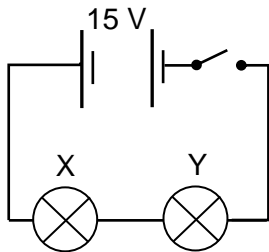


- 21** Two bulbs are connected in series to a 15 V power supply. Bulb X is rated 10 V, 20 W and Bulb Y is rated 5 V, 2 W.



Which of the following best describes the power output of the bulbs when the switch is closed?

|          | <u>power output of bulb X</u> | <u>power output of bulb Y</u> |
|----------|-------------------------------|-------------------------------|
| <b>A</b> | 20 W                          | 2 W                           |
| <b>B</b> | greater than 20 W             | smaller than 2 W              |
| <b>C</b> | smaller than 20 W             | greater than 2 W              |
| <b>D</b> | smaller than 20 W             | smaller than 2 W              |