5 A particle P has charge and mass. The particle causes an electric field and a gravitational field.

Which of the following statements is correct, at a distance r from P?

☒ **A** gravitational field strength is proportional to $\dfrac{1}{r}$

☒ **B** electric field strength is proportional to $\dfrac{1}{r}$

☒ **C** gravitational potential is always positive

☒ **D** electric potential is proportional to $\dfrac{1}{r}$

(Total for Question 5 = 1 mark)