

(OP1) Eight well known historical supernovae will appear in the projected sky one at a time (not necessarily in chronological order). You have to identify the appropriate map (Map 1 / Map 2) where a particular supernova belongs and mark it in the corresponding map with ‘+’ sign and write codes ‘S1’ to ‘S8’ besides it. 40

Each supernova code will be projected on dome for 10 seconds, followed by appearance of supernova for 60 seconds and then 20 seconds for you to mark the answers.

(OP1.1) For S1, S2, S3, S4 and S5, the projected sky corresponds to the sky as seen from Rio de Janeiro on the midnight of 21<sup>st</sup> May.

(OP1.2) For S6, S7 and S8, the projected sky corresponds to the sky as seen from Beijing on the midnight of 20<sup>th</sup> November. There will be a gap of two minute after S5 for change over and adaptation to new sky.

(OP2) We are now projecting sky of another planet. The sky will be slowly rotated for 5 minutes . Identify the visible celestial pole of this planet and mark it with a ‘+’ sign and label it as ‘P’ on the appropriate map (Map 1 / Map 2). 10