

ARITHMETIC / GENERAL MATH

1. What is 25% of 200?

A. 25

B. 40

C. 50

D. 60

ANSWER: C – 50

2. What is $144 \div 12$?

A. 10

B. 11

C. 12

D. 13

ANSWER: C – 12

3. What is the average of 10 and 20?

A. 10

B. 15

C. 20

D. 25

ANSWER: B – 15

4. Convert 0.5 to fraction.

A. $\frac{1}{4}$



B. $\frac{1}{3}$

C. $\frac{1}{2}$

D. $\frac{2}{3}$

ANSWER: C – $\frac{1}{2}$

5. What is 7^2 ?

A. 14

B. 49

C. 21

D. 56

ANSWER: B – 49

6. Which is divisible by 5?

A. 22

B. 31

C. 45

D. 68

ANSWER: C – 45

7. What is the reciprocal of 4?

A. $\frac{1}{2}$

B. $\frac{1}{3}$

C. $\frac{1}{4}$

D. 4

ANSWER: C – $\frac{1}{4}$



8. What is 3^3 ?

A. 6

B. 9

C. 27

D. 81

ANSWER: C – 27

9. What is $|-10|$?

A. -10

B. 0

C. 10

D. 20

ANSWER: C – 10

10. What is 60% of 50?

A. 20

B. 25

C. 30

D. 35

ANSWER: C – 30

ALGEBRA



11. Solve: $x + 8 = 15$

A. 5

B. 6

C. 7

D. 8

ANSWER: C – 7

12. Solve: $4x = 24$

A. 4

B. 5

C. 6

D. 8

ANSWER: C – 6

13. What is x if $x^2 = 49$?

A. 7

B. -7

C. ± 7

D. 14

ANSWER: C – ± 7

14. Simplify: $5x - 2x$

A. 3

B. $7x$



C. $3x$

D. x^2

ANSWER: C – $3x$

15. If $x = 3$, find $2x + 5$

A. 9

B. 10

C. 11

D. 12

ANSWER: C – 11

16. Which is a linear equation?

A. $x^2 - 4 = 0$

B. $3x + 2 = 0$

C. $x^3 = 1$

D. $xy = 4$

ANSWER: B – $3x + 2 = 0$

17. Solve: $x - 9 = 0$

A. 0

B. 7

C. 8

D. 9

ANSWER: D – 9



18. Simplify: $(x + 4)(x + 1)$

A. $x^2 + 5x + 4$

B. $x^2 + 4$

C. $x^2 + x + 4$

D. $x^2 + 6x$

ANSWER: A – $x^2 + 5x + 4$

19. What is the coefficient of x in $9x$?

A. 9

B. x

C. 1

D. 0

ANSWER: A – 9

20. Solve: $2x + 6 = 14$

A. 3

B. 4

C. 5

D. 6

ANSWER: B – 4

GEOMETRY

21. How many sides does a pentagon have?



A. 4

B. 5

C. 6

D. 7

ANSWER: B – 5 sides

22. Sum of angles of a triangle is:

A. 90°

B. 120°

C. 180°

D. 360°

ANSWER: C – 180°

23. Area of rectangle =

A. $l + w$

B. $2(l + w)$

C. $l \times w$

D. l^2

ANSWER: C – length \times width

24. A right angle measures:

A. 45°

B. 60°

C. 90°

D. 180°



ANSWER: C – 90°

25. What is the radius if diameter is 20 cm?

- A. 5
- B. 8
- C. 10
- D. 20

ANSWER: C – 10 cm

26. Shape with all sides equal and all angles equal:

- A. Rectangle
- B. Rhombus
- C. Square
- D. Trapezoid

ANSWER: C – Square

27. Which angle is less than 90° ?

- A. Right
- B. Obtuse
- C. Straight
- D. Acute

ANSWER: D – Acute angle

28. Perimeter of square with side 4 cm:

- A. 8



B. 12

C. 16

D. 20

ANSWER: C – 16 cm

29. π is approximately:

A. 2.14

B. 3.14

C. 4.13

D. 5.14

ANSWER: B – 3.14

30. A triangle with two equal sides is:

A. Scalene

B. Right

C. Isosceles

D. Equilateral

ANSWER: C – Isosceles triangle

CALCULUS

31. Derivative of x^2 is:

A. x

B. 2

C. $2x$



D. x^2

ANSWER: C – $2x$

32. $d/dx (5) =$

A. 5

B. 1

C. 0

D. x

ANSWER: C – 0

33. $\int 1 dx =$

A. 1

B. x

C. x^2

D. 0

ANSWER: B – x

34. $d/dx (3x) =$

A. 3

B. x

C. $3x$

D. 0

ANSWER: A – 3

35. Calculus studies:



A. Shapes

B. Numbers

C. Change

D. Letters

ANSWER: C – Change

36. $\int x \, dx =$

A. x

B. x^2

C. $\frac{1}{2}x^2$

D. $2x$

ANSWER: C – $\frac{1}{2}x^2$

37. Limit describes the:

A. Size

B. Shape

C. Behavior of a function

D. Value only

ANSWER: C – Behavior of a function

38. Slope of $y = 4x$ is:

A. 2

B. 3

C. 4

D. 5



ANSWER: C – 4

39. Derivative of x^3 is:

A. $3x$

B. $3x^2$

C. x^2

D. x^3

ANSWER: B – $3x^2$

40. Integral is the opposite of:

A. Addition

B. Multiplication

C. Differentiation

D. Division

ANSWER: C – Differentiation

DIFFERENTIAL EQUATIONS

41. A differential equation contains:

A. Numbers only

B. Algebra only

C. Derivatives

D. Geometry

ANSWER: C – Derivatives



42. dy/dx represents:

- A. Area
- B. Integral
- C. Derivative
- D. Constant

ANSWER: C – Derivative

43. Order of d^2y/dx^2 is:

- A. Zero
- B. First
- C. Second
- D. Third

ANSWER: C – Second order

44. Differential equations are used in:

- A. Physics
- B. Engineering
- C. Economics
- D. All of the above

ANSWER: D – All of the above

45. $dy/dx = 0$ means the function is:

- A. Increasing
- B. Decreasing
- C. Constant



D. Curved

ANSWER: C – Constant

BIOLOGY

46. Basic unit of life:

A. Atom

B. Cell

C. Tissue

D. Organ

ANSWER: B – Cell

47. Powerhouse of the cell:

A. Nucleus

B. Ribosome

C. Mitochondria

D. Vacuole

ANSWER: C – Mitochondria

48. Photosynthesis occurs in:

A. Mitochondria

B. Chloroplast

C. Nucleus

D. Cytoplasm

ANSWER: B – Chloroplast



49. DNA carries:

- A. Energy
- B. Oxygen
- C. Genetic information
- D. Blood

ANSWER: C – Genetic information

50. Organ that pumps blood:

- A. Brain
- B. Lungs
- C. Heart
- D. Kidney

ANSWER: C – Heart

51. Normal human body temperature:

- A. 35°C
- B. 36°C
- C. 37°C
- D. 38°C

ANSWER: C – 37°C

52. Which is a vertebrate?

- A. Worm
- B. Fish



C. Insect

D. Snail

ANSWER: B – Fish

53. Digestion starts in the:

A. Stomach

B. Mouth

C. Intestine

D. Esophagus

ANSWER: B – Mouth

54. White blood cells fight:

A. Oxygen

B. Infection

C. Food

D. Hormones

ANSWER: B – Infection

55. Plants make food through:

A. Respiration

B. Transpiration

C. Photosynthesis

D. Digestion

ANSWER: C – Photosynthesis



GENERAL SCIENCE

56. Matter has:

- A. Color only
- B. Shape only
- C. Mass and volume
- D. Energy only

ANSWER: C – Mass and volume

57. Water boils at:

- A. 50°C
- B. 75°C
- C. 100°C
- D. 150°C

ANSWER: C – 100°C

58. Gravity pulls objects:

- A. Upward
- B. Sideways
- C. Toward Earth
- D. Away from Earth

ANSWER: C – Toward Earth

59. Energy of motion is:

- A. Potential



B. Chemical

C. Kinetic

D. Thermal

ANSWER: C – Kinetic energy

60. Sound travels fastest in:

A. Air

B. Liquid

C. Solid

D. Vacuum

ANSWER: C – Solid

GRAMMAR

61. Choose the correct sentence.

A. She go home.

B. She goes home.

C. She going home.

D. She gone home.

ANSWER: B – She goes home

62. Noun is a:

A. Action

B. Name

C. Description



D. Connector

ANSWER: B – Name

63. Verb shows:

A. Place

B. Action

C. Thing

D. Quality

ANSWER: B – Action

64. Plural of “mouse”:

A. Mouses

B. Mouse

C. Mice

D. Meese

ANSWER: C – Mice

65. Past tense of “eat”:

A. Eated

B. Eats

C. Ate

D. Eating

ANSWER: C – Ate

66. Adjective describes a:



- A. Noun
- B. Verb
- C. Adverb
- D. Pronoun

ANSWER: A – Noun

67. Correct article: ___ umbrella

- A. A
- B. An
- C. The
- D. No article

ANSWER: B – An

68. Synonym of “happy”:

- A. Sad
- B. Angry
- C. Joyful
- D. Weak

ANSWER: C – Joyful

69. Sentence must have:

- A. Noun only
- B. Verb only
- C. Subject and verb
- D. Adjective only



ANSWER: C – Subject and verb

70. "Quickly" is an:

- A. Noun
- B. Verb
- C. Adjective
- D. Adverb

ANSWER: D – Adverb

ORAL COMMUNICATION

71. Oral communication uses:

- A. Writing
- B. Speaking
- C. Drawing
- D. Reading

ANSWER: B – Speaking

72. Receiver of the message is the:

- A. Speaker
- B. Writer
- C. Listener
- D. Sender

ANSWER: C – Listener



73. Eye contact shows:

- A. Fear
- B. Confidence
- C. Anger
- D. Confusion

ANSWER: B – Confidence

74. Effective communication needs:

- A. Noise
- B. Understanding
- C. Silence
- D. Speed

ANSWER: B – Understanding

75. Tone of voice affects:

- A. Meaning
- B. Grammar
- C. Spelling
- D. Writing

ANSWER: A – Meaning

RESEARCH

76. Research is a:

- A. Guess



B. Opinion

C. Systematic study

D. Story

ANSWER: C – Systematic study

77. Hypothesis is a:

A. Conclusion

B. Tentative answer

C. Fact

D. Title

ANSWER: B – Tentative answer

78. Data are:

A. Feelings

B. Opinions

C. Facts

D. Beliefs

ANSWER: C – Facts

79. Part that states the problem:

A. Methodology

B. Conclusion

C. Introduction

D. References

ANSWER: C – Introduction



80. Conclusion is based on:

- A. Opinion
- B. Guess
- C. Data
- D. Emotion

ANSWER: C – Data

DRRM

81. DRRM stands for:

- A. Disaster Risk Reduction and Management
- B. Disaster Rescue Response Method
- C. Disaster Relief Resource Management
- D. None

ANSWER: A – Disaster Risk Reduction and Management

82. First thing to do during earthquake:

- A. Run
- B. Panic
- C. Duck, Cover, Hold
- D. Shout

ANSWER: C – Duck, Cover, Hold

83. Flood is caused by:



- A. Fire
- B. Earthquake
- C. Heavy rain
- D. Wind

ANSWER: C – Heavy rain

84. Evacuation center is for:

- A. Shelter
- B. Shopping
- C. Studying
- D. Traveling

ANSWER: A – Shelter

85. Typhoon signal no. 3 means:

- A. Weak wind
- B. No rain
- C. Strong wind
- D. Normal weather

ANSWER: C – Strong wind

86. Disaster preparedness means:

- A. Ignoring hazards
- B. Being ready
- C. Panicking
- D. Escaping



ANSWER: B – Being ready

87. Landslide usually happens in:

- A. Flat areas
- B. Mountains
- C. Oceans
- D. Deserts

ANSWER: B – Mountains

88. Fire extinguisher is used to:

- A. Start fire
- B. Stop fire
- C. Spread fire
- D. Heat objects

ANSWER: B – Stop fire

89. Tsunami is caused by:

- A. Wind
- B. Volcanic eruption
- C. Earthquake under sea
- D. Rain

ANSWER: C – Earthquake under the sea

90. DRRM aims to:

- A. Increase disasters



- B. Reduce risks
- C. Ignore hazards
- D. Create danger

ANSWER: B – Reduce risks

MIXED (GENERAL REVIEW)

91. Prime number is divisible by:

- A. 1 only
- B. 2 only
- C. 1 and itself
- D. All numbers

ANSWER: C – 1 and itself

92. Probability ranges from:

- A. 0 to 1
- B. 1 to 10
- C. -1 to 1
- D. 0 to 100

ANSWER: A – 0 to 1

93. Which is renewable energy?

- A. Coal
- B. Oil
- C. Solar



D. Gas

ANSWER: C – Solar energy

94. Acid tastes:

A. Sweet

B. Bitter

C. Sour

D. Salty

ANSWER: C – Sour

95. Planet closest to the sun:

A. Venus

B. Earth

C. Mars

D. Mercury

ANSWER: D – Mercury

96. Unit of force:

A. Joule

B. Newton

C. Watt

D. Volt

ANSWER: B – Newton

97. Light travels in a:



- A. Curve
- B. Straight line
- C. Circle
- D. Spiral

ANSWER: B – Straight line

98. Research variables are:

- A. Fixed only
- B. Measured factors
- C. Titles
- D. Conclusions

ANSWER: B – Measured factors

99. Communication barrier example:

- A. Noise
- B. Listening
- C. Speaking
- D. Understanding

ANSWER: A – Noise

100. Grammar helps in:

- A. Confusion
- B. Clear communication
- C. Noise
- D. Silence



ANSWER: B – Clear communication

FINAL SET

101. What is 2^5 ?

A. 16

B. 24

C. 32

D. 64

ANSWER: C – 32

102. Equation with highest power 1 is:

A. Quadratic

B. Linear

C. Cubic

D. Rational

ANSWER: B – Linear

103. Which is a producer?

A. Human

B. Animal

C. Plant

D. Fungi

ANSWER: C – Plant



104. Sample represents:

- A. Whole population
- B. Part of population
- C. Hypothesis
- D. Conclusion

ANSWER: B – Part of population

105. Speaker should speak with:

- A. Anger
- B. Clarity
- C. Speed only
- D. Silence

ANSWER: B – Clarity

106. Probability of impossible event is:

- A. 1
- B. 0
- C. $\frac{1}{2}$
- D. 2

ANSWER: B – 0

107. A function is a relation where:

- A. One output per input
- B. Many outputs per input
- C. No input



D. No output

ANSWER: A – One output per input

108. Data collected directly is:

A. Secondary

B. Primary

C. False

D. Assumption

ANSWER: B – Primary data

109. Disaster mitigation means:

A. Reducing impact

B. Ignoring risk

C. Increasing hazard

D. Escaping

ANSWER: A – Reducing impact

110. Listening is part of:

A. Writing

B. Oral communication

C. Research only

D. Grammar

ANSWER: B – Oral communication

111. Variable that changes is:



- A. Constant
- B. Dependent
- C. Fixed
- D. Control

ANSWER: B – Dependent variable

112. Human respiration uses:

- A. Nitrogen
- B. Carbon dioxide
- C. Oxygen
- D. Hydrogen

ANSWER: C – Oxygen

113. Math symbol \geq means:

- A. Less than
- B. Equal only
- C. Greater than or equal
- D. Not equal

ANSWER: C – Greater than or equal

114. A good conclusion restates the:

- A. Title
- B. Hypothesis result
- C. Opinion
- D. Abstract



ANSWER: B – Hypothesis result

115. Communication feedback comes from:

- A. Sender
- B. Receiver
- C. Noise
- D. Channel

ANSWER: B – Receiver

116. Evacuation drill helps people to:

- A. Panic
- B. Be prepared
- C. Ignore danger
- D. Sleep

ANSWER: B – Be prepared

117. Study of life is:

- A. Physics
- B. Chemistry
- C. Biology
- D. Geology

ANSWER: C – Biology

118. General math includes:

- A. Only calculus



B. Only algebra

C. Basic math concepts

D. Biology

ANSWER: C – Basic math concepts

119. Disaster risk is a combination of hazard and:

A. Strength

B. Vulnerability

C. Wealth

D. Weather

ANSWER: B – Vulnerability

120. College entrance exams test:

A. Memorization only

B. Luck

C. Understanding of concepts

D. Guessing

ANSWER: C – Understanding of concepts

