

(c) The nucleus of a sperm cell fuses with the nucleus of an egg cell to form a zygote. The zygote develops into a blastocyst.

(i) Draw a diagram to show the arrangement of the cells of a blastocyst.

(2)

(ii) The blastocyst contains some pluripotent stem cells.

Which of the following describes these pluripotent stem cells?

(1)

- A** adult stem cells that can give rise to most types of cell in the body, including totipotent cells
- B** adult stem cells that can give rise to most types of cell in the body, excluding totipotent cells
- C** embryonic stem cells that can give rise to most types of cell in the body, including totipotent cells
- D** embryonic stem cells that can give rise to most types of cell in the body, excluding totipotent cells