

Important Instructions :

1. The test is of **1 hour 40 minutes** duration and the Test Booklet contains **100** multiple-choice questions (four options with a single correct answer) from **Mathematics, Science and General Knowledge**.
2. Each Question carries **4** marks. For each correct response, the candidate will get **4** marks. For each incorrect response, **one** mark will be deducted from the total scores. **The maximum marks are 400.**
3. Use **Blue/Black Ball Point Pen only** for marking responses on Answer Sheet.
4. Rough work is to be done in the space provided for this purpose in the Test Booklet only.
5. On completion of the test, the candidate **must hand over the Answer Sheet to the Invigilator** before leaving the Room/Hall. The candidates are allowed to take away this Test Booklet with them.
6. The candidates should ensure that the Answer Sheet is not folded. Do not make any stray marks on the Answer Sheet. Do not write your Roll No. anywhere else except in the specified space in the Answer Sheet.
7. Use of white fluid for correction is **NOT** permissible on the Answer Sheet.
8. The candidates should not leave the Examination Hall without handing over their Answer Sheet to the Invigilator on duty.
9. Use of Electronic/Manual calculator is prohibited.
10. Use of any unfair means shall amount to disqualification.

Note:-

For Official Answer Keys & Result , do visit our website : wearehere.org.in

Name of the Candidate : _____

Roll Number : _____ Candidate's Signature : _____

SECTION A (G.K)**1. Who was the first Maharaja of Jammu & Kashmir?**

- a) Hari Singh b) Gulab Singh
c) Ranbir Singh d) Pratap Singh

2. Which significant event in the history of J&K occurred in 1947?

- a) treaty of Lahore b) Accession to India
c) First War of Independence
d) Shimla Agreement

3. Which dynasty is known for its rule over Kashmir during the medieval period?

- a) Mughal Dynasty b) Dogra Dynasty
c) Abdullah Dynasty d) Gupta Dynasty

4. Which mountain range separates Kashmir Valley from Ladakh?

- a) pirpanjal Range b) Zaskar Range
c) Shivalik Range d) Karakoram Range

5. Which is the largest freshwater lake in India, located in Kashmir?

- a) Dal Lake b) Wular Lake
c) Mansar Lake d) Pangong Lake

6. Which of the following correctly arranges the districts of the Kashmir region in order of their population, from most to least populated?

- a) Srinagar > Budgam > Baramulla
b) Baramulla > Budgam > Srinagar
c) Budgam > Srinagar > Baramulla
d) Srinagar > Baramulla > Budgam

7. The famous Amarnath Cave Temple is dedicated to which Hindu deity?

- a) Vishnu b) Shiva
c) Ganesh d) Durga

8. Which of the following is not a tributary of the Jhelum River?

- a) Lidder b) Sindh
c) Suru d) Pohru

9. Who was the first female Chief Minister of Jammu and Kashmir?

- a) Sonia Gandhi b) Mehbooba Mufti
c) Indira Gandhi d) Sakeena Itoo
- 10. Match the following famous personalities with their respective roles:**
- | | |
|---------------------------|----------------------------|
| Column I: | Column II: |
| I. Poet | A. Ghulam Nabi Azad |
| II. Former Chief Minister | B. Manoj Sinha |
| III. Lieutenant Governor | C. Mehjoor |
| IV. Renowned Sufi Saint | D. Sheikh Noor-ud-din Wali |
- a) I - D, II - A, III - C, IV - B
b) I - C, II - A, III - B, IV - D
c) I - A, II - D, III - B, IV - C
d) I - B, II - C, III - D, IV - A
- 11. Who wrote the famous Persian Couplet "Agar firdaus bar roo-e zameen ast, Hameen ast-o hameen ast-o hameen ast" for Kashmir?**
- a) Rumi b) Omar Khayyam
c) Amir Khusrau d) Mirza Ghalib
- 12. Who is the current Member of Parliament for the Srinagar parliamentary constituency?**
- a) Farooq Abdullah b) Agha Syed Ruhullah Mehdi
c) Engineer Rashid d) Mia Altaf
- 13. Which scheme in J&K specifically focuses on providing free education to underprivileged children?**
- a) Beti Bachao Beti Padhao
b) Sarva Shiksha Abhiyan
c) Pradhan Mantri Awas Yojana
d) Swachh Bharat Abhiyan
- 14. How many total assembly constituencies are there in Jammu and Kashmir after it became a Union Territory?**
- a) 90 b) 87 c) 94 d) 82
- 15. Which festival, celebrated in many parts of the world on 21st March including Kashmir, marks the Persian New Year and the beginning of spring?**
- a) Baisakhi b) Navroz
c) mehregan d) Lohri
- 16. What is the traditional Kashmiri woolen shawl known for its intricate patterns and warmth called?**
- a) Kani Shawl b) Kullu Shawl
c) Pashmina Shawl d) None of these
- 17. What is the traditional form of theatre in Kashmir known as?**
- a) Kathak b) Bhand Pather
c) Lavani d) Ladishah
- 18. Match the following religious sites with their suitable characteristics:**

- | | |
|--------------------------------|---|
| Column 1
(Religious Sites): | Column 2
(Characteristics): |
| 1. Jamia Masjid Nowhatta | A) Sufi shrine with intricate carvings |
| 2. Imam Bargah | B) Famous for its beautiful wooden architecture |
| 3. Shankaracharya Temple | C) Located on a hilltop, ancient site |
| 4. Khaqah-e-Moula | D) Sacred site for Shia Muslims |
- a) 1-A, 2-B, 3-C, 4-D
b) 1-B, 2-D, 3-C, 4-A
c) 1-C, 2-D, 3-B, 4-A
d) 1-D, 2-A, 3-B, 4-C
- 19. Pari Mahal, the famous tourist destination in Jammu and Kashmir, is also known as which of the following?**
- a) Palace of Dreams b) Palace of Gardens
c) Palace of Fairies d) Palace of Kings
- 20. Which fort is located on Koh-e-Maran Hill in J&K ?**
- a) Hari Parbat Fort b) Bahu Fort
c) Akhnoor fort d) None of these
- 21. What can individuals do to help reduce environmental issues in Jammu and Kashmir?**
- a) Use More Non-renewable Resources
b) Increase Plastic Use
c) Promote Industrial Expansion
d) Reduce, Reuse, Recycle
- 22. Which of the following software is commonly used to create presentations?**
- a) Microsoft Excel b) Microsoft Word
c) Microsoft PowerPoint d) Microsoft Access
- 23. Match the following computer components with their functions:**
- | | |
|--------------|---|
| Column A: | Column B: |
| 1. Keyboard | A. Stores data permanently |
| 2. Hard Disk | B. Input device |
| 3. CPU | C. Executes instructions and processes data |
| 4. RAM | D. Temporary storage |
- a) 1-A, 2-C, 3-B, 4-D b) 1-B, 2-D, 3-A, 4-C
c) 1-C, 2-D, 3-B, 4-A d) 1-B, 2-A, 3-C, 4-D
- 24. Which of the following statement is Incorrect in computer terminology?**
- a) The monitor is used to display visual output from the computer.
b) Software applications can only run if the computer is connected to the internet.
c) A computer's CPU performs calculations and executes instructions.
d) None of these

25. What does URL stand for in web browsing?

- a) Universal Resource locator
- b) Unified Resource Link
- c) Uniform Resource Locator
- d) Uniform Routing Link

26. Which arrangement among the following data storage from Greater to smaller sizes is correct?

- a) 1 KB > 1 MB > 1 GB > 2 TB
- b) 1 MB > 1024 KB > 1 B > 512 KB
- c) 1 GB > 2048 MB > 512 KB > 100 B
- d) 1 TB > 500 GB > 1 GB > 512 MB

27. What does the "GAD" stand for in the context of government in Jammu & Kashmir?

- a) General Accounting Division
- b) General Administration Department
- c) Government Advisory Department
- d) Government Affairs Division

28. The abbreviation NASA stands for?

- a) National Association of Space Agencies
- b) National Aeronautics and Space Administration
- c) North American Space Agency
- d) National Astronaut and Space Agency

29. "World Environment Day" is celebrated on which date?

- a) 21st March
- b) 16th September
- c) 5th September
- d) 5th June

30. "World Anti-Drugs Day" is observed on which date?

- a) July 26
- b) June 26
- c) August 30
- d) November 1

SECTION B (MATHEMATICS)

31. Which of the following numbers is irrational?

- (a) $\sqrt{16}$
- (b) $\frac{4}{5}$
- (c) π
- (d) 0.25

32. The value of $(256)^{\frac{1}{4}}$ is:

- (a) 64
- (b) 16
- (c) 8
- (d) 4

33. The decimal representation of $\frac{7}{8}$ is:

- (a) 0.125
- (b) 0.75
- (c) 0.875
- (d) 0.5

34. The sum of a rational and an irrational number is:

- (a) Always rational
- (b) Always irrational
- (c) Sometimes rational, sometimes irrational
- (d) None of the above

35. Which of the following is a rational number?

- (a) $\sqrt{2}$
- (b) 0.3333
- (c) π
- (d) $\sqrt{3}$

36. A polynomial of degree 2 is called a:

- (a) Constant polynomial
- (b) Linear polynomial
- (c) Quadratic polynomial
- (d) Cubic polynomial

37. The value of the polynomial $P(x) = x^2 - 4x + 5$ at $x = 2$ is:

- (a) 1
- (b) 5
- (c) 9
- (d) 10

38. If $x - 2$ is a factor of the polynomial $x^2 + ax + b$, then the value of $a + b$ is :

- (a) 4
- (b) 2
- (c) 0
- (d) -2

39. The degree of the polynomial $5x^4 - 2x^3 + 7x^2 + 3$ is:

- (a) 1
- (b) 2
- (c) 3
- (d) 4

40. If $x - 3$ is a factor of $2x^2 - 7x + k$, then the value of k is:

- (a) 1
- (b) 5
- (c) 6
- (d) 9

41. The point (0, 5) lies on which axis?

- (a) X-axis
- (b) Y-axis
- (c) Both X and Y axes
- (d) Neither X nor Y axes

42. The coordinates of the origin are:

- a) (0, 0)
- b) (1, 0)
- c) (0, 1)
- d) (1, 1)

43. The distance between the points (0, 0) and (3, 4) is:

- (a) 3
- (b) 4
- (c) 5
- (d) 7

44. The point (3, 0) lies on which axis?

- (a) X-axis
- (b) Y-axis
- (c) Both axes
- (d) Neither axis

45. The distance of the point (0, 5) from the origin is:

- (a) 0
- (b) 5
- (c) 10
- (d) 25

46. The graph of the equation $y = 2x + 1$ is a:

- (a) Straight line
- (b) Circle
- (c) Parabola
- (d) Ellipse

47. The point of intersection of the lines $x = 0$ and $y = 0$ is:

- a) (1, 0)
- b) (0, 0)
- c) (0, 0)
- d) (1, 1)

48. The equation $2x + 3y = 6$ is a:

- (a) Quadratic equation
- (b) Linear equation
- (c) Cubic equation
- (d) Bi-quadratic equation

49. The slope of the line $3x + 2y = 6$ is:

- (a) 3
- (b) $-\frac{3}{2}$
- (c) 2
- (d) $-\frac{2}{3}$

50. The equation of a line parallel to $y = 2x + 3$ is:

- (a) $y = 2x - 1$
- (b) $y = -2x + 3$
- (c) $y = x + 2$
- (d) $y = 2x - 5$

51. If two parallel lines are intersected by a transversal, then the corresponding angles are:

- (a) Equal (b) Complementary
(c) Supplementary (d) None of these

52. The sum of the angles of a triangle is:

- (a) 90° (b) 180° (c) 270° (d) 360°

53. If two angles are supplementary and one angle is 60° , then the other angle is:

- (a) 60° (b) 120° (c) 90° (d) 30°

54. Vertically opposite angles are:

- (a) Equal (b) Supplementary
(c) Complementary (d) Unequal

55. If two intersect each other, then the number of pairs of vertically opposite angles is:

- (a) 1 (b) 2 (c) 3 (d) 4

56. A triangle with all three sides equal is called:

- (a) Scalene triangle (b) Isosceles triangle
(c) Right-angled triangle (d) Equilateral triangle

57. The ratio of the sides of a 30° - 60° - 90° triangle is:

- (a) 1:2:3 (b) $1:\sqrt{3}:2$
(c) 2:3:5 (d) $1:1:\sqrt{2}$

58. In a right-angled triangle, the side opposite the right angle is called the:

- (a) Attitude (b) Base
(c) Hypotenuse (d) Median

59. The Pythagoras theorem is applicable to:

- (a) All triangles
(b) Right-angled triangles
(c) Acute-angled triangles
(d) Obtuse-angled triangles

60. In an equilateral triangle, each angle measures:

- (a) 30° (b) 45° (c) 60° (d) 90°

SECTION C (SCIENCE)

61. The motion along a straight line is the type of motion that is

- a) simplest (b) complex
c) both A and b (d) none

62. Assertion : an object can acquired acceleration even if it is moving at a constant speed

Reason : with change in direction of motion and object can acquire acceleration

- a) Both Assertion and Reason are true, and Reason is the correct explanation for the Assertion

b) Both Assertion and Reason are true, but Reason is not the correct explanation for the Assertion.

c) Assertion is true, but Reason is false.

d) Assertion is false, but Reason is true.

63. An object travels 18 m in 4 seconds and then another 18 m into seconds what is the average speed of object?

- a) 5.33 meter per second
b) 6 meter per second
c) 3.2 meter per second d) ..zero

64. At the starting of trip a car covers 2000 km and 2400 km at the end of the trip if the trip took 8 hours calculated the average speed in kilometer per hour.

- a) 62 km per h (b) 70 km per h
c) 55 km per h (d) 50 km per h

65. Identify the incorrect statement

- a) The Acceleration is taken to be positive if it is in direction of velocity
b) The motion of a freely falling body is an example of non uniform acceleration
c) Acceleration is taken to be negative if it is an opposite direction of velocity
d) The velocity time graph gives us distance

66. If the Acceleration of a car on applying brakes is 3 m per second to stop after the application of brakes calculate the distance

- a) 3 m per second (b) 6 m per second
c) 18 m per second (d) 12 m per second

67. The value of acceleration due to gravity experienced by a body under free fall is

- a) 15 m/s^2 (b) 9.8 m/s (c) 9.8 m/s^2 (d) 10 m/s

68. The equations of motion are not valid in which of the following:

- a) Constant Velocity (b) Variable velocity
c) constant Acceleration (d) Variable acceleration

69. Which of the following is the SI unit of force

- a) kg meter per second square
b) Kg m per second
c) Newton meter
d) Newton

70. the inertia of an object caused the object to

- a) decrease its speed (b) increase its speed
c) resist any change in state of its motion
d) Decelerate due to friction

71 Which of the following statement is correct

- a) the first law of motion is known as the law of mass action
- b) The tendency of an object to resist or keep moving is inertia
- c) All obj do not resist a change in their state of motion
- d) External force is not needed to change the position of an object

72. Find the SI unit of momentum from the formula

$$p = mv$$

- a) Kg m sec
- b) kg per m per s
- c) Kg m per second. Sq
- d) kg m per second

73. which would require a greater force accelerating a 3 kg at 5m per second or 6 kg mass at 2 m per second

- a) Both will require same force
- b) 3kg mass will require more force
- c) 6 kg will require more force
- d) The force applied will be zero

74. Assertion (A) : The terms action and reaction in third law of motion stand for simultaneous mutual forces between a pair of bodies**Reason (R) :** Action always proceeds or causes reaction

- a) Both Assertion and Reason are true, and Reason is the correct explanation for the Assertion.
- b) Both Assertion and Reason are true, but Reason is not the correct explanation for the Assertion.
- c) Assertion is true, but Reason is false.
- d) Assertion is false, but Reason is true.

75. identify the incorrect statements regarding alloys

1. Alloys are mixtures of two or more metals or a metal and a nonmetal
 2. The alloys are separated into their components by physical methods
 3. And alloy cannot be considered as a mixture as its composition is same throughout
 4. Liquation is a metallurgical method for separating metals from an ore or alloys.
- a) all except 2 are correct
 - b) 1 and 3 are incorrect
 - c) 2 and 3 are incorrect
 - d) all are incorrect

76. which of the following is not the property of colloidal solution

- a) the particle size is too small to be individually seen by the naked eye
- b) colloids are big enough to scatter a beam of light passing through it and make its path visible

- c) They settle down when left undisturbed that is collide is quite unstable
- d) A colloid is a heterogeneous mixture

77. A solution contains 30 g of common salt in 320 g of water calculate the concentration in terms of mass by mass percentage of solution

- a) 11.1 percent
- b) 36 percent
- c) 7.6 percent
- d) 8.6 percent

78. . The particles of solution are smaller than

- a) 1nm
- b) 2nm
- c) 5nm
- d) 0.5nm

79. Who gave the Three fundamental laws of Motion?

- a) Einstein
- b) Robert Hooke
- c) Newton
- d) Rutherford

80. which of the following material falls in the category of pure substances

- i . Ice
- ii . Water
- iii . Sugar in water
- iv . Milk
- v . HCl
- a) i and ii
- b) I ii ii and iv
- c) i , ii and v
- d) ii and v

81. Which of the following phenomena would increase with the rise in temperature

- a) Evaporation diffusion expansion of gases
- b) diffusion ,evaporation, compression of gases
- c) Evaporation, solubility , diffusion
- d) Evaporation, compression of gases, solubility

82. match the following

Column I	Column II
I. Solid to gas	A. Condensation
II. Gas to solid	B. Evaporation
III. Liquid to gas	C. Deposition
IV. Gas to liquid	D. Sublimation

Options:**Option A:** I - C, II - A, III - D, IV - B**Option B:** I - B, II - D, III - A, IV - C**Option C:** I - D, II - C, III - B, IV - A**Option D:** I - D, II - C, III - B, IV - A**83. Find out the correct statement among following**

- I) boiling is a bulk phenomenon
- II) the states of matter are unconvertible
- III) evaporation causes cooling
- IV) force of attraction is maximum in gases
- a) i and ii are correct
- b) only ii is correct

- c) all except iv are correct d) i and ii are correct

84. The ----- of solid is an indication of strength of force of attraction between its particles

- a) boiling point b) freezing point
c) Melting point d) Sublimation

85. In an activity camphor is crushed and heated after completion of experiment the result show evolving of gas at the end. which process has taken place:?

- a) deposition b) evaporation
c) sublimation d) condensation

86. The physical state of water at 298 Kelvin is

- a) liquid state b) solid state
c) gaseous state d) none of the above

87. Generally the size of Eukaryotic cell is :-

- a) 10-200µm b) 100-200µm
c) 5-100µm d) 5-50µm

88. Each of the following statement is true except?

- a) The cytoplasm is the fluid content inside the cell membrane.
b) The Endoplasmic reticulum membrane Similar in structure to the plasma membrane.
c) Membrane bound organelles are a characteristic of prokaryotic cells.
d) Golgi apparatus consists of flattened discs parallel to each other.

89. Assertion (A) : The endoplasmic reticulum which lacks ribosomes is called smooth Endoplasmic reticulum

Reason (R) : STR is mainly involved in synthesis of proteins.

- a) Both A and R true and R is the correct explanation of A.
b) Both A&R.
c) A true R false.
d) A false R true.

90. Assertion (A) : A cell swells up when present in a hypotonic solution

Reason (R) : More water molecules enter the cell than they leave

- a) Both A and R are correct R is the correct explanation of A.
b) Both A&R.
c) A true R false.
d) A false R true.

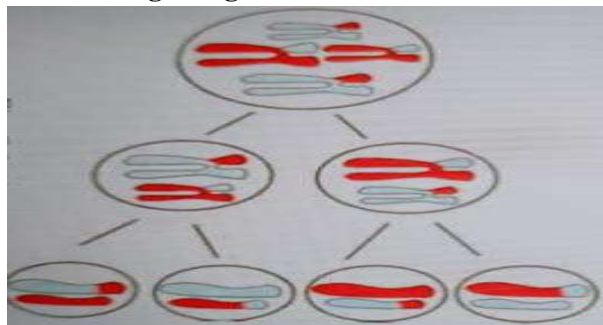
91. In an Amoeba the specialised proteins speed up the change and after the division of nucleus cytoplasm divided having each nuclei : Which division has taken place.

- a) Mitosis b) Meiosis
c) Amitosis d) Meiosis 2

92. Match the following.

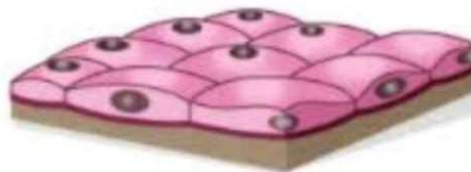
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|-----------------------|-----------------------|
| (1) RER | (A) ATP |
| (2) Leucoplast | (B) protein synthesis |
| (3) Mitochondria | (C) storage |
| (4) Lysosome | (D) Defence. |
| a) 1-B, 2-C, 3-A, 4-D | b) 1-D, 2-A, 3-B, 4-C |
| c) 1-A, 2-C, 3-D, 4-B | d) 1-C, 2-D, 3-A, 4-B |

93. The diagram given below shows.



- a) Equational division b) Meiosis
c) Reductional division d) Both b&c

94. The diagram given below represents which type of epithelium.



- a) Cuboidal epithelium b) Squamous epithelium
c) Columnar epithelium d) Stratified epithelium

95. Identify the incorrect statement.

- a) The growth of plants occur in certain specific regions because the dividing tissue, meristematic tissue is present.
b) The cells of meristematic tissue are very active and they have a dense cytoplasm then cellulose walls and prominent nucleus.
c) The vacuoles are present in meristematic tissue and perform a specific function.
d) Apical stem increases the growth of stem and the root.

96. Xylem and phloem are the examples of:

- a) Simple permanent tissue
- b) Complex permanent tissue
- c) Dividing tissue
- d) None of the above.

97. Match the following.

Column 1

Column2 (1)

- | | |
|-----------------------|-----------------------|
| (1) Blood | (A) Squamous ep. |
| (2) Skin | (B) Cuboidal ep. |
| (3) Kidney tubules | (C)Connective tissue. |
| (4) Glands | (D) Glandular ep. |
| a) 1-C, 2-A, 3-B, 4-D | b) 1-A, 2-B, 3-C, 4-D |
| c) 1-C, 2-D, 3-B, 4-A | d) 1-C, 2-B, 3-D, 4-A |

98. Which of the following statement is true?

- a) Two bones are connected to each other by Tendon.
- b) Areolar tissue is found between skin and muscles.
- c) Ligament connects bone to muscle and are a type of Connective tissue.
- d) Cartilage hardens the bone surface at joints.

99. Consists of relatively unspecialised cells with thin cell walls and the cells are living, loosely arranged.

- | | |
|----------------|-------------------|
| a) Sclernchyma | b) Chlorenchyma |
| c) parenchyma | d) complex tissue |

100. Which type of tissue is responsible for the movement in our body?

- | | |
|----------------------|----------------------|
| a) Epithelial tissue | b)Nervous tissue |
| c) Muscular tissue | d) Connective tissue |