Class : 11   Subject : Maths

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1. In many forms can rational numbers be represented

1) One   2) Two   3) Three   4) Many

2. The rational   number in between $\frac{4}{5}$ and $\frac{7}{8}$

1) $\frac{11}{13}$ 2) $\frac{9}{10}$ 3) $\frac{2}{3}$ 4) $\frac{77}{40}$

3. The period of the decimal number 0.45555 is

1) 2   2) 1   3) 5   4) 4

4. The rational number $-\frac{71}{125}$ has _____ expression

1) Non – Terminating Decimal   2) Terminating Decimal

3) Non – Terminating Recurring Decimal   4) Terminating and Recurring Decimal

5. $\sqrt{10}$ = _____   1) 1   2) 10   3) $2\sqrt{5}$ 4) $\sqrt{5}\sqrt{2}$

6. An irrational number between 2 and 2.5 is

1) $\sqrt{11}$ 2) $\sqrt{5}$ 3) $\sqrt{2.5}$ 4) $\sqrt{8}$

7. $x^{\frac{m}{n}}$ = _____   1) $\sqrt[m]{x^n}$ 2) $\sqrt[n]{x^m}$ 3) $(x^n)^m$ 4) $\left(\frac{1}{x^n}\right)^m$

8. $\sqrt{63} - \sqrt{175} + \sqrt{28}$ = _____

1) $\sqrt{-82}$ 2) 0   3) $\sqrt{82}$ 4) $5\sqrt{7}$

9. $\sqrt[9]{8} - \sqrt[6]{6}$ =

1) $\sqrt{\frac{8}{6}}$ 2) $\sqrt[9]{\frac{2}{3}}$ 3) $\sqrt[6]{\frac{2}{3}}$ 4) $\sqrt{\frac{6}{8}}$

10. If $\sqrt{180} = k\sqrt{5}$ then k = _____

1) 2   2) 8   3) 6   4) 16

11. Find the odd one out of the following

1) $\sqrt{125}\ \sqrt{5}$ 2) $\frac{\sqrt{27}}{\sqrt{3}}$ 3) $\sqrt{72}\ \sqrt{8}$ 4) $\sqrt{3}$

12. $0.\overline{43} + 0.4\overline{3}$ =

1) $0.8\overline{7}$ 2) $0.8\overline{67}$ 3) $0.\overline{86}$ 4) $0.8\overline{76}$

13. The scientific notation of 0.00090002 is

1) 9×10^{-2} 2) 9.0002×10^{-4} 3) 9.002×10^{-4} 4) 9.0002×10^{-8}

14. The simplest form of $\left(2\sqrt{5} - \sqrt{2}\ \right)^2$ is

1) $4\sqrt{5} + 2\sqrt{5}$ 2) $22 - 4\sqrt{10}$ 3) $8 - 4\sqrt{10}$ 4) $2\sqrt{10} - 2$

15. The area of the rectangle with dimensions 5×10^5 and 3×10^3 is

1) 15×10^{15} 2) 8×10^5 3) 3.5×10^5 4) 15×10^8

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16. When the ice melts completely the level of water in a Tumbler

1) will increase

2) will decrease

3) remains the same

4) depends on ice

17. 1 kilogram is equal to

1) 9.8 N

2) 980 N

3) 1000× 9.8 N

4) 1000× 9.8 N

18. When your body is weighted in a liquid, the loss in its weight depends upon

1) volume of the body

2) mass of the body

3) weight of the body

4) centre of gravity of the body

19. The electrostatic force between two-point charges operates on the basis of the_____ law.

1) Coulomb's law

2) Newton's second law

3) Newton's third law

4) 1 and 3

20. If a 20 C charge passes through a cross-sectional area of a conductor in one minute, its current will be

1) 0.5 A

2) 0.33 A

3) 0.35 A

4) 0.25 A

21. As the temperature increases in a semiconductor, its resistance _____ and electrical conductivity is_____

1) decreases and increases

2) increases and decreases

3) decreases and decreases

4) increases and increases

22. Choose the group which contains only matters

1) soil, stone, energy, sunlight, air

2) sand, water, air, force, tree

3) sunlight, force, energy, sound

4) soil, sand, stone, water, air, tree

23. Correct examples for matter are,
A. Copper, Oxygen, Hydrogen
B. water, sugar, salt
C. water-alcohol mixture, water- sugar mixture
D. water- oil mixture, sand- sugar mixture

1) A, B & C only

2) All are correct

3) B, C & D only

4) A, C & D only

24. Radha was gifted with a brass lamp as memorandum, Brass is a

1) Compound

2) Mixture

3) Pure material

4) Metal

25. Match the following

i.	Copper, Oxygen, Hydrogen	-	a. homogeneous
ii.	water, sugar, salt	-	b. heterogeneous
iii.	water-alcohol mixture, water- sugar mixture	-	c. compounds
iv.	water- oil mixture, sand- sugar mixture	-	d. elements

1) i-d, ii-c, iii-a, iv-b

2) i-c, ii-d, iii-a, iv-b

3) i-d, ii-c, iii-b, iv-a

4) i-d, ii-c, iii-a, iv-b

26. Human tongue is made up of _____ tissue

1) ciliated epithelium

2) cuboidal epithelium

3) columnar epithelium

4) squamous epithelium

27. Canaliculi is present in the ___ which is helpful for connecting network of body.

1) ligaments

2) blood

3) bone

4) muscles

28. Which one of the following is correct example for granulocytes?

1) Lymphocyte

2) Neutrophils

3) Basophiles

4) Eosinophils

29. Match the following

i)	sclereids	-	a) chollenchyma
ii)	chloroplast	-	b) phloem
iii)	simple tissue	-	c) sclerenchyma
iv)	companion cell	-	d) chlorenchyma

1) i-a, ii-b, iii-c, iv-d

2) i-d, ii-c, iii-b, iv-a

3) i-c, ii-d, iii-a, iv-b

4) i-c, ii-d, iii-b, iv-a

30. Nerve cells do not undergo the cell division due to the absence of___

1) nucleus

2) vacuels

3) centrioles

4) chromosomes

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31. Who referred to Egypt as the "gift of the Nile"?

   1. Confucius   2. Zoroaster   3. Herodotus   4. Hamurabi

32. Who wrote the book "Art of War"?

   1. Lao Tzu   2. Sun Tzu   3. Confucius   4. Shi Heiwangdi

33. Which of the following was not invented by the Egyptians?

   1. Sundial   2. Water clock   3. Glass   4. Invention of the wheel

34. What is correct about the contribution of Mesopotamian civilization?

   1. They developed the calendar system of 360 days

   2. Divide a circle into 360 units

   3. The Cuneiform system of writing was their contribution

   4. The Hammurabi's law code is another legacy of the Mesopotamians

35. Match the followings

 a) The sorrow of China   - 1. Shi Hwangdi

 b) Chin Dynasty   - 2. Zabu

 c) Silk Road   - 3. Yellow River

 d) Large breed   - 4. The Han Empire

   1) 2, 1, 3, 4   2) 3, 1, 2, 4   3) 3, 1, 4, 2   4) 1, 2, 3, 4

36. Process of dissolution of rock substances in water is ....

   1. Oxidation   2. Solution   3. Gradation   4. Hydration

37. This generally originates from mountains.

   1. Lake   2. Sea   3. River   4. Ocean

38. The Cylindrical holes drilled vertically in the river bed are ....

   1. Potholes   2. Valleys   3. Jumps   4. Path between hills

39. The Largest Delta in the world is ....

   1. The Nile River Delta   2. The Ganges - Brahmaputra Delta

   3. The Yellow River Delta   3. The Indus Delta

40. The redness of the red clay soil is due to precence of ....

   1. Iron oxide   2. Carbon   3. Copper   4. Magnesium

41. Which part of the Constitution of India says about the Election Commission?

   1. Part - III   2. Part - XV   3. Part - XX   4. Part - XXII

42. Assertion (A): Indian Constitution provides for an independent Election Commission.

Reason (R): It ensures free and fair elections in the country.

1. Both A and R are correct, and R explains A

2. Both A and R are correct, R does not explain A

3. A is correct and R is incorrect

4. A is false and R is correct

43. India has adopted the electoral system following in the ………………….

   1. USA   2. United Kingdom   3. Canada   4. Russia

44. Which one of the following is not in primary sector?

   1. Agriculture   2. Manufacturing   3. Mining   4. Fishing

45. Match List I and with List II using the code given below.

List I		List II
A. Agriculture Forestry Fishing and Mining	-	1. Unorganized Sector
B. Generation Power Generation Gas and Drinking Water Distribution	-	2. Dependent Sector
C. Commerce, Transport and Telecommunications	-	3. Second Sector
D. Group uploading companies and home industries	-	4. Primary sector

	A	B	C	D
1)	1	2	3	4
2)	4	3	2	1
3)	2	3	1	4
4)	3	2	4	1