

Ramakrishna Mission Industrial Training Center, Narendrapur Kolkata – 700103
ITI Admission Test – 2018

Candidate's Roll No.: _____ Name: _____

A

Total Marks (2 x 50 = 100)

Write the correct alternative in the space provided. In case of overwriting, no mark will be awarded.
Do rough work in the last 2 pages.

- Q 1. Value of $\{3\sqrt{x^2y^5}\}^8$
a) $189x^5y^{15}$ b) $729y^6x^{15}$ c) $729x^6y^{15}$ d) None of these Q 1.Ans: __
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- Q 2. Value of $9-6x+x^2$
a) $(3+x)(3-x)$ b) $(3-x)(3-x)$ c) $(3+x)(x-X)$ d) None of these Q 2.Ans: __
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- Q 3. The cost of two tables and five chairs is Rs. 5000/-. The cost of five tables and two chairs is Rs. 9000/-. Find the cost of each.
a) Rs. 1666.67 and Rs. 333.33 b) Rs. 1555.57 and Rs. 331.30 c) Rs. 1777.77 and Rs. 443.33
d) None of these Q 3.Ans: __
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- Q 4. Find Value of x & y, when $x+y=100$, $x-y=80$.
a) $x=10, y=90$ b) $x=90, y=10$ c) $x=80, y=20$ d) $x=50, y=50$ Q 4.Ans: __
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- Q 5. A father is 50 years old and his son's age is 22 years. After how many years, father's age will be twice the age of his son ?
a) 6 years b) 5 years c) 7 years d) 10 years Q 5.Ans: __
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- Q 6. $a^3 a^6 a^0 = ?$
a) a^5 b) a^3 c) a^9 d) None of these Q 6.Ans: __
-
- Q 7. $x + y = \sqrt{5}$; $x - y = \sqrt{3}$, Hence $8xy(x^2 + y^2) = ?$
a) 15 b) 16 c) 18 d) 20 Q 7.Ans: __
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- Q 8. $a^{x+y} \times a^{x-y} = ?$
a) $2x$ b) $X+Y$ c) X^2-Y^2 d) None of these Q 8.Ans: __
-
- Q 9. $\frac{5}{a^2-b^2} \div \frac{15}{a-b} = ?$
a) $\frac{2}{3(a+b)}$ b) $\frac{15}{(a-b)}$ c) $\frac{1}{3(a+b)}$ d) None of these 9.Ans: __
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- Q 10. Simplify : $5 + \frac{1}{1 - \frac{3}{2 + \frac{1}{3}}}$
a) 1.5 b) 2.5 c) 3.5 d) None of these Q10.Ans: __
-
- Q 11. $\frac{\tan A - \cot B}{\tan B - \cot A} = ?$
a) $\frac{\tan A}{\tan B}$ b) $\frac{\tan B}{\tan A}$ c) $\frac{\cot A}{\tan B}$ d) None of these Q11.Ans: __
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- Q 12. $\frac{1 - \cos 2\theta}{1 + \cos 2\theta} = ?$
a) $\cot^2 \theta$ b) $\tan^2 \theta$ c) $\sec^2 \theta$ d) None of these Q 12.Ans: __
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- Q 13. Find the value of θ when, $\sin \theta + \cos \theta = \sqrt{2}$
a) 30° b) 15° c) 45° d) None of these Q 13.Ans: __
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- Q 14. The perimeter of a rectangle is 80cm. If the length is 5cm more than its breadth, find the area.
a) 383.8sq.m. b) 393.75 sq.m. c) 398.77 sq.m. d) None of these Q 14.Ans: __

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- Q 15. A path way 2m wide runs outside a rectangular lawn 24m long and 16m broad. Calculate the area of path.
a) 172 sq.m. b) 170 sq.m. c) 176 sq.m. d) None of these Q 15.Ans: __
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- Q 16. In a right angle triangle, the sum of the two acute angles is equal to the third angle and the difference between them is 50° . Find each angle of triangle.
a) $90^\circ, 50^\circ, 40^\circ$ b) $90^\circ, 70^\circ, 20^\circ$ c) $90^\circ, 60^\circ, 30^\circ$ d) None of these Q16.Ans: __
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- Q 17. An isosceles triangle has base of 200mm. and its area is 2000sq.mm. Find the length of sides.
a) 102mm. b) 105mm. c) 106mm. d) None of these Q 17.Ans: __
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- Q 18. The lateral surface area of cylinder is 1000cm^2 and radius of its base is 20cm. Find the volume of the cylinder.
a) 8000c.c. b) 6000c.c. c) 5000c.c. d) None of these Q 18.Ans: __
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- Q 19. Find the volume of equilateral triangle prism having side 6cm and length 16cm.
a) 249.408 c.c. b) 250.88 c.c. c) 255.546 c.c. d) None of these Q 19.Ans: __
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- Q 20. The base of conical tent is 19.2 m. in diameter and the height of its vertex is 2.8 m. What area of canvas is required to put up such tent ?
a) 300.47m^2 b) 301.7m^2 c) 303.47m^2 d) None of these Q 20.Ans: __
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- Q 21. When some detergent is added to water, the tension –
a) Increases b) decreases c) remains unaffected d) None of these Q21.Ans: __
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- Q 22. Unit of resistance is – a) volt \times ampere b) $\text{volt}^2 \times$ ampere c) volt/ampere d) ampere/volt Q 22.Ans: __
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- Q 23. A temperature at which both the Fahrenheit and the centigrade scales have the same value is
a) -60° b) -40° c) -20° d) 0° Q. 23.Ans: __
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- Q 24. The mode of transmission of heat in which heat carried by moving particles is –
a) Conduction b) radiation c) wave motion d) convection Q 24.Ans: __
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- Q 25. The temperature of liquid during vapourization –
a) increases b) decreases c) remains same d) comes to 100°C Q 25.Ans: __
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- Q 26. HP is the unit of – a) 2N b) 0.75N c) 0.5N d) 1N Q 26.Ans: __
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- Q 27. The fixed resistance is called – a) switch b) resistor c) rheostat d) key Q 27.Ans: __
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- Q 28. Pascal is the unit of – a) force b) pressure c) impulse d) energy Q 28.Ans: __
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- Q 29. The mechanical advantage of an inclined plane is 2. Its inclination is –
a) 45° b) 30° c) 65° d) 25° Q 29.Ans: __
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- Q 30. The gravitational unit of work in S.I. system is –
a) Gram weight b) dyne-centimeter c) gram centimeter/second d) gram centimeter Q 30.Ans: __
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- Q 31. Super phosphate of lime contains –
a) calcium sulphate b) hydrated calcium sulphate c) calcium chloride d) calcium phosphate Q 31.Ans: __
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- Q 32. Which of the following is a compound?
a) ozone b) marble c) diamond d) deuterium Q 32. Ans: __
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- Q 33. In a double bond containing two atoms there is a shearing of –
a) 1electron b) 2electron c) 4 electron d) All of these Q 33.Ans: __
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- Q 34. Fossil fuel is the mixture of –
a) coal and petroleum b) coal and wood c) coal tar and charcoal d) LPG and coke Q 34.Ans: __

- Q 35. Diamond is a –
 a) allotrop of carbon b) allotrop of phosphorus c) allotrop of iodine d) allotrop of sulphur Q 35.Ans: __
- Q 36. Which one of the following is the main ore of copper –
 a) chalcopyrite b) copper glance c) malachite d) altacanite Q 36.Ans: __
- Q 37. Which of the following coal is used for cooking purpose and for manufacturing of coal gas?
 a) Lignite b) Bituminous c) Pit d) Anthracite Q 37.Ans: __
- Q.38. Which of the following gas is used in carbide lamp for welding purpose?
 a) Methylene b) Butane c) Methane d) Acetylene Q.38.Ans: __
- Q.39. Calcium magnesium silicate is
 a) Glass b) Litmus c) Asbestos d) Plastic Q.39.Ans: __
- Q40. The sugar present in the human blood is –
 a) Glucose b) Fructose c) Lactose d) Sucrose Q40.Ans: __
- Q41. Change the voice – “The boy laughed at the beggar”.
 a. The beggar was laughed by the boy. B. The beggar was being laughed by the boy.
 c. The beggar was being laughed at by the boy. D. The beggar was laughed at by the boy Q.41.Ans: __
- Q.42. Find the correct spelt word.
 A. Adverisity b. Advercety c. Adversity d. Advercity Q.42.Ans: __
- Q.43. Find the correct spelt word.
 A. Affedevit b. Afidevit c. Affidavit d. Affidavit Q.43.Ans: __
- Q.44. Find the correct antonym word for ‘protects’.
 A. Defends b. Deprives c. Deserts d. Secures Q.44.Ans: __
- Q.45. Find the correct antonym word for ‘beautiful’.
 A. wonderful b. graceful c. ugly d. handsome Q.45.Ans: __
- Q.46. Find the correct synonym word for ‘massive’.
 A. strong b. little c. huge d. lumpsum Q.46.Ans: __
- Q.47. Find the correct synonym word for ‘beautiful’.
 A. wonderful b. graceful c. ugly d. handsome Q.47.Ans: __
- Q.48. 1 Meter = _____.
 A. 3.28 feet b. 32.8 feet c. 0.328 feet d. none Q.48.Ans: __
- Q.49. 1 inch = _____.cm
 A. 2.54 b. 3.5 c. 2.94 d. none Q.49.Ans: __
- Q.50. 1 kilo watt = _____.HP
 A. 1.76 b. 1.86 c. 1.56 d. 1.36 Q.50.Ans: __