

ITI Quiz - 23-Apr-2026

09:45 AM

Q. ID: ITISKILL2352WJ

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Answer Key

Duration: 120 Mins

Total Marks: 63

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1. Which is mineral insulator

- A) Quartz B) Mica
C) Porcelain D) Glass

Answer: B) Mica

2. What is the radius of a circle whose diameter is 44 cm?

- A) 23 cm B) 22 cm
C) 20 cm D) 44 cm

Answer: B) 22 cm

3. What is the multiplication value of $5a^2 \times 8a^5 \times b^3$?

- A) $40a^3 b^2$ B) $40a^4 b^7$
C) $40a^2 b^3$ D) $40a^7 b^4$

Answer: D) $40a^7 b^4$

4. What is the length of arc of a sector whose radius is 3.6 cm and angle is 36 Degree?

- A) 22.6 cm B) 2.10 cm
C) 21.0 cm D) 2.26 cm

Answer: D) 2.26 cm

5. Which is equal to $(a+b)^2 - (a-b)^2$?

- A) 3ab B) 5ab
C) 2ab D) 4ab

Answer: D) 4ab

6. What is the flow of electrons in any conductor?

- A) Power B) Current
C) Resistance D) Voltage

Answer: B) Current

7. What is the area of the sector, whose diameter is 40 mm and angle is 120 Degree?

- A) 400.50 mm^2 B) 415.5 mm^2
C) 416.6 mm^2 D) 418.66 mm^2

Answer: D) 418.66 mm^2

8. What is the total resistance if three resistances of 3 ohms, 9

ohms and 5 ohms are connected in series?

- A) 7 ohm B) $1/17$ ohms
C) 17 ohms D) 11 ohms

Answer: C) 17 ohms

9. What is the circumference of a circle whose diameter is 7 cm?

- A) 25 cm B) 44 cm
C) 21 cm D) 22 cm

Answer: D) 22 cm

10. Which is very good conductor?

- A) Steel B) Cast iron
C) Wrought iron D) Copper

Answer: D) Copper

11. What are the three consecutive numbers if their sum is 42?

- A) 11,12,13 B) 13,14,15
C) 12,13,14 D) 14,15,16

Answer: B) 13,14,15

12. What is the formula for $(a-b)^2$?

- A) $a^2 - 2ab - b^2$ B) $a^2 + 2ab + b^2$
C) $(-a^2 - 2ab - b^2)$ D) $a^2 - 2ab + b^2$

Answer: D) $a^2 - 2ab + b^2$

13. What is the area of the semicircle, if the diameter is 14 cm?

- A) 75.06 cm^2 B) 76.93 cm^2
C) 86.93 cm^2 D) 70 cm^2

Answer: B) 76.93 cm^2

14. What is the expanded form of $(a+b)^2$?

- A) $a^2 - 2ab + b^2$ B) $a^2 + 2ab + b^2$
C) $a^2 + 2ab - b^2$ D) $(-a^2 - 2ab + b^2)$

Answer: B) $a^2 + 2ab + b^2$

15. Which is equal to $(a^m)^n$?

- A) a^{m-n} B) $a^{m/n}$
 C) a^{m+n} D) a^{mn}

Answer: D) a^{mn}

16. Which is the expansion of $a^3 + b^3$?

- A) $(a-b)(a^2 + b^2 - ab)$ B) $a^3 + b^3 + 3ab(a+b)$
 C) $a^3 - b^3 + 3ab(a-b)$ D) $(a+b)(a^2 + b^2 - ab)$

Answer: D) $(a+b)(a^2 + b^2 - ab)$

17. What is the diameter of the circle, if the area of the circle is 706.5cm^2 ?

- A) 30.5 cm B) 29 cm
 C) 30 cm D) 29.5 cm

Answer: C) 30 cm

18. What is the value of $14x+3y+25x+2y$?

- A) $39x + 5y$ B) $17x + 27y$
 C) $44xy$ D) $16x + 28y$

Answer: A) $39x + 5y$

19. What is the area of the sector, if the diameter is 12 cm and the angle is 60 Degree?

- A) 17.75 cm^2 B) 19.00 cm^2
 C) 18.84 cm^2 D) 18.0 cm^2

Answer: C) 18.84 cm^2

20. What is the value of $(6^3) / ((-3)^3)$?

- A) (-8) B) 8
 C) 27 D) (-27)

Answer: A) (-8)

21. What is the value of x, if $3(2x - 4) = -4x + 28$?

- A) 8 B) 6
 C) 12 D) 4

Answer: D) 4

22. What is the value of $x^3 + 3y^2x^2$ if $x=3, y=2$?

- A) 135 B) 54
 C) 81 D) 63

Answer: A) 135

23. Which is the unit of current?

- A) Watt B) Ampere
 C) Volt D) Ohm

Answer: B) Ampere

24. Which is the formula for a^m / a^n ?

- A) a^{m-n} B) a^{m+n}
 C) a^{mxn} D) $(a^m)^n$

Answer: A) a^{m-n}

25. What is the subtracted value of $3x - 4x^2 + 2y^2$ from $4y^2 - 2x + 8x^2$?

- A) $(-2y^2 - 5x + 12x^2)$ B) $2y^2 + 5x - 12x^2$
 C) $2y^2 - 5x - 12x^2$ D) $2y^2 - 5x + 12x^2$

Answer: D) $2y^2 - 5x + 12x^2$

26. What is the value of $a^2 \times a^3 \times a^4$?

- A) a^{10} B) a^9
 C) a^7 D) a^8

Answer: A) a^{10}

27. What is the value of $1 / a^{-5}$?

- A) a^5 B) $(-5a)$
 C) a^{-5} D) $5a$

Answer: A) a^5

28. What is the value of adding $(5x+2y), (4x - 7z)$ and $(15z - 3y)$?

- A) $9x + y - 8z$ B) $9x - y + 8z$
 C) $x - 9y + 8z$ D) $x + 9y + 8z$

Answer: B) $9x - y + 8z$

29. What is the value of $12x^3y^2 / 4x^2y$?

- A) $8xy$ B) $(-3xy)$
 C) $16xy$ D) $3xy$

Answer: D) $3xy$

30. What is the value of x if $11x+4=37$?

- A) 2 B) 5
 C) 3 D) 4

Answer: C) 3

31. Which machine converts mechanical energy into electrical energy?

- A) Generator B) Battery
 C) Heater D) Iron box

Answer: A) Generator

32. What is the area of the circle, if the circumference of the

circle is 44cm?

- A) 128 cm^2 B) 129 cm^2
C) 154 cm^2 D) 130 cm^2

Answer: C) 154 cm^2

33. What is the diameter of the circle, if the circumference is 31.4 cm?

- A) 8.5 cm B) 8 cm
C) 5 cm D) 10 cm

Answer: D) 10 cm

34. What is the area of a circular surface if the radius is 14 cm?

- A) 615.44 cm^2 B) 612.25 cm^2
C) 612.44 cm^2 D) 614.5 cm^2

Answer: A) 615.44 cm^2

35. What is the formula for $a^m \times a^n$?

- A) a^{m-n} B) a^{m+n}
C) a^{mn} D) $n \cdot a^m$

Answer: B) a^{m+n}

36. What is the length of arc of the sector whose radius is 15 cm and the intended angle is 30 Degree?

- A) 7.85 cm B) 7.25 cm
C) 6.85 cm D) 6.75 cm

Answer: A) 7.85 cm

37. What is the value of x, if $x^{120} = 960$?

- A) 8 B) 10
C) 6 D) 7

Answer: A) 8

38. What is the name of the region of a circle between any two point on the circumference?

- A) Chord B) Segment
C) Arc D) Sector

Answer: B) Segment

39. What is the radius of the circle if the angle of sector is 90 Degree and the area of the circle is 196 cm^2 ?

- A) 14.95 cm B) 15 cm
C) 15.77 cm D) 14.85 cm

Answer: C) 15.77 cm

40. What is the value of ab if $(a+b)^2 = 36$ and $(a-b)^2 = 24$?

- A) 2 B) 4
C) 6 D) 3

Answer: D) 3

41. What is the area of the circle if the radius is 10 cm?

- A) 31.4 cm^2 B) 3.14 cm^2
C) 314 cm^2 D) 30.4 cm^2

Answer: C) 314 cm^2

42. What is the name called biggest chord of the circle?

- A) Diameter B) Radius
C) Diagonal D) Arc

Answer: A) Diameter

43. What is the simplified value of $(3x + 15) / (5x + 25)$?

- A) $(3/5)$ B) $(-5/3)$
C) $(-3/5)$ D) $(5/3)$

Answer: A) $(3/5)$

44. What is the diameter of the semicircle, if the circumference of the semicircle is 21.98 cm?

- A) 8 cm B) 7.55 cm
C) 7 cm D) 8.55 cm

Answer: D) 8.55 cm

45. What is the value of 625^0 ?

- A) 1 B) 25
C) 0 D) 525

Answer: A) 1

46. What is the value of $a^5 \times a^7$?

- A) a^{22} B) a^{12}
C) a^{35} D) a^{21}

Answer: C) a^{35}

47. What is the area of the circle, whose diameter is 50 cm?

- A) 1960 cm^2 B) 1962.5 cm^2
C) 1900 cm^2 D) 1950 cm^2

Answer: B) 1962.5 cm^2

48. What is the length of arc of a sector, whose perimeter is 64.8cm and radius is 12.4 cm?

- A) 42 cm B) 40 cm
C) 40.8 cm D) 45 cm

Answer: B) 40 cm

49. Which is expanded form of $a^3 - b^3$?

- A) $(a-b)(a^2 - b^2 + ab)$ B) $(a-b)(a^2 - b^2 - ab)$
C) $(a-b)(a^2 + b^2 + ab)$ D) $(a+b)(a^2 - b^2 - ab)$

Answer: C) $(a-b)(a^2 + b^2 + ab)$

50. What is the value of x if $13+x = 20$?

- A) 13 B) 8
C) 7 D) 9

Answer: C) 7

51. Which property of a substance is opposing the flow of electric current?

- A) Resistance B) EMF
C) Voltage D) Current

Answer: A) Resistance

52. What is the radius of the semicircle, if the circumference of the semicircle is 28.26 cm?

- A) 8.75 cm B) 6.49 cm
C) 8.5 cm D) 5.49 cm

Answer: D) 5.49 cm

53. What is the length of arc of a sector, whose radius is 15 cm and angle is 40 Degree?

- A) 10.60 cm B) 9.8 cm
C) 9.75 cm D) 10.4 cm

Answer: D) 10.4 cm

54. What is the value of $x^2 - y^2$ if $(x+y) = 9$, $(x - y) = 4$?

- A) 13 B) 65
C) 46 D) 36

Answer: D) 36

55. What is the diameter of the circle, if the area of the circle is 78.5cm^2 ?

- A) 5.5 cm B) 15 cm
C) 5 cm D) 10 cm

Answer: D) 10 cm

56. What is the expansion of $(a+b+c)^2$?

- | | |
|--|--|
| A) $a^2 + b^2 + c^2 - 2ab + 2bc + 2ca$ | B) $a^2 + b^2 + c^2 + 2(ab + bc + ca)$ |
| C) $a^2 - b^2 - c^2 + 2ab + 2bc + 2ca$ | D) $a^2 + b^2 + c^2 + 2ab - 2bc + 2ca$ |

Answer: B) $a^2 + b^2 + c^2 + 2(ab + bc + ca)$

57. What is the value of 'X' if $x - y = 6$ and $x + y = 8$?

- A) 7 B) 5
C) 14 D) 6

Answer: A) 7

58. What is the value of $a^2 + b^2$ if $a+b=9$ and $ab = 20$?

- A) 121 B) (-41)
C) (-121) D) 41

Answer: D) 41

59. Which is the unit of resistance?

- A) Ohm B) Watt
C) Ampere D) Volt

Answer: A) Ohm

60. What is the value of any number raised to the power of 0?

- A) 0 B) (-1)
C) Alpha (?) D) 1

Answer: D) 1

61. What is the value of x if $(x + 2) / 2 = 19$?

- A) 35 B) 33
C) 38 D) 36

Answer: D) 36

62. What is the radius of the circle, whose circumference is 440 cm?

- A) 70 cm B) 71.5 cm
C) 72.2 cm D) 70.5 cm

Answer: A) 70 cm

63. What is the value of $5x^4 / 5x^3$?

- A) x B) $5x^4 / 5x^3$
C) $5x^2$ D) 5x

Answer: A) x