	The certification body
43.	In the standard IST DS 413 are following grading classes:
	K30-K24-K18
	T30-T24-DK18
	T30-T24
44.	Is it possible to grade preservative penetration timber?
	Yes
	No
	It depends on the preservative penetration
45.	When finger-jointing timber are stress graded how shall they be marked?
	With the company logo
	With grade class
	With special label
46.	Under a long-time load can timber last:
	As long as short time load
	Less than short time load
	Longer than short time load
47.	About ring shakes:
	Are not allowed
	Limited quantity is allowed
	Depends on the size of the shakes

48.	About blue stain:
	Not allowed
	No demands are defined
	Depends on the size of the shakes
49.	About heart shakes:
	Not allowed
	Limited quantity is allowed
	Depends on the size of the shakes
50.	What are the requirements for the slope of grain for T30?
	1/20
	1/10
	No demands are defined

## Mark the highest grade

	Questions	<b>T30</b>	T24	DK18	Other
	Width of the annual rings				
1	Board with 9 annual rings total 50 mm				
2	Beams with 50 annual rings total 120 mm				
3	Board with 30 annual rings total 90 mm				
4	Board with 0,3 mm annual rings				
5	Strips with 4,5 mm annual rings				
6	Spars with 8 mm annual rings				
7	Beams with 4 mm annual rings				
8	Beams with 0,5 mm annual rings				
	Slope of grain				
9	Beams with 1/7 slope of grain				
10	Board with 1/4 slope of grain				
11	Strips with 1/12 slope of grain				
12	Board with 1/6 slope of grain				
	Wane				
13	Board 25x100 mm with 15 mm edge wane				
14	Spar 150x150 mm with 75 mm wane				
15	Beams 50x150 mm with 45 mm face wane on				
	both sides				
16	Beams 50x100 mm with 50 mm face wane				
17	Strips 50x50 mm with 10 mm wane, 1/3 of the				
	edge				
	Bow				
18	Board 38x125 mm with 15 mm edge bow				
19	Beams 63x125 mm with 12 mm edge bow				
20	Spars 125x125 mm with 25 mm bow				
21	Board 19x100 mm with 10 mm edge bow				
22	Beams 50x150 mm with 15 mm edge bow				
23	Spars 100x100 mm with 4 mm bow				

24 25 26 27 28	Board 25x150 mm with 25 mm face bow Board 32x125 mm with 35 mm face bow Strips 50x50 mm with 12 mm bow Beams 75x150 mm with 15 mm face bow Spar 75x75 mm with 15 mm bow		
29 30 31 32	<b>Twist</b> Board 25x100 mm with 13 mm twist Beams 50x100 mm with 3 mm twist Spar 125x125 mm with 9 mm twist Board 38x125 mm with 6 mm twist		
33	Heart shakes Board 25x100 mm with heart shakes which are 6 mm deep		
34	Beams 50x200 mm with heart shakes which are 28 mm deep		
35	Board 25x100 mm with heart shakes which are 8 mm deep		
36	Spars 150x150 mm with heart shakes which are 70 mm deep		
37	Board 32x125 mm with heart shakes which are 20 mm deep		
38	Beams 50x150 mm with heart shakes which are 15 mm deep		
39	shakes which are 10 mm deep		
40	50 mm deep		
	Bark pocket - Scar		
41	Beams 50x200 mm with a 300 mm long scar		
42	Beams 63x125 mm with a 70 mm long scar		
43	Beams 75x150 mm with a 150 mm long scar		
44	Board 38x125 mm with a scar on the face which is 25 mm wide		

45	Spar 100x100 mm with 35 mm deep scar			
45	Beams 50x100 mm with a scar which is 25			
-10	deen			
	Other defects			
47	Beams 75x150 mm with compression wood	_	_	
	which is $20x15$ mm of the cross section			
48	Spars 125x125 mm with compression wood			
	which is 100x100 mm of the cross section			
49	Beams 50x200 mm with top rupture which is			
	48 mm from the arris			
50	Beams 50x100 mm with top rupture which is			
	40 mm from the arris			
51	Beams 50x100 mm with 2 pieces 20 mm deep			
	marks from crane			
52	Beams 50x150 mm where the pith is 35 mm			
	from the arris			
53	Beams 50x150 mm where the pith is 45 mm			
	from the arris			
54	Board 25x150 mm with 20 resin pochet on 4 m			
55	Spars 150x150 mm with curly grain			
56	Beams 63x125 mm with scar which is 170 mm			
	long, 30 mm deep and 25 mm wide			
57	Beams 50x100 mm with blue stain			
58	Beams 50x100 mm with fibre cracks			
59	Spars 100x100 mm 6 m long with rot in first			
	50 cm			
60	Spars 125x125 mm with insect holes			

## Mark the highest grade

	Questions	Т30	T24	DK18	Other
	Knots				
61	Board 25x125 mm with 25 mm edge knot				
62	Beams 63x125 mm with 20 mm edge knot				
63	Beams 50x150 mm with 10 mm edge knot				
64	Spars 150x150 mm with 30 mm knot				
65	Board 25x150 mm with 8 mm face knot				
66	Spars 100x100 mm with 15 mm knot				
67	Spars 125x125 mm with 40 mm knot				
68	Beams 125x250 mm with 40 mm edge knot				
69	Beams 125x300 mm with 30 mm edge knot				
70	Board 19x150 mm with 10 mm face knot				
71	Board 38x175 mm with 30 mm face knot				
72	Beams 50x150 mm with 25 mm face knot				
73	Beams 63x125 mm with 35 mm face knot				
74	Beams 125x250 mm with 40 mm face knot				
75	Spars 100x100 mm with 25 mm knot				
76	Spars 150x150 mm with 40 mm knot				
77	Spars 200x200 mm with 50 mm knot				
78	Spars 200x200 mm with 32 mm knot				
79	Beams 50x150 mm with 51 mm knot cluster				
80	Board 25x100 mm with 30 mm knot cluster				
81	Spars 150x150 mm with 115 mm knot cluster				
82	Beams 100x200 mm with 60 mm knot cluster				
83	Board 32x125 mm with 55 mm knot cluster				
84	Beams 50x125 mm with 65 mm knot cluster				
85	Beams 63x125 mm with 35 mm knot cluster				
86	Beams 50x150 mm with two 30 mm face knots				
	and there is 200 mm between them				
87	Beams 75x150 mm with two edge knots				
	cluster on each side and they both are 25 mm				
88	Spars 200x200 mm with two knots which are				
	35 mm each and they are 150 mm apart				
89	Beams 50x150 mm with edge knot which is				

	10 mm on the edge and 25 mm on the outside		
	face		
90	Beams 75x150 mm with edge knot which is		
	5 mm on the edge and 20 mm on the outside		
	face		
91	Beams 50x100 mm with edge knot which is		
	5 mm on the edge and 40 mm on the outside		
	face		
92	Beams 63x125 mm with 30 mm knot which is		
	in the wane		
93	Beams 50x150 mm with spike knot		
94	Board 32x125 mm with through face knot which is 10 mm in inside face and 15 mm in		
	outside face		
0.7	Spars 100x100 mm with two knots 25 mm on		
95	two sides		