



ISMART SAMPLE PAPER
FOR CLASS 6th
MOVING TO CLASS 7th (NURTURE)

Test ID : 00000000

Time : 90 min.

M. Marks: 240

The Test Consists (TOTAL 60 QUESTIONS)

SUBJECTS	Qs.	SYLLABUS
Section A : Reasoning		
REASONING	10	General Reasoning
Section B : Scholastic Aptitude		
PHYSICS	12	Measurement, Light, Magnetism
CHEMISTRY	11	Water, Separation of Substances, Matter or Materials Around Us
BIOLOGY	12	Components of Food, Adaptations, Diversity in Plants
MATHEMATICS	15	Number System, General Geometry, Data Handling, Perimeter and Area

INSTRUCTIONS TO CANDIDATE

- Each subject in this paper consists of multiple choice questions with only one correct answer. **+4 marks** will be awarded for correct answer and there is no negative marking.
- Please read the instructions given for each question carefully and fill the correct answer against the question numbers on the answer sheet in the respective subject.
- **Use ball point pen to darken the appropriate circle & mark should completely fill the circle.**
- The Question paper contains blank spaces for your rough work. No additional sheet will be provided for rough work.
- Blank papers, Clipboards, Log Tables, Slide rule, Calculators, Cellular phones, Pagers and Electronic gadgets in any form are not allowed.
- Write your Name, Student ID in the block at the top of the Answer Sheet. Also write your Name & Student ID in the space provided on this cover page of question paper.

Name: _____ **Student ID** _____

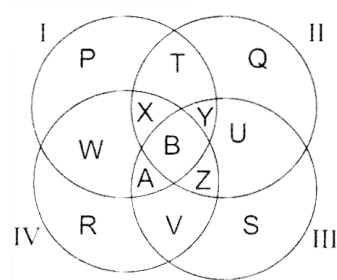
REASONING

1. If U is denoted by 7, M by 2, I by 5, O by 1, K by 8 and J by 4, then what will be the numeric form of the word MOUJIK when written in the reverse order?
 (A) 217458 (B) 845712
 (C) 854712 (D) 857412
2. Dad gives you money every day to put in your new piggy bank. He gives money to you in such a way that the money in the piggy bank doubles with each passing day. Dad gives you 1 cent the first day, 2 cents the second day, 4 cents the third day and so on, then your piggy bank gets full on the 16th day.
 On which day will your piggy bank be half-full?
 (A) 8th (B) 10th
 (C) 12th (D) 15th
3. Bodo weighs 60 pounds more than his sister Rebecca. Their combined weight is 100 pounds. How many pounds does Bodo weigh?
 (A) 20 (B) 40
 (C) 60 (D) 80
4. There is a village that has five fortune tellers. The first fortune teller's prediction has 84 % chance of being correct. The second has 58 % chance of being correct, the third 47 %, the fourth 33 %, and the fifth 6 %.

If you were trying to get the best prediction of your future, which fortune teller would you go to?

- (A) 1st (B) 3rd
 (C) 4th (D) 5th
5. Fill in the blank - Earth, Jupiter, _____, Pluto
 (A) Uranus (B) Mercury
 (C) Mars (D) Venus
 6. Fill in the blank- rocket, plane, _____, bicycle
 (A) cart (B) tricycle
 (C) spacecraft (D) train
 7. In which of the following options the letters are in alphabetical order –
 (A) butterfly (B) iquest
 (C) almost (D) reasoning

Directions (Q. 8-9): These questions are based on the following diagram. Study the diagram and its information given below it. Choose the correct alternative given below each question and mark the number of that choice as your answer.



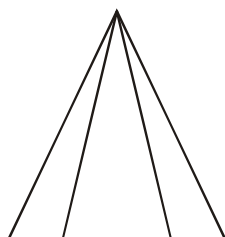
Circle I represents the people who eat Vanilla ice cream.

Circle II represents the people who eat Tutti-Fruity ice cream.

Circle III represents the people who eat Butter Scotch ice cream.

Circle IV represents the people who eat cornetto ice cream.

8. Which of the following represents the people who eat Vanilla ice cream as well as Tutti-Fruity but not any other ice cream ?
(A) T (B) P
(C) Q (D) P and Q
9. Which of the following represents the people who eat all the four ice cream ?
(A) A (B) V
(C) B (D) Z
10. **Count the number of triangles in the given figure.**



- (A) 6 (B) 8
(C) 10 (D) 4

Physics

11. The prefix used to represent 10^{-2} is called
(A) milli (B) Centi
(C) kilo (D) Deci

12. Rahul has a storage box that measures 12 cm wide, 16.5 cm long and 10 cm high. It has a mass of 850 g. What is the density of the box?
(A) 1980 cm^3 (B) 38.5 cm^3
(C) 2.3 g/cm^3 (D) 0.43 g/cm^3
13. What is the greatest time interval among the following:
(A) 20 sec (B) 0.30 minutes
(C) .004 hours (D) .00009 days
14. How much is $5 \text{ m} + 5 \text{ cm}$?
(A) 10 m (B) 10 cm
(C) 5.05 cm (D) 505 cm
15. Which of the following measurement have not been expressed in correct S.I. unit ?
(A) 5 m of cloth (B) 20 seconds of time
(C) Surface area of 25 cm^2 (D) 2 kg cooking oil
16. The straight line path along which the light travels in a homogeneous medium is called
(A) Beam (B) Ray
(C) Parallel Beam (D) None of these
17. It is a medium through which light cannot be propagated
(A) Transparent (B) Translucent
(C) Opaque (D) None of these
18. The speed of light in vacuum or free space is
(A) $3 \times 10^8 \text{ m/s}$ (B) $2.9 \times 10^8 \text{ m/s}$
(C) $2.25 \times 10^8 \text{ m/s}$ (D) $2 \times 10^8 \text{ m/s}$
-
-

19. What is a magnet?
(A) A stone that shines (B) A material that attracts only wood
(C) A material that (D) A material that attracts iron and repels all metals steel
20. Which of the following is attracted by a magnet
(A) Plastic (B) Paper
(C) Iron nail (D) Glass
21. When a beam of light is incident on a polished interface and is sent back in the same medium. This phenomenon is called
(A) refraction (B) reflection
(C) Both A and B (D) None of the above
22. Which of the following is NOT a magnetic material?
(A) Iron (B) Nickel
(C) Plastic (D) Cobalt
25. Which of the following is a chemical change ?
(A) Mixing of iron filings and sand (B) Freezing of water
(C) Passage of electricity through candle wires (D) Burning of a
26. Which of the following simple separation methods is best suited to separate tea leaves from prepared liquid tea?
(A) Sedimentation (B) Filtration / Strainer filtering
(C) Winnowing (D) Threshing
27. Which of the following is not an element ?
(A) Oxygen (B) Bromine
(C) Paper (D) Zinc
28. Groundwater is naturally recharged when rainwater seeps down through soil and permeable rock layers in a process termed:
(A) Infiltration (B) Condensation
(C) Transpiration (D) Sublimation
29. Among the following substances, which one is a element ?
(A) Diamond (B) Brass
(C) Sand (D) Air
30. Which of the following is a compound ?
(A) Stainless steel (B) Bronze
(C) Graphite (D) Hydrogen sulphide
31. To obtain completely pure water (distilled water) from a salt-water solution, which sequence of phase changes occurs inside a distillation apparatus?

Chemistry

23. Which of the following represents an element ?
(A) Brass (B) Stainless steel
(C) Arsenic (D) Silica
24. Salt is commercially recovered from shallow seawater beds using which natural separation method?
(A) Filtration (B) Evaporation
(C) Decantation (D) Magnetic separation

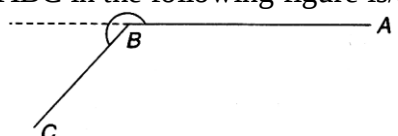
- (A) Freezing followed by Sublimation (B) Evaporation (Boiling) followed by Condensation
(C) Filtration followed by Sedimentation (D) Decantation followed by Transpiration
32. Which of the following is not a physical change?
(A) Dissolution of oxygen in water (B) Dissolution of carbon dioxide in water
(C) Dissolution of alcohol in water (D) Dissolution of salt in water
33. Select the correct alternative(s)
(i) Melting of ice is a physical change
(ii) A physical change is due to change in physical properties of a substance
(iii) A physical change is always irreversible in nature
(iv) burning of candle is an example of physical change
(A) (i) & (ii) (B) (i) & (iv)
(C) (i), (ii) & (iv) (D) (ii) & (iii)
- Biology**
34. A child suffers from swollen gums, delayed wound healing, and frequent bleeding. The child is most likely deficient in:
(A) Vitamin A (B) Vitamin C
(C) Vitamin D (D) Iron
35. Which of the following nutrients is mainly responsible for the growth and repair of body tissues?
(A) Carbohydrates (B) Fats
(C) Proteins (D) Minerals
36. Which combination correctly matches the plant with its root type and leaf venation?
(A) Wheat – Tap root – Parallel venation (B) Mustard – Tap root – Reticulate venation
(C) Rice – Fibrous root – Reticulate venation (D) Maize – Tap root – Parallel venation
37. A plant has leaves with parallel venation. Which of the following is most likely true about its roots?
(A) It has a tap root system (B) It has a fibrous root system
(C) It has adventitious roots only (D) It has aerial roots
38. The broad, flat part of a leaf that helps in trapping sunlight is called:
(A) Petiole (B) Lamina
(C) Midrib (D) Stipule
39. Which of the following plants is most likely to have fibrous roots?
(A) Gram (B) Pea
(C) Onion (D) Mustard
40. A cactus survives in deserts mainly because:
(A) It has broad leaves (B) Its leaves are

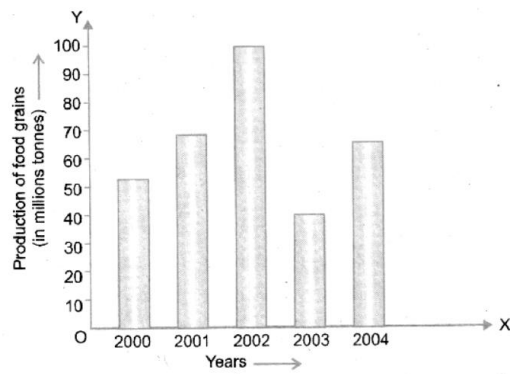
- modified into
spines and the
stem stores water
- (C) It has very short roots (D) It performs photosynthesis only at night
41. Which adaptation helps aquatic plants like lotus to float on water?
(A) Deep tap roots (B) Waxy leaves with air spaces
(C) Leaves modified into spines (D) Thick bark
42. The long neck of a giraffe is an adaptation that helps it:
(A) Escape from water (B) Reach leaves on tall trees
(C) Dig underground (D) Run faster
43. Which of the following is correctly matched?
(A) Polar bear – Thick fur and layer of fat (B) Camel – Webbed feet and gills
(C) Fish – Lungs for breathing (D) Frog – Scales to prevent water loss underwater
44. Which part of a flower develops into a fruit after fertilization?
(A) Stigma (B) Ovary
(C) Petal (D) Anther
45. A student observes a flower with sepals, petals, stamens, and pistil. Which statement is correct?
(A) The flower is (B) The flower is

incomplete complete
(C) The flower lacks reproductive parts (D). The flower cannot form seeds

Mathematics

46. Express $\frac{42}{-63}$ as a rational number with denominator 3.
(A) $-\frac{1}{3}$ (B) $-\frac{4}{3}$
(C) $-\frac{2}{3}$ (D) $-\frac{8}{3}$
47. Which least number should be added to 1330 to get a number exactly divisible by 43?
(A) 46 (B) 1
(C) 3 (D) 7
48. Which of these integers is closest to zero on the number line ?
(A) – 15 (B) – 3
(C) 2 (D) – 1
49. $7 - [13 - \{-2 - 6(6 \text{ of } -5)\}]$
(A) – 172 (B) + 180
(C) + 172 (D) 0
50. Reciprocal of $1\frac{3}{4}$ is
(A) $1\frac{4}{3}$ (B) $4\frac{1}{3}$
(C) $3\frac{1}{4}$ (D) None of these

51. If the perimeter of a square is $(4y + 12) m$, then the length of its diagonal is
 (A) $\frac{y+3}{\sqrt{2}}m$ (B) $\sqrt{2}(y+3)m$
 (C) $\sqrt{2}(4y+12)m$ (D) $\frac{4y+12}{\sqrt{2}}m$
52. The ratio of the area of a square to that of the square drawn on its diagonal is
 (A) 1 : 1 (B) 1 : 2
 (C) 1 : 3 (D) 1 : 4
53. The length of a rectangle is 1 cm more than its width and its perimeter is 14 cm, then the area of the rectangle is
 (A) 16 cm^2 (B) 14 cm^2
 (C) 12 cm^2 (D) 10 cm^2
54. If each of the dimensions of a rectangle is increased by 100%, then the area is increased by
 (A) 100% (B) 200%
 (C) 300% (D) 400%
55. If the length of a rectangle is increased by $\frac{1}{3}$ rd and the width is decreased by $\frac{1}{3}$ rd, then the area of the rectangle is decreased by the fraction.
 (A) $\frac{2}{3}$ (B) $\frac{1}{6}$
 (C) $\frac{1}{9}$ (D) $\frac{1}{8}$
56. The length of a given rectangle is increased by 20% and the breadth is decreased by 20%, then the area
 (A) remains the same (B) increases by 5%
 (C) decreases by 5% (D) decreases by 4%
57. The angle at a point is
 (A) 90° (B) 180°
 (C) 300° (D) 360°
58. Two angles are called adjacent if
 (A) They lie in the same plane and have a common vertex
 (B) They have a ray in common
 (C) The intersection of their interiors is empty
 (D) All the above
59. Angle ABC in the following figure is/an

 (A) acute angle (B) obtuse angle
 (C) reflex angle (D) straight angle
60. The given bar graph shows the annual production of food grains in a state during the period 2000 to 2024.



Find the ratio between the maximum production and the minimum production during the given period.

- (A) 5 : 2 (B) 5 : 3
(C) 5 : 4 (D) 5 : 5

Answer Key

- | | | |
|-------|-------|-------|
| 1. C | 2. D | 3. D |
| 4. D | 5. A | 6. D |
| 7. C | 8. A | 9. C |
| 10. A | 11. B | 12. D |
| 13. A | 14. D | 15. C |
| 16. B | 17. C | 18. A |
| 19. C | 20. C | 21. B |
| 22. C | 23. C | 24. B |
| 25. D | 26. B | 27. C |
| 28. A | 29. A | 30. D |
| 31. B | 32. B | 33. A |
| 34. B | 35. C | 36. B |
| 37. B | 38. B | 39. C |
| 40. B | 41. B | 42. B |
| 43. A | 44. B | 45. B |
| 46. C | 47. C | 48. D |
| 49. C | 50. D | 51. B |
| 52. B | 53. C | 54. C |
| 55. C | 56. D | 57. D |
| 58. D | 59. C | 60. A |