

## EXPONENTS AND POWERS (BASIC)

Q1. Simplify :

a.  $(-5)^5 / (5)^7$

b.  $(4)^{-6} \times (-4)^2$

Q2. Find 'p' such that  $(-6)^{p+2} \times (-6)^3 = (-6)^9$ .

Q3. Find the value of the following :

a.  $[5^0 + (1/2)^2] \times (2)^2$

b.  $(4/7)^{-3}$

Q4. Simplify the following :

$$(1/6)^{2 \times} (2/3)^3 / (4/5)^{4 \times} (12/45)^0.$$

Q5. Find the value of t in the following :

$$(27 \times t^{-3}) / (6^2 \times t^{-5}) = 48.$$

Q6. Express the following in the standard form :

a. 0.000407

b. 370000

Q7. Express the following in their usual form :

a.  $3.414567 \times 10^8$

b.  $0.079 \times 10^{-3}$

Q8. In a stack there are 5 books each of thickness 25mm and 5 paper sheets each of thickness 0.0145mm. What is the thickness of the steel?