



1. Which of the following are true?

- a) A binomial has two and only two terms
- b) A binomial may have degree 3
- c) Degree of zero polynomial is zero
- d) Every polynomial is a binomial
- e)  $\pi r^2$  is a monomial

(i) {c,d,e} (ii) {c,a} (iii) {d,b} (iv) {a,b,e} (v) {c,a,b}

2. Which of the following are polynomials?

- a)  $x^2$
- b)  $\frac{(x+y)}{(x-y)}$
- c)  $x^2 + \frac{1}{x^2}$
- d)  $(x+y)$
- e)  $x + \frac{1}{x}$

(i) {a,d} (ii) {e,b,a} (iii) {c,d,a} (iv) {b,a} (v) {c,d}

3. Which of the following are not polynomials?

- a)  $16x^2$
- b)  $x + \frac{1}{x}$
- c)  $\frac{(6x+y)}{(11x-9y)}$
- d)  $(66x^2 - 43xy - 9y^2)$
- e)  $(6x+y)$

(i) {d,c,b} (ii) {e,a,b} (iii) {b,c} (iv) {d,c} (v) {a,b}

4. Which of the following are not polynomials?

- a)  $(3x+7y)$
- b)  $\sqrt{x}$
- c)  $81x^2 + \frac{1}{81x^2}$
- d)  $81x^2$
- e)  $(3x-12y)$

(i) {d,c,b} (ii) {b,c} (iii) {e,a,b} (iv) {d,c} (v) {a,b}

5. Which of the following are not polynomials?

a)  $(21x^2 + 4xy - 32y^2)$

b)  $(7x - 8y)$

c)  $\frac{(3x+4y)}{(7x-8y)}$

d)  $x^2$

e)  $\sqrt{x}$

(i) {d,a,c} (ii) {a,c} (iii) {c,e} (iv) {b,e,c} (v) {b,e}

6. Which of the following is a factor of  $7x^2y^5z^4$  ?

(i)  $7yz^4$  (ii)  $7y^6z^4$  (iii)  $7x^2yz^5$  (iv)  $x^3yz^4$  (v)  $7yz^5$

7. Which of the following is not a factor of  $42x^4y^3z^5$  ?

(i)  $2x^3y^3z^5$  (ii)  $2x^5y^4z^5$  (iii)  $2x^4y^2z^2$  (iv)  $2x^4y^3z^4$  (v)  $2x^4y^2z^5$

8. Which of the following is a factor of  $(4x^5 + y^4z^3)$  ?

(i)  $4x^5$  (ii)  $4x^2z^3$  (iii)  $4y^4$  (iv)  $y^4z^3$  (v) no factors

9. Which of the following is an irreducible factor of  $30xy^5z^3$  ?

(i)  $xz^3$  (ii)  $y^4z$  (iii)  $x^2y$  (iv)  $y$  (v)  $x^2y^4z^3$

10. Which of the following is not an irreducible factor of  $(x^2y + xy^2 + xy)$  ?

(i)  $(x+y+1)$  (ii)  $xy$  (iii)  $y$  (iv)  $x$

11.  $e^4 =$

(i)  $e \times e \times e \times e$  (ii)  $e \times e \times e \times e$  (iii)  $-e \times e \times e \times e$  (iv)  $4 \times e \times e \times e \times e$  (v)  $e \times e \times e$

12.  $k^2l^3 =$

(i)  $-2 \times k \times k \times l \times l \times l$  (ii)  $k \times k \times l \times l \times l$  (iii)  $k \times l \times l \times l$  (iv)  $k \times k \times k \times l \times l \times l$  (v)  $4 \times k \times k \times l \times l \times l$

13.  $19a^4b^2c^4 =$

(i)  $19 \times a \times a \times a \times a \times b \times b \times c \times c \times c \times c$  (ii)  $17 \times a \times a \times a \times a \times b \times b \times c \times c \times c \times c$

(iii)  $19 \times a \times a \times a \times a \times b \times b \times c \times c \times c \times c$  (iv)  $19 \times a \times a \times a \times a \times a \times b \times b \times c \times c \times c \times c$

(v)  $22 \times a \times a \times a \times a \times b \times b \times c \times c \times c \times c$

14.  $30 \times p \times p \times p =$

(i)  $33p^3$  (ii)  $30p^3$  (iii)  $28p^3$  (iv)  $30p^2$  (v)  $30p^4$

15.  $6 \times c \times c \times c \times c \times d \times d =$

(i)  $8c^4d^2$  (ii)  $6c^4d^2$  (iii)  $4c^4d^2$  (iv)  $6c^3d^2$  (v)  $6c^5d^2$

16.  $k \times k \times l \times l \times l \times m \times m \times m \times m =$

- (i)  $k^2 l^3 m^4$  (ii)  $4k^2 l^3 m^4$  (iii)  $kl^3 m^4$  (iv)  $-2k^2 l^3 m^4$  (v)  $k^3 l^3 m^4$

## Assignment Key

1) (iv)	2) (i)	3) (iii)	4) (ii)	5) (iii)	6) (i)
7) (ii)	8) (v)	9) (iv)	10) (ii)	11) (ii)	12) (ii)
13) (iii)	14) (ii)	15) (ii)	16) (i)		