

DON BOSCO HIGH SCHOOL, PANJIM
DON BOSCO COMPETITIVE ADVANTAGE TEST (DB-CAT) 2024-25
27 FEBRUARY 2025
CLASS VI

A. QUESTION PAPER RELATED INSTRUCTIONS

Before you begin, check if all 80 questions have been printed on your question paper.
DB-CAT 24 - 2025 consists of a total of 80 questions as follows:

ENGLISH – Q Nos. 1-15

MATHEMATICS- Q Nos. 16-30

SCIENCE - Q Nos. 31-45

HISTORY – Q Nos. 46 -55

GEOGRAPHY – Q Nos. 56 – 65

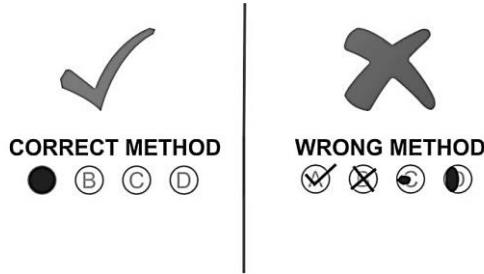
G.K AND CURRENT AFFAIRS Q Nos. 66 – 75

LOGIC AND REASONING – Q Nos. 76-80

1. Each question carries 1 mark.
2. Total duration of the test is 90 minutes
3. All questions are compulsory.
4. There is no negative marking for incorrect answers.
5. You may take away the question paper after the examination.

B. OMR SHEET RELATED INSTRUCTIONS:

1. Begin by writing your name and other required information in the space provided at the top of the OMR sheet.
2. Your signature must be entered in the box labelled as Candidate's signature.
3. Each Multiple Choice Question (MCQ) has four options a) b) c) and d), of which only one is the correct answer.
4. Before marking your answers, carefully read each question and review all four options. Changing answers is not permitted.
5. Once you are sure of your answer, use a dark pen (**BLUE OR BLACK BALL POINT PEN**) to mark your answers on the provided OMR sheet. Answers marked with pencil will not be accepted
6. Fully darken the bubble corresponding to your chosen option, as shown in the example below.



7. Responses with more than one darkened bubble or those not darkened as per instructions will be considered invalid.
8. Avoid making any stray marks on the sheet.
9. No rough work should be done on the OMR sheet. All rough work must be done in the space provided on the question paper. Additional paper for rough work will be provided by the invigilator on request.
10. Do not use a marker or whitener on the OMR sheet.

DON BOSCO COMPETITIVE ADVANTAGE TEST (DB-CAT)
2024-2025
STD VI

ENGLISH

15. The victory was the result of nearly a decade of hard work and preparation.

(Choose the word opposite in meaning to the underlined word)

a) success	b) defeat
c) triumph	d) conquest

MATHEMATICS

16. What number must be added to -5 to get -15?

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

17. Which of these numbers have only two factors, one and the number itself?

a) $37+1$	b) $37+37$
c) 37×1	d) 37×37

18. Two angles of a triangle measure 35 degrees and 65 degrees. What is the measure of the third angle of the triangle?

a) 100 degrees	b) 80 degrees
c) 125 degrees	d) 135 degrees

19. John has stamps from different countries. 1/3rd of them are India's stamps. If he has 36 Indian stamps, how many stamps does he have in total?

a) 12	b) 36
c) 48	d) 108

20. What is the place value of 3 in 1.234?

a) 3	b) $3/10$
c) $3/100$	d) $3/1000$

21. If the 8 digit number $136x5785$ is divisible by 3 then the least possible value of x is ____.

a) 0	b) 1
c) 3	d) 2

22. How many times in a day do the hands of a clock form a right angle?

a) 22	b) 24
c) 44	d) 48

23. A wire of side 16 cm in the shape of an equilateral triangle is re-bent into a regular octagon. Each side of the octagon will measure _____ cms.

a) 4	b) 8
c) 12	d) 6

24. The difference between the number 389 and that obtained on reversing its digit is ____.

a) 594	b) 549
c) 504	d) 450

25. If David was 27 years old in 2011, then his age in 2003 would have been ____.

a) 17 years	b) 37 years
c) 20 years	d) 19 years

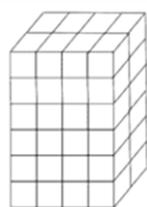
26. A clock seen through a mirror, shows quarter past three. What is the correct time shown by the clock?

a) 3.15	b) 8.45
c) 9.15	d) 9.45

27. The wages of 10 workers for a six-day week is Rs 1200. What are the one day's wages of 4 workers?

a) Rs. 40	b) Rs. 32
c) Rs. 80	d) Rs. 24

28. Determine the volume of the following rectangular prism (cuboid) by counting the number of unit cubes it contains:



29. Estimate the answer (Exact Calculation not needed):

If you leave the tap on at home, 10 litres will run every 2 minutes.

How long will it take for 490 litres to run?

- a) About 50 minutes
- b) About 90 minutes
- c) About 110 minutes
- d) About 100 minutes

30. Sarah read a novel in 20 days. She made it a habit to read 16 pages every day for the first 15 days. She then started reading 18 pages every day for the last 5 days. How many pages was the book?

- a) 300 pages
- b) 330 pages
- c) 320 pages
- d) 288 pages

SCIENCE

31. Rahul experienced breathlessness while climbing the Mt. Everest. What could be the reason for this?

- a) The air pressure is higher at high altitudes
- b) The oxygen levels in the air are lower at high altitudes
- c) The temperature is lower, making it harder to breathe
- d) The body needs more oxygen at higher temperatures

32. If you place a glass tumbler filled with ice water on a table, you notice water droplets forming on the outer surface. What explains this phenomenon?

- a) The ice melts, and water seeps through the glass
- b) The glass absorbs moisture from the air
- c) Water vapour in the air condenses on the cold surface of the glass
- d) The glass releases water from its pores

33. A new type of fabric is designed to keep the wearer cool in the summer. What property of the fabric would make it most effective?

- a) Ability to absorb heat
- b) Ability to reflect heat and allow air circulation
- c) Low water absorption to keep the body dry
- d) High density to block sunlight

34. A cactus plant has spines instead of leaves. What could be the main advantage of this adaptation in a desert environment?

- a) It helps the plant capture more sunlight.
- b) It attracts more insects for pollination.
- c) It helps the plant absorb more nutrients from the soil.
- d) It reduces water loss through transpiration.

35. A student designs an experiment to test the effect of sunlight on plant growth. She places one plant in direct sunlight and another in complete darkness. After a week, the plant in darkness has pale leaves. Why?

- a) Lack of sunlight stopped chlorophyll production
- b) The plant in darkness received too much water
- c) The plant in darkness used up all its energy
- d) The plant in sunlight grew faster and blocked the light

36. Nisha observes that her stainless steel spoon becomes hot while stirring soup, but the plastic handle of the saucepan does not.

- a) Plastic is a better conductor of heat than steel
- b) Steel is a good conductor of heat, while plastic is an insulator
- c) Plastic transfers heat faster than steel
- d) Both materials have the same heat-conducting properties

37. A frog is placed in three different environments: a pond, a dry land, and a sandy desert. In which environment is the frog least likely to survive, and why?

- a) Sandy desert, because it needs a moist environment to survive.
- b) Pond, because it cannot breathe underwater.
- c) Dry land, because it cannot move easily on the surface.
- d) None of these, as a frog can adapt to all environments.

38. Ravi observes a fish moving its tail back and forth while swimming. How does this movement help the fish?

- a) It maintains the fish's balance in water
- b) It propels the fish forward
- c) It helps the fish breathe underwater
- d) It allows the fish to sink to the bottom

39. Why does the moon's shape appear to change when observed from Earth?

- a) The moon's distance from Earth changes during the orbit
- b) The Earth's shadow falls on the moon
- c) The moon's actual size keeps changing
- d) Clouds obscure (block)parts of the moon

40. What would happen if all decomposers disappeared from an ecosystem?

- a) Plants would grow faster
- b) Oxygen levels in the atmosphere would increase
- c) Herbivores would become decomposers
- d) Dead matter would accumulate, and nutrient cycling would stop

41. Why do earthen pots keep water cool even in summer?

- a) The pot absorbs heat from the water
- b) The pot prevents heat from entering the water
- c) The pot allows water to evaporate, which cools the remaining water
- d) The clay contains cooling agents

42. If you sprinkle iron filings around a magnet, why do they form distinct patterns?

- a) Iron filings are charged by the magnet
- b) They repel each other due to magnetism
- c) They align along the magnetic field lines
- d) They get heated by the magnet's energy

43. An athlete feels tired and lacks energy after a workout. Why is he advised to drink a glass of glucose water?

- a) It provides quick energy to the body
- b) It helps in digestion
- c) It helps in cooling down the body
- d) It repairs muscle tissues instantly

44. Amar notices that one of his dogs is behaving aggressively, drooling excessively, and appears unable to swallow. What might be the cause of these symptoms in the dog?

- a) A bacterial infection in the stomach
- b) Poisoning from contaminated food
- c) Dehydration due to lack of water
- d) Rabies infection caused by a bite from an infected animal

45. A person is suffering from night blindness and weak immunity. Which food should they include in their diet to overcome these deficiencies?

- a) Rice and wheat
- b) Carrots and spinach
- c) Potato and sugar
- d) Meat and fish only

HISTORY

46. Rice was first grown to the north of the _____

- a) Kirthar
- b) Vindhya
- c) Sulaiman
- d) Magadha

47. Evidence of pit houses were in the _____ sites.

- a) Daojali Hading
- b) Brahmaputra
- c) Mehrgarh
- d) Burzahom

48. People who wrote and helped in making seals were called _____

- a) rulers
- b) merchants
- c) scribes
- d) craftsperson

GEOGRAPHY

56. The sun does not rise above the horizon and therefore the rays are always slanting, providing less heat. These statements are true about which region?

- a) Temperate
- b) Frigid
- c) Torrid
- d) Artic circle

57. In which continent is Christmas celebrated in summer?

- a) Australia
- b) China
- c) India
- d) Europe

58. What are maps showing natural features of the earth such as plateaus, mountains and plains called?

- a) Political map
- b) Topological map
- c) Relief map
- d) Thematic map

59. Erosion is an example of which of the following?

- a) Internal processes
- b) Sinking
- c) Lifting
- d) External processes

60. Which of the following options correctly states the names of the oceans in the order of their size?

- a) Atlantic, Pacific, Indian, Artic and Southern
- b) Pacific, Atlantic, Indian, Southern and Artic oceans
- c) Southern, Artic, Indian, Pacific and Atlantic oceans
- d) Indian, Pacific, Atlantic, Artic, Indian and Southern oceans

61. Sometimes small pieces of rock come near the Earth and drop on its surface. What are these pieces called after they enter Earth's atmosphere?

- a) Asteroids
- b) Planets
- c) Meteors
- d) Meteoroids

62. Which landform is rich in mineral deposits?

- a) Plateaus
- b) Mountains
- c) Glaciers
- d) Plains

63. Which gas is present in abundance in the atmosphere?

- a) Argon
- b) Carbon dioxide
- c) Methane
- d) Nitrogen

64. Full moon night is also called _____

- a) Pole star
- b) Poornima
- c) Amavasya
- d) Celestial night

65. Which statement is NOT true about maps?

- a) Maps can be easily read
- b) There is an international understanding on the use of symbols on maps
- c) Traditional maps are easier to carry around than digital maps
- d) Scale makes calculating the distance between two places easier.

G.K/ CURRENT AFFAIRS

LOGIC AND REASONING

LOGIC AND REASONING

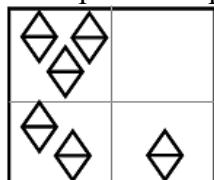
76. A boy walks 20m towards the south. Turning towards his right he walks 10 m. Now which direction is he facing?

- a) West
- b) East
- c) North
- d) South

77. Five friends went to a party and each brought a different gift. John did not bring the cake. Alex brought flowers. Emily brought a book. Dan did not bring chocolates. Who brought the chocolates?

78. Hardworking: Determined:: Happy :?

79. Identify the figure which completes the pattern



The image contains four sub-diagrams labeled a, b, c, and d, each showing a 2x2 grid of diamond shapes. The diamonds are oriented with their points pointing upwards. In diagram a), the top-left diamond is empty, while the other three are filled. In diagram b), all four diamonds are filled. In diagram c), the top-right diamond is empty, while the other three are filled. In diagram d), the bottom-left diamond is empty, while the other three are filled.

80. Introducing a child, a man said, "He is the son of my father's only daughter". How is that man related to the child?

- a) Father
- b) Brother
- c) Maternal Uncle
- d) Son

***** Space for Rough Work *****