RoboCupJunior Singapore 2010
DANCE INTERVIEW

Team Name: _____
Country: _____

Age Group (tick one)
PRIMARY
SECONDARY

JUDGE Initials

Robot Design & Construction **The appearance and construction of the robot shows...**	**TOTALS**
Design & construction was largely students' own Commercial robot (eg. AIBO) = 0, commercial kit (eg. LEGO) = 1-2 (eg. Using existing instruction) = 3 (own design), own design and hand-built = 4-5. Significant mentor's involvement will cause points reduction.	/5
Gearing, linkages, pivots, motors (other non-basic features) used in design and drive mechanisms (reward design for complexity IF it aids movement. How many motors are used? How did you design the actuators arrangement?)	/3
Students successfully addressed problems of robot balance and structural soundness in design in performance application (eg: how did you stop x from becoming loose during the performance? What have you done to prevent your robot(s) falling over, or breaking if they fall?,)	/3
Electronic boards used in design and actually on the robot Eg: What kinds of boards are on the robot? (e.g. computer or microcontroller board, motors driver board, etc.) What is the function of each board? How are the voltages regulated? How are motor speed/direction controlled (hardware)? What types of batteries are used?	/3
Evidence of authenticity and evolution (Logbook, journal, photographic record or similar provided to convey ideas tried and discarded, progressive evolution of students' design and original ideas.) Teams are requested to produce four A4 paper sheets with a general summary of their robots including photographs of different stages of development	/2
TOTAL	**/16**

Programming and Preparation **Through experience, research and teamwork the team shows:**	**TOTALS**
They can explain, describe and understand their program thoroughly (eg: what does this section of program tell the robot to do? If I changed this part/instruction to become x, what effect would that have on the robot?)	/4
Complex, innovative or original programming used or programming level appropriate to age and expertise level (eg: simple commands only 1;use of jumps/lands, loops, nested sections, creation of own icons or sequences 2-3, use of multiple languages/assembler, use interrupts 4-5)	/5
They are able to explain connections between the program and music selected (eg: How do you get your robot to synchronise to music ? If your robot(s) perform in Theatre, how the robot programming is related to the music?) 1 mark = limited programming so that robot is vaguely in time with music, 3=robot programmed so in full sync. with the music.	/3
They could explain how they have worked as a team (eg: How did you work as a team? Share the tasks? How did you make decisions? How many were really active in building/programming the robot? How did they solve problems as a team? Did they have sub-teams? If only one member of the team, If the team has only one student, ask how s/he has managed to successfully complete multiple tasks, and if s/he got any help/support from adults or/and friends. If yes, ask what/how.	/2
TOTAL	**/14**

Sensors & Technology **Robot shows...**	**TOTALS**
Use of sensors (eg:)? What types of sensors are on the robot? How do they function? How does the robot know its direction? Programming to respond to sensors, use of sensors to trigger next part of performance, evidence of programming to keep the robot within the stage boundaries: how did the robot avoid obstacles or another robot? Effectiveness of sensors used; how did you place your sensors? Did you encounter interference when the sensors were used? etc)	/5
Communication between robots using IR, Ultrasonic waves or other means: (eg: communications between robots triggers events, keeps in sync with other robots, etc.)	/3
Use of other technologies: (eg: use of unusual technologies such as RFID, digital camera, in-built timer to monitor duration of performance, construction and control of hand-made servo motors/sensors, etc)	/2
TOTAL	**/10**

TOTAL SCORE /40