

'Gulab Jamuns' (assumed to be spherical) are to be heated in an oven. They are available in two sizes, one twice bigger (in radius) than the other. Pizzas (assumed to be discs) are also to be heated in oven. They are also in two sizes, one twice big (in radius) than the other. All four are put together to be heated to oven temperature. Choose the correct option from the following:

- (a) Both size gulab jamuns will get heated in the same time.
- (b) Smaller gulab jamuns are heated before bigger ones.
- (c) Smaller pizzas are heated before bigger ones.
- (d) Bigger pizzas are heated before smaller ones.

Since $\frac{dQ}{dt} \propto A$; heat radiation from smaller

gulab jamuns and smaller pizzas will be less.
Hence, they will be heated faster as compared to larger ones.