

## Exponent Worksheet – 1

1. The multiplicative inverse of  $(\frac{3}{4})^2$  is not equal to  $(\frac{4}{3})^2$ . Mark True/False.
  - a) True
  - b) False
2.  $(\frac{2}{5})^{-2} \times (\frac{2}{5})^5 = (\frac{2}{5})^{10}$ . Mark True/ False.
  - a) True
  - b) False
3. The multiplicative inverse of  $(-3)^{-2}$  is  $(-3)^{-2}$ . Mark True/False.
  - a) False
  - b) True
4.  $123.35 = 1 \times 10^2 + 2 \times 10^1 + 3 \times 10^0 + 3 \times 10^{-1} + 5 \times 10^{-2}$ . Mark True /False.
  - a) False
  - b) True
5. The value of  $\frac{1}{7^{-2}}$  is equal to 49. Mark True /False.
  - a) True
  - b) False
6. The expression for  $9^{-3}$  as power with the base 3 is  $3^6$ . Mark True /False.
  - a) False
  - b) True
7.  $p^m = \frac{1}{p^{-m}}$ . Mark True / False.
  - a) False
  - b) True
8. The exponential form of  $(3)^4 \times (5/3)^4$  is  $5^4$ .
  - a) True
  - b) False
9.  $p^m \times q^n = (pq)^{mn}$ . Mark True /False.
  - a) True
  - b) False
10.  $A^m / B^m = (A/B)^m$ . Mark True /False.
  - a) True
  - b) False
11. Multiplicative inverse of  $10^9$  is \_\_\_\_\_.
  - a)  $10^{-9}$
  - b)  $(\frac{1}{10})^{-9}$
  - c)  $10^9$
  - d) None of these
12.  $7^5 \times 7^{-5} = \underline{\hspace{2cm}}$ .
  - a) 0
  - b) 1
  - c)  $7^{10}$
  - c)  $7^{-25}$
13. The expression of very small numbers in standard form by using \_\_\_\_exponents.
  - a) Positive
  - b) Both

c) Negative

d) None

14. The value of  $(7^{-1} - 9^{-1})^{-1} - (3^{-1} - 5^{-1})^{-1}$  is \_\_\_\_\_.

a) 24

b) 44

c) -24

d) -48

15. The standard form of 0.000034 is \_\_\_\_\_.

a)  $34 \times 10^5$

b)  $3.4 \times 10^{-5}$

c)  $340 \times 10^5$

d)  $0.34 \times 10^5$

16. Which of following is same as  $\left(-\frac{5}{6}\right)^{-3}$ ?

a)  $\left(-\frac{6}{5}\right)^{-3}$

b)  $\left(-\frac{6}{5}\right)^3$

b)  $-\left(\frac{5}{6}\right)^3$

d)  $\left(\frac{5}{6}\right)^3$

17. The value of  $(-3)^{2 \times 3 - 3}$  is \_\_\_\_\_.

a) 27

b) 81

c) -81

d) -27

18. The multiplicative inverse of  $\left(-\frac{7}{9}\right)^{99}$  is \_\_\_\_\_.

a)  $\left(-\frac{7}{9}\right)^{-99}$

b)  $\left(\frac{9}{7}\right)^{99}$

c)  $\left(\frac{7}{9}\right)^{-99}$

d)  $\left(\frac{9}{7}\right)^{-99}$

19. If y is any non-zero integer, then  $y^{-1}$  is equal to \_\_\_\_\_.

a) y

b)  $\frac{1}{y}$

c) -y

d)  $\frac{-1}{y}$

20. On dividing  $11^5$  by \_\_\_\_\_, we get 11. Fill in the blanks by choosing correct option.

a)  $11^4$

b)  $11^3$

c)  $11^0$

d) None of these.