| 10 | (a) | Very likely weight will increase with time oe or He is only looking for positive correlation | B1 | Or eg "Expect weight to increase with time" oe "Foetuses grow" oe Ignore all else |
|----|-----|---|----------------------------|--|
| 10 | (b) | $H_0: \rho = 0$ Allow other letters $H_1: \rho > 0$ where ρ is the correlationcoefficient for the populationor where ρ is the correlation coefficientbetween time and weightComp 0.722 with 0.6851Reject H_0.Condone Accept H_1There is evidence of (positive linear)correlation between time from conception tobirth and weight of new-born babiesOr eg It appears that birth weight increaseswith time (from conception to birth) | B1 B1 M1 M1 A1 | B1B0 for 1 error, eg undefined ρ or 2-tail For hypotheses in words, not using parameter: H₀: There is no correlation between time and weight H₁: There is positive correlation between time and weight But omission of "positive": B0B0 May be implied by conclusion Allow without "positive" and without "linear" In context, not definite |