

Section : 1 - Aptitude and Logical Reasoning

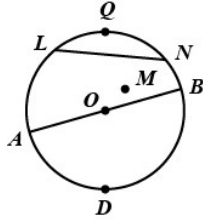
1. If '+' means '×', '-' means '+', '×' means '÷', and '÷' means '-', then $6 - 9 + 8 \times 3 \div 20 = ?$
 (a) -2 (b) 6 (c) 10 (d) 12
2. Kunal walks 10 km towards North. From there he walks 6 km towards South. Then, he walks 3 km towards East. How far and in which direction is he with reference to his starting point?
 (a) 5 km West (b) 7 km West (c) 7 km East (d) 5 km North-east
3. 1, 3, 3, 6, 7, 9, ?, 12, 21
 (a) 10 (b) 11 (c) 12 (d) 13
4. In a certain code, TEACHER is written as VGCEJGT. How is CHILDREN written in that code?
 (a) EJKNEGTP (b) EGKNFITP (c) EJKNFGTO (d) EJKNFTGP
5. In an exam, A scores 5 marks more than B, B scores 6 marks less than C and C scores 2 marks more than D. Which of the following statements is true?
 (a) A scores 1 mark more than D
 (b) A scores 1 mark less than D
 (c) D scores 4 marks less than C
 (d) A has scored the maximum marks among the four students

Section : 2 - Mathematics

6. Find the greatest number which will divide the greatest 3-digit number and the greatest 4-digit number exactly.
 (a) 9 (b) 8 (c) 7 (d) 3
7. Find the value of $a + b + c$, if $373a$ is divisible by 9, $473b$ is divisible by 11 and $371c$ is divisible by 6.
 (a) 7 (b) 6 (c) 0 (d) 9

ROUGH SPACE

8. In the given circle, which of the following statements is INCORRECT?



- (a) AB is the diameter.
- (b) LQN is the minor segment
- (c) M is the centre of the circle.
- (d) ADB is the semicircle.

9. Through how many degrees does the hour hand of a clock turn in 5 minutes?

- (a) $\left(\frac{1}{2}\right)^\circ$
- (b) $\left(3\frac{1}{2}\right)^\circ$
- (c) 5°
- (d) $\left(2\frac{1}{2}\right)^\circ$

10. State T for true and F for false.

- (A) A quadrilateral is a five sided polygon.
- (B) All the four sides of a rhombus are equal.
- (C) A trapezium has all angles equal.
- (D) Half of a revolution is straight angle.

- | | | | | |
|-----|-----|-----|-----|-----|
| (a) | (A) | (B) | (C) | (D) |
| | F | F | T | T |
| (b) | (A) | (B) | (C) | (D) |
| | F | T | F | T |
| (c) | (A) | (B) | (C) | (D) |
| | T | T | F | F |
| (d) | (A) | (B) | (C) | (D) |
| | T | F | T | F |

11. Which of the following statements is CORRECT?

- (a) A right angle is $\frac{1}{2}$ of a revolution.
- (b) A straight angle is $\frac{1}{4}$ of a revolution.
- (c) The measure of a reflex angle is greater than that of a straight angle.
- (d) The angle of one revolution is a reflex angle.

ROUGH SPACE

12. In 0, _____, _____, (-3), what are the numbers that fill the blanks?
 (a) -1 and -5 (b) -5 and -12 (c) -1 and -2 (d) 1 and 2
13. Direction: The following is an account of a shopkeeper that shows profit and loss from the sale of certain item

Name of the item	Profit	Loss	Representation with sign
Rice	150	—	A
Wheat	—	250	B
Sugar	225	—	225
Groundnut oil	—	330	C
Jowar	200	—	200

What is the total profit or loss?

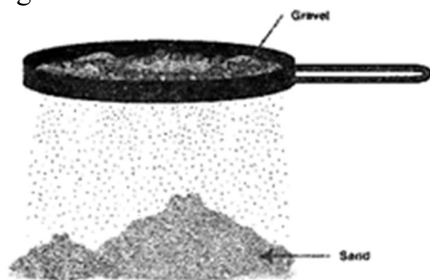
- (a) Rs.5 loss (b) No profit (c) Rs. 86 profit (d) No loss
14. If a boy runs once around a football field of length and width equal to 30 and 20 metre respectively how many metre has he run?
 (a) 50 m (b) 100 m (c) 600 m (d) 80 m
15. If the ratio of circumference of two circle is 4 : 9, what is the ratio of their areas?
 (a) 9 : 4 (b) 16 : 81 (c) 4 : 9 (d) 2 : 3

Section : 3 - Science

16. Shamsheer releases an object from a height and observes it moving towards ground. This is because of
 (a) Electricity (b) Gravitation (c) Magnetism (d) Pressure
17. Doctor wants to use a device to measure temperature of patient’s body. He uses a
 (a) Barometer (b) Laboratory thermometer
 (c) Clinical thermometer (d) Clinical barometer
18. A man observes his _____ image on a plane mirror.
 (a) Virtual (b) Real (c) Diminished (d) All of these
19. Choose the incorrect statement
 (a) Alina gets an electric shock when touches the switch with wet hands
 (b) Alina can be protected from an electric shock while switching on a circuit using rubber gloves
 (c) Alina can be protected from an electric shock while switching on a circuit using wooden stick
 (d) Alina safeguards herself from electric shock when touches the switch with wet hands

ROUGH SPACE

20. S.I. unit of pressure is
 (a) Joule (b) Newton (c) Watt (d) Pascal
21. Moon coming in between the sun & the earth along a straight-line forms' solar eclipse. This is due to
 (a) Formation of a shadow of the earth on the moon
 (b) Reflection of the light by the moon
 (c) Formation of a shadow of the moon on the earth
 (d) Reflection of light by the earth
22. Jenny leaves for her office at 8:30 AM and reaches at 9:20 AM. If her speed was 15 km/hr then find the distance she travelled?
 (a) 12.5 km (b) 10.5 km (c) 15 km (d) 7.5 km
23. An example of natural magnet is
 (a) Iron (b) Steel (c) Cobalt (d) None of these
24. Which form of energy is contained in water stored in dams?
 (a) Kinetic energy (b) Electric energy (c) Potential energy (d) Thermal energy
25. Saisha uses a beam balance to measure _____ of an object.
 (a) Mass (b) Weight (c) Force (d) Both c & d
26. Which one of the following methods of separation of mixtures has been shown in the following figure?



- (a) Sieving (b) Winnowing (c) Hand-picking (d) Threshing

ROUGH SPACE

27. Which one of the following statements is incorrect about air?
 (a) Air is a tasteless, colourless and odourless gaseous substance
 (b) Air has mass
 (c) Air occupies space
 (d) Air cannot be compressed
28. An iron nail is kept in each of the following liquids. In which case would it lose its shine and appear dull?
 (a) Mustard oil (b) Kerosene (c) Coconut oil (d) Soft drink
29. In an activity, a teacher dissolved a small amount of solid copper sulphate in a tumbler half filled with water. Which method would you use to get back solid copper sulphate from the solution?
 (a) Decantation (b) Sedimentation (c) Evaporation (d) Condensation
30. Aerated drinks are an example of:
 (a) liquid-gas mixtures (b) solid-liquid mixtures
 (c) liquid-liquid mixtures (d) none of these
31. Hydrogen gas is a/an _____ whereas water (H₂O) is a _____.
 (a) mixture, element (b) compound, mixture
 (c) element, mixture (d) element, compound
32. The process of twisting fibers to make yarn is called
 (a) Spinning (b) Combing (c) Ginning (d) Knotting
33. Acid reacts with base to form _____ and water.
 (a) Sugar (b) Hydrogen (c) Salt (d) Oxygen
34. Air pollution causes the acid rain. Which one of the following causes the acid rain?
 (a) SO₂ (b) CO₂ (c) O₂ (d) None of these
35. A gas is colourless, odourless and heavier than air and extinguishes fire. Name it.
 (a) Nitrogen (b) Hydrogen (c) Carbon dioxide (d) Oxygen
36. Longest bone of human body is _____.
 (a) Humerus (b) Femur (c) Stapes (d) Skull

ROUGH SPACE

37. Deficiency of vitamin A causes
(a) night blindness (b) beriberi (c) scurvy (d) rickets
38. Which of the following plants store food in their roots?
(a) Sweet potato (b) Brinjal (c) Ginger (d) None of these
39. Brain of the cell is
(a) Chloroplast (b) Vacuole (c) Nucleus (d) Cytoplasm
40. The process of loss of water by a plant through leaves is called
(a) Evaporation (b) Condensation (c) Photosynthesis (d) Transpiration
41. Blood cell responsible for transportation of oxygen
(a) RBC (b) WBC (c) Platelets (d) None of these
42. The part of cactus which is responsible for photosynthesis is
(a) Spines (b) Stem (c) Roots (d) Flower
43. Sac like structure in lungs where exchange of gases takes place
(a) Bronchioles (b) Larynx (c) Alveoli (d) Trachea
44. A young child needs to take more _____ as they help in body building.
(a) Diseases (b) Proteins (c) Minerals (d) None of these
45. Fruit is formed from _____.
(a) Petal (b) Sepal (c) Ovary (d) Stem

ROUGH SPACE
