Deerwalk Institute of Technology

Deerwalk Aptitude Test (DAT) – BCA – Model Questions – Class of 2027

Instructions

- All questions are compulsory.

- There's no negative marking

- There are three major sections in this paper - English, Mathematics and IQ. Each question carries 1 mark.

- Please darken the most appropriate answer in the provided answer sheet.

Time: 1hour 30 Minutes.

The marks wise distribution of each of the section is as follows:

Section	Subject	Marks	Time [Suggested]
A	English	20	30 Minutes
B	Mathematics	20	30 Minutes
C	IQ	20	30 Minutes

Section A– English

SENTENCE COMPLETION

1. Archaeology is a poor profession; only _____ sums are available for excavating sites and even more _____ amounts for preserving the excavations.
   A. paltry – meager
   B. miniscule – substantial
   C. average – augmented
   D. judicious – penurious

2. Some people _____ themselves into believing that, they are the only honest and hardworking employees in the company.
   A. Keep
   B. Fool

C. Delude

D. Force

3. Dialogue and the _____ interchange of diverse ideas is the _____ of democracy.

A. untrammeled, deterioration

B. discriminating, epitome

C. essence, unhampered

D. restrained, height

4. My coach is one of the best coaches _____.

A. I had know

B. that I know

C. I know

D. who I know

5. Unwilling to admit that they had been in error, the researchers tried to _____ their case with more data obtained from dubious sources.

A. Ascertain

B. Buttress

C. Refute

D. Absolve

6. Rajesh, two of _____ brothers play cricket, wishes to be a coach after his retirement.

A. Whom

B. Which

C. Them

D. Whose

7. The wrong values we impart to our children at home are solely to be blamed for the moral _____ of the society.

A. Devaluation

B. Degradation

C. Advocacy

D. Revival

8. The finance secretary _____ the NGO's funds _____ he was dismissed.

   A. misplaced, soon

   B. misappropriated, so

   C. rolled, thus

   D. continued, for

9. The peasants were the least ____ of all people, bound by tradition and ____ by superstitions.

   A. free – fettered

   B. enfranchised – rejected

   C. enthralled – tied

   D. pinioned – limited

10. Corruption is ____ in our society; the integrity of even senior officials is ____ .

    A. growing - unquestioned

    B. rife – suspect

    C. pervasive - intact

    D. rare – corrupted

WORD ANALOGIES

11. PALTRY : SIGNIFICANCE :

    A. REDUNDANT : DISCUSSION

    B. AUSTERE : LANDSCAPE

    C. OBLIQUE : FAMILIARITY

    D. BANAL : ORIGINALITY

12. LUMEN : BRIGHTNESS

    A. CANDLE : LIGHT

B. NICKEL : METAL

C. INCHES : LENGTH

D. COLOR : HUE

13. CHRONOLOGICAL : TIME
    A. VIRTUAL : TRUTH
    B. ABNORMAL : VALUE
    C. MARGINAL : KNOWLEDGE
    D. ORDINAL : PLACE

14. MEDICINE : ILLNESS :
    A. LAW : ANARCHY
    B. HUNGER : THIRST
    C. ETIQUETTE : DISCIPLINE
    D. LOVE : TREASON

15. Food: Cook ::?
    A. Farmer: Crop
    B. Furniture: Wood
    C. Tailor: Clothing
    D. Jewellery: Goldsmith

16. RP : SQ :: ?
    A. JL : IK
    B. KG : LH
    C. MA : NZ
    D. RV: QW

17. _____ : trail :: grain : grail
    A. train
    B. path

C. wheat

D. holy

18. Market : Demand : : Farming : ?

    A. Farmer

    B. Foodgrain

    C. Monsoons

    D. Supply

19. Good : Bad : : Roof :?

    A. Walls

    B. Pillars

    C. Window

    D. Floor

20. UNION JACK : VEXILLOLOGY

    A. TOAD : ORNITHOLOGY

    B. TURTLE : MICROBIOLOGY

    C. GYMNOSPERMS : BOTANY

    D. FRIEND : HOME ECONOMICS

Section B– Mathematics

1. If n(A)= 3 and n(B)= 6 and A ⊆ B, then the number of elements in
   (A∩B) equals

   A. 3

   B. 9

   C. 6

   D. 8

2. If $f(x) = \frac{1}{4x-3}$ then its domain is given by

A. R

B. $R+\frac{3}{4}$

C. $R-\frac{3}{4}$

D. $[\frac{3}{4}, \infty)$

3. For a square matrix A, Which of the following is true?

   A. a) $|A| = |A^T|$

   B. $|A^{-1}| = |A|$

   C. $|A-1| = |1A|$

   D. None

4. From a group of four boys and six girls, how many ways are there to choose five of the children, if you must choose at least two boys and two girls

   A. 60

   B. 90

   C. 120

   D. 180

5. If sum of a number and its reciprocal is 2, the number is

   A. 1

   B. -1

   C. -2

   D. 2

6. If the third term of a G.P. is 3. The product of first five terms is

   A. 246

   B. 243

   C. 3125

   D. 32

7. The Degree of polynomial p(x) = 5 is

    A. 3

    B. 1

    C. 2

    D. 5

8. What is permutation of letters of the word MATHEMATICS

    A. 4949600

    B. 4969600

    C. 3969600

    D. 4989600

9. If $\cos 3\theta - \cos\theta = 0$ then general values of is equal to

    A. $\dfrac{n\pi}{2}$

    B. $\dfrac{n\pi}{3}$

    C. $\dfrac{n\pi}{4}$

    D. 6

10. The equation $x^2 - y^2 = 0$ represents

    A. Circle

    B. Ellipse

    C. Parabola

    D. Pair of straight lines

11. If actual selling price of and an article including 20% discount and 10% VAT is Rs.880 what is the marked price of the article.

    A. 10

    B. 1000

    C. 1500

    D. 2000

12. The solution set for 7≤ |x|+4<10

    A. x∈ (-6,3]U[3,6)

    B. x∈ (-6,-3] U[3,6)

    C. x∈ (-6,-3]U[3,∞)

    D. x∈ (-,3]U[3,∞)

13. What is the probability of getting the sum as a prime number if two dice are thrown?

    A. $\frac{7}{24}$

    B. $\frac{5}{30}$

    C. $\frac{1}{4}$

    D. $\frac{5}{12}$

14. $\frac{sinx}{tanx}$ is equal to

    A. -1

    B. 0

    C. 1

    D. 2

15. The area bounded by y=2-x² and x+y=0 is

    A. 5/2 sq. Unit

    B. 9/2 sq. unit

    C. 5 sq. unit

    D. 9 sq. unit

16. which one is perpendicular line to line y=x

    A. 3x+5y=20

    B. y= -x

C. 2x+y=6

D. y = 0

17. If a:b=3:5 and a:c=5:7 what is the value of b:c

   A. 3:7

   B. 25:21

   C. 21:35

   D. 7:3

18. What is average of 2^{10} and 2^{20}?

   A. 2^{15}

   B. 2^5+2^{10}

   C. 2^{29}

   D. 2^9+2^{19}

19. Of the four numbers whose average is 60, the first one is one-fourth of the sum of the last three.
The first number is

   A. 67

   B. 53

   C. 48

   D. 71

20. What is the derivative of $y=a^x$?

   A. a^x

   B. $a^x loga$

   C. xa^{x-1}

   D. 0

Section C– IQ

1. If MATH is code as OCRF for GATE?

    A. FDRC

    B. ICQC

    C. FDPV

    D. ICRC

2. 0, 1, 2, 4, 6, 9, 12, 16, ? What number should replace the question mark?
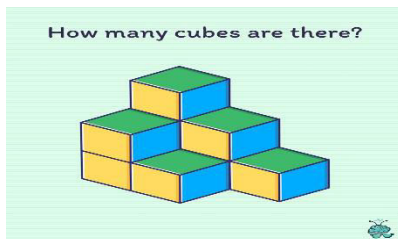
    A. 18

    B. 20

    C. 21

    D. 24

3. If a person walks at 14 km/hr instead of 10 km/hr, he would have walked 20 km more. The actual distance travelled by him is:

    A. 50 km

    B. 56 km

    C. 70 km

    D. 80 km

4. What day comes three days after the day which comes two days after the day which comes immediately after the day which comes two days after Monday?

    A. Wednesday

    B. Thursday

    C. Saturday

    D. Tuesday

5. What is the chance to give the birth by a pregnant lady on Tuesday?

    A. 2/7

    B. 1/7

    C. 1

    D. 2

6. How many three digits' number plates can be formed from the digits 1,2,3,4,5 without repetition of digits?

A. 60

B. 120

C. 125

D. 720

7. Pick the odd one out

A. Spade

B. Axe

C. Blacksmith

D. Hammer

8. Wireless networks are useful when computers are

A. Connected

B. Fixed

C. Portable

D. Non-movable

9. Coldest place in Earth

A. Artic

B. Himalayas.

C. Hammu kasmir.

D. Antartica

10. How many cubes are there?

A. 5

B. 6

C. 8

D. 9

11. If 3 Lions can catch 3 Deers in 3 minutes, how long will it take 100 lions to catch 100 Deers?

    A. 3 mins

    B. 100 mins
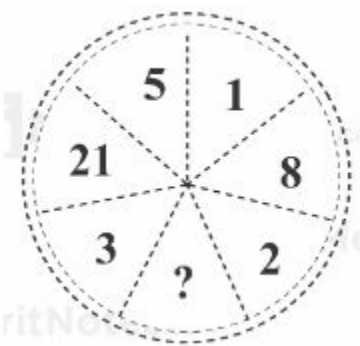
    C. 300 mins

    D. 9 mins

12. If NEW YORK can be encrypted as PGYAQTM, how can you code the word CHARLOTTE?

    A. EICSNPVVG

    B. EJCTNQVVG

    C. EICTNPVVF

    D. EJCSMPVVG

13. If 6 is 24% of a number, what is 40% of the same number?

    A. 8

    B. 10

    C. 15

    D. 20

14. What number should logically replace the question mark?

    A. 11

    B. 13

C. 15

D. 17

15. Alex ranked 9th from the top and 38th from the bottom in a class. How many students are there in the class?

A. 45

B. 42

C. 46

D. 4

16. What is the liquid in your mouth that helps soften food?

A. Saliva

B. Plasma

C. Tears.

D. Saline

17. What refers to surfaces that move over one another?

A. Speed

B. Velocity

C. Friction

D. Color

18. The difference between a two-digit number and the number obtained by interchanging the positions of its digits is 36. What is the difference between the two digits of that number?

A. 9

B. 4

C. None of these

D. Cannot be determined

19. How many iron balls, each of radius 1 cm, can be made from a sphere whose radius is 8 cm?

A. 64

B. 256

C. 512

D. 124

20. If AB + C = D, find A and C given that when B = 6, D = 30 and when B = 8, D = 36

    A. A = 2, C = 6

    B. A = 3, C = 12

    C. A = 6, C = 3

    D. A = 4, C = 3

End of Test.

Answer Keys

English

1. A	2. C	3. C	4. B	5. B
6. D	7. B	8. B	9. D	10. B
11. D	12. C	13. D	14. A	15. D
16. B	17. A	18. C	19. D	20. C

Mathematics

1. A	2. C	3. A	4. D	5. B
6. A	7. A	8. C	9. D	10. D
11. A	12. B	13. D	14. C	15. B
16. B	17. B	18. D	19. C	20. B

IQ

1. D	2. B	3. A	4. D	5. B
6. A	7. A	8. C	9. D	10. D
11. A	12. C	13. B	14. B	15. C
16. A	17. C	18. B	19. C	20. B