

I. Read the following excerpt from "Breaking the Barrier" by Caroline Patterson and answer the questions that follow.

We were sitting on the front porch one August morning, bored and penniless, trying to think ways to make money. I polished shoes and my brother mowed the lawn, but shoes dirtied and grass grew only so fast. That's when we hit on the idea of the fair. Cash prizes, no limit on entries: we entered everything we possibly could, and added up what we'd make for first in every category, the dazzling twenty-four dollars already weighing our pockets.

The fair week, our house was a whirlwind of activity. My mother's VW bus pulling in and out of the driveway for more tape or matting board. My brother and I snarling insults back and forth at each other.

I was particularly proud of two of my entries: a coloured pencil sketch and a dress I'd sewn. The sketch was the silhouette of a woman's head I'd copied from a booklet called "Drawing the Human Head", and I thought I'd done an exceptionally good job on the ear, which the booklet said was the hardest part to draw. "Nice ear!" I could imagine the judges whispering among themselves "See how she managed the shine on the canals!"

The dress, however, was my pie'ce de re'sistance. During the long, hot afternoons while my friends went swimming, I was at the sewing machine, ripping out mangled seams, crying raging, then sewing them again.

Opening day, I went to the silhouette. I looked at the entry tag. Nothing. Next to it, an elk sketch - a big, dumb elk that had been entered every year since the fair began- mocked me with its shiny blue ribbon. What was wrong with those judges, I steamed. Didn't they see my ear?

I still had my dress.

I found my dress on a rack. The tag was bare, except for a comment from the judge, written in a measured school teacher's hand: "Rickrack is such a decorative touch!"

My brother cleaned up. He got a first on chocolate chips he'd never made before the morning our entries were due, prizes on his photographs, a car model I didn't even know he'd entered.... It went on and on.

My brother made twenty-one dollars and I got two.

1. The passage reveals an inherent behaviour of the children
 - (a) care for the competitions
 - (b) sibling rivalry
 - (c) concern for each other
 - (d) co-operation
2. Which phrase in the first paragraph help create a mood of anticipation?
 - (a) bored and penniless
 - (b) twenty-four dollars already weighing our pockets
 - (c) the idea of the fair
 - (d) our house was a whirlwind of activities
3. The narrator was proud of ...
 - (a) his two entries
 - (b) his coloured pencil sketch
 - (c) the dress
 - (d) model of a car
4. In paragraph 5, the narrator personifies the elk in the sketch in order to.....
 - (a) emphasis how insulted she feels
 - (b) show the superiority of the sketch
 - (c) question the judges authority
 - (d) to illustrate the contest..

5. The difference between what the narrator imagines about the contest and what actually happens represent the.....
- (a) conflict between the new and the old
(b) narrator's self - deception
(c) brother's apparent talent
(d) narrator's nature
6. The comment made by the judge was about the
- (a) rack on which the dress was displayed.
(b) the material of the dress.
(c) decorative designs on the dress
(d) dress which was impressive.
7. The conflict at the end of the passage can be best described as:
- (a) internal - the narrator's feeling about her brother winning
(b) external - interactions between the narrator and the judges
(c) external - interactions between the narrator and her brother
(d) internal - the narrator's feelings towards the judges
8. Find another word that means outline:
- (a) model
(b) silhouette
(c) concern
(d) painting
9. Pick out the antonym of mangled.
- (a) destroyed
(b) damaged
(c) fixed
(d) crumpled
10. Change into reported speech; I said to my brother, " When did you submit the car model?"
- (a) I asked my brother when he had to submit the model of the car.
(b) I asked my brother how he submitted the model of the car.
(c) I asked my brother who submitted the model of the car.
(d) I asked my brother when he had submitted the model of the car.
11. Change into passive voice, "Somebody sketched the elk for the competition every year.
- (a) Every year for the competition someone sketched the elk.
(b) Every year for the competition the elk sketched.
(c) Every year for the competition the elk was sketched.
(d) Every year for the competition somebody sketched the elk.
12. Correct if necessary - "A pair of scissors were taken out of the drawer."
- (a) A pair of scissors were taken out of the drawer.
(b) A pair of scissors was taken out of the drawer.
(c) A pair of scissors are taken out of the drawer.
(d) A pair of scissors may be taken out of the drawer.
13. Correct the sentence - "The Arabian Nights have interesting stories"
- (a) The Arabian Nights has interesting stories.
(b) The Arabian Night are interesting stories.
(c) The Arabian Nights are interesting.
(d) The Arabian Nights are wonderful stories

II. Read the poem 'Identity' by Julio Noboa Polanco.

Let them be as flowers,
always watered, fed, guarded, admired,
but harnessed to a pot of dirt.

I'd rather be a tall, ugly weed,
clinging on cliffs, like an eagle
wind-wavering above high, jagged rocks.

To have broken through the surface of stone,
to live, to feel exposed to madness
of the vast, eternal sky.
To be swayed by the breezes of an ancient sea,
carrying my soul, my seed,
beyond the mountains of time or into the abyss of the bizarre.

I'd rather be unseen, and if,
then shunned by everyone,
than to be a pleasant - smelling flower,
growing in clusters in the fertile valley,
where they're praised, handled, and plucked
by greed human hands.

I'd rather smell of musty, green stench
than of sweet, fragrant lilac.
If I could stand alone strong and free,
I'd rather be tall ugly weed.

14. The poem is an extended metaphor on:

- (a) reeds (b) plants (c) flowers (d) life

15. The poem deals with the theme of:

- (a) flowers (b) freedom (c) reeds (d) plants

16. The poet admires flowers but they have a major drawback....

- (a) are harnessed to a pot of dirt (b) watered (c) protected (d) taken care of

17. The simile in the second stanza is that of...

- (a) grass (b) a reed (c) an eagle (d) flowers

18. The poet Polanco contrasts...

- (a) flower to grass.
(b) the well protected flower to a weed that is independent and ungoverned.
(c) the weed to wind.
(d) life to an eagle

19. The poet prefers to remain unseen and shunned by everyone than....

- (a) be a pleasant smelling flower (b) be a reed
(c) be an eagle (d) be a tuft of grass

20. In the poem the reed represents a...

- (a) concern for nature (b) rivalry in nature
(c) a comparison to the fields (d) an imagery of freedom and unfettered existence

21. If two chords AD & BE are drawn perpendicular to a chord AB of circle which of the following is correct?

- (a) AD = BE (b) AD = 2BE (c) 2AD = BE (d) AD = 3BE

22. A field is in the shape of a trapezium whose parallel sides are 50m and 15m. The non-parallel sides are 20m and 25m. What is the area of the field?

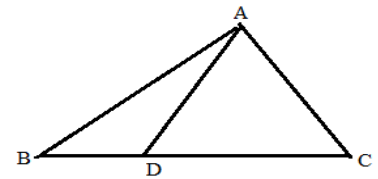
- (a) $\frac{900\sqrt{6}}{7}m^2$ (b) $\frac{1100\sqrt{6}}{7}m^2$ (c) $\frac{1300\sqrt{6}}{7}m^2$ (d) $\frac{1500\sqrt{6}}{7}m^2$

23. How many positive numbers from 1 to 200 both inclusive are equal to cube of an integer?

- (a) 6 (b) 5 (c) 4 (d) 0

24. In the figure given, D divides the side BC of ΔABC in the ratio 3:5, what is the area of ΔABD ?

- (a) $\frac{2}{5} \times \text{ar}(\Delta ABC)$ (b) $\frac{3}{5} \times \text{ar}(\Delta ABC)$
(c) $\frac{5}{8} \times \text{ar}(\Delta ABC)$ (d) $\frac{3}{8} \times \text{ar}(\Delta ABC)$



25. If $y = 3^x$ and 'x' and 'y' are both integers, which of the following is equivalent to $3^{2x} + 3^x \times 3$?

- (a) $y(y+3)$ (b) y^2+3 (c) $3y+3$ (d) $3(y+3)$

26. In a quadrilateral ABCD, if AB = 5m, BC = 5m, CD = 6m, AD = 6m and diagonal AC = 6m, what is its area?

- (a) $2(4+3\sqrt{3})m^2$ (b) $3(4+3\sqrt{3})m^2$ (c) $5(4+3\sqrt{3})m^2$ (d) $7(4+3\sqrt{3})m^2$

27. A rectangle of length "a" and breadth "b" is revolved 360° about its length. The volume of the resulting cylinder is:

- (a) $2\pi ab^2$ (b) πa^2b (c) πab (d) $2\pi ab$

28. X, Y, Z, U are four points in a straight line. If distance from X to Y is 15, Y to Z is 5, Z to U is 8 and X to U is 2, then the correct sequence of the points will be

- (a) X - Y - Z - U (b) X - Z - Y - U (c) X - U - Z - Y (d) X - Z - U - Y

29. If $x + y = 2013$ and $\frac{1}{x} + \frac{1}{y} = 2013$. What is the value of xy ?

- (a) 2013 (b) 4026 (c) 0 (d) 1

30. ABCD is a parallelogram of Area S. E and F are the middle points of the sides AD and BC respectively. If G is any point on the line EF, then the area of ΔAGB is equal to:
- (a) $\frac{S}{2}$ (b) $\frac{S}{3}$ (c) $\frac{S}{4}$ (d) $\frac{3S}{4}$
31. If a point lies in between A and B, which of the following is true?
- (a) $AP = \frac{1}{2}AB$ (b) $BP = \frac{1}{2}AB$ (c) $AP + PB = AB$ (d) $AP = BP$
32. The mean of 10 numbers is 20. If 5 is subtracted from every number, what is the new mean?
- (a) 15 (b) 20 (c) 17.5 (d) 25
33. If $(x-2)$ is a common factor of $x^3 - 4x^2 + ax + b$ and $x^3 - ax^2 + bx + 8$, then the values of a and b are respectively:
- (a) 3 and 5 (b) 2 and 4 (c) 4 and 0 (d) 0 and 4
34. Straight line passing through the points $(-1, 1)$, $(0,0)$ and $(1,-1)$ has equation:
- (a) $y = x$ (b) $x + y = 0$ (c) $y = 2x$ (d) $2 + 3y = 7x$
35. Which figure can be formed by joining the midpoints of the adjacent sides of a rectangle?
- (a) A square (b) A rectangle (c) A rhombus (d) A parallelogram
36. The base of a conical tent is of area 616 sq.cm. A 48 cm long vertical pole is placed at its centre so that it touches the roof of the tent. How much canvas is needed to make the tent if the base is also covered with canvas?
- (a) 2816 cm^2 (b) 2861 cm^2 (c) 2618 cm^2 (d) 2681 cm^2
37. A cube of edge 'k' is divided into 'n' equal cubes. What is the edge of the new cube?
- (a) $\sqrt[3]{nk}$ (b) $\frac{k}{\sqrt[3]{n}}$ (c) $\sqrt[3]{kn}$ (d) $\frac{\sqrt[3]{n}}{k}$
38. One half of the difference between the sum of interior angles of a rectangle and that of a triangle is:
- (a) 360 (b) 240 (c) 180 (d) 90
39. Where does the line $y = x - 3$ cross the y-axis?
- (a) (2,3) (b) (0,-3) (c) (-3,2) (d) (-3,3)
40. If $P = 5 + 2\sqrt{6}$ and $q = \frac{1}{p}$ then, $p^2 + q^2$ is:
- (a) 49 (b) 98 (c) 100 (d) 10
41. The sides of a triangle are 5 cm, 12 cm and 13 cm. then its area is:
- (a) 0.0024 m^2 (b) 0.0026 m^2 (c) 0.003 m^2 (d) 0.0015 m^2

42. The remainder when $x^4 - 3x^3 + 2x^2$ is divided by x is:

- (a) $x^3 - 3x^2 + 2x$ (b) $2x^2 - 3x^3$ (c) 1 (d) 0

43. If the coordinates of the point p are $(3, -5)$, then the perpendicular distance of p from the y -axis:

- (a) -5 (b) 5 (c) 3 (d) -3

44. Straight line passing through the points $(-1,1), (0,0)$ and $(1,-1)$ has equation:

- (a) $y = x$ (b) $x+y=0$ (c) $y=2x$ (d) $2+3y=7x$

45. If $153a=37b=5661$, what is the average of 'a' and 'b'?

- (a) 76.5 (b) 37 (c) 153 (d) 95

46. A square is inscribed in a circle with radius 'r'. What is the probability that a randomly selected point within the circle is not within the square?

- (a) $\frac{\pi - 2}{\pi^2}$ (b) $\frac{\pi - 1/2}{\pi}$ (c) $\frac{\pi - 2}{\pi}$ (d) $\frac{1 - r}{\pi}$

47. If a point P lies between 2 points X and Y such that $XP= YP$. What is the value of $XY:XP$?

- (a) 1:2 (b) 2:3 (c) 3:2 (d) 2:1

48. The width of each of five continuous classes in a frequency distribution is 5 and the lower class-limit of the lowest class is 10. Find the upper class- limit of the highest class.

- (a) 15 (b) 25 (c) 35 (d) 40

49. How many times the surface area of a cylinder increases when its radius is doubled?

- (a) 2 (b) 4 (c) 6 (d) 8

50. A bag contains 3 red balls, 5 black balls and 4 white balls. A ball is drawn at random from the bag. What is the probability of not getting a black ball?

- (a) $\frac{1}{4}$ (b) $\frac{5}{12}$ (c) $\frac{1}{3}$ (d) $\frac{7}{12}$

51. The work done by a force is defined by $\text{work} = \text{force} \times \text{displacement}$. In certain situation, force (F) and displacement (S) are not equal to zero but work done is zero. From this, we conclude that:

- (a) F and S are in same direction. (b) F and S are in opposite directions
(c) F and S are at right angles (d) $F > S$

52. A boat having length 3m and breadth 2m is floating on a lake. The boat sinks by 1cm, when a man gets on it. The mass of the man is?

- (a) 60kg (b) 72 kg (c) 12 kg (d) 128 kg

53. The speed of sound will be greatest in:

- (a) air (b) vacuum (c) water (d) metal

54. An athlete completes one round of a circular track of radius R in 40 seconds. What will be his displacement at the end of 2 minutes 20 seconds?
- (a) zero (b) $2R$ (c) $2\pi R$ (d) $7\pi R$
55. Three different objects of masses m_1 , m_2 and m_3 are allowed to fall from rest and from the same point O along three different frictionless paths. The speed of the three objects on reaching the ground will be in the ratio of:
- (a) $m_1:m_2:m_3$ (b) $m_1:2m_2:3m_3$ (c) $\frac{1}{m_1} : \frac{1}{m_2} : \frac{1}{m_3}$ (d) 1:1:1
56. A body goes 20km North and 10Km due East. The displacement of the body from its starting point is.
- (a) 30 km (b) 25.2 km (c) 22.36 km (d) 10 km
57. Choose the wrong statement:
- (a) Speed can never be negative.
 (b) When the particle returns to the starting point its average velocity is zero but average speed is not zero
 (c) displacement does not tell the nature of the actual motion of a particle between the points
 (d) If the velocity of a particle is zero at an instant, its acceleration should also be zero at that instant
58. The forces acting on a body are in equilibrium. If the body is moving along a straight line, then it should be:
- (a) moving with uniform velocity (b) moving with uniform acceleration
 (c) moving with uniform retardation (d) coming to a stop
59. The distance between two consecutive crests in a wave train produced in a string is 5cm. If 2 complete waves pass through any point per second, the velocity of the wave is:
- (a) 10 cm/s (b) 2.5 cm/s (c) 5 cm/s (d) 15 cm/s
60. A block of wood floats in water with a fraction of its volume outside water. The up thrust on block is:
- (a) less than weight of the block (b) equal to the weight of the block
 (c) more than weight of the block (d) determined by the fraction of volume inside water.
61. The atomicities of Ozone, Sulphur, Phosphorus and Argon are:
- (a) 8,3,4 and 1 (b) 1,3,4 and 8 (c) 4,1,8 and 3 (d) 3,8,4 and 1
62. Atoms of which of the following pairs elements are most likely to exist in free state?
- (a) H and He (b)) He and Ne (c) Ar and C (d) Ne and N
63. In carbon dioxide the proportion of oxygen to carbon by mass and in water the proportion of oxygen and hydrogen by volume respectively are:
- (a) 8:3 and 2:1 (b) 2:1 and 3:8 (c) 1:2 and 8:3 (d) 8:3 and 1:2

64. Which of the following is wrong?

- (a) Isotopes have same atomic number (b) Isotopes have same no. of neutrons
(c) Isotopes have same no. of protons (d) Isotopes have same no. of electrons

65. A proton is identical to:

- (a) A molecule of hydrogen (b) An atom of hydrogen
(c) The nucleus of helium (d) The nucleus of hydrogen

66. The charge on a α particle and its mass number respectively are:

- (a) -2 and 4 (b) +2 and 4 (c) -4 and +2 (d) +2 and 2

67. Which of the following can lose three electrons to attain the configuration of neon?

- (a) Aluminium (b) Chlorine (c) Nitrogen (d) Magnesium

68. Which contains more number of molecules?(At. masses of H=1, O=16, N=14, C=12)

- (a) 2 g of H₂ (b) 4 g of O₂ (c) 7 g of N₂ (d) 22 g of CO₂

69. How many grams of magnesium will have the same number of atoms as 6 grams of carbon (Atomic masses of Mg=24, C=12)

- (a) 12 g (b) 24 g (c) 18 g (d) 6 g

70. Cathode ray particles are nothing but:

- (a) X rays (b) electrons (c) gamma rays (d) radio waves

71. Which of the following is not a characteristic of mixed farming?

- (a) Minimizes risk of crop failure.
(b) Set pattern of rows
(c) harvesting and threshing of crops separately is not possible
(d) individual marketing and consumption of crop is not possible

72. In which of the animals, the heart does not have the left and right auricles?

- (a) cartilaginous and bony fishes (b) frogs and toads
(c) lizards and snakes (d) crocodiles and alligators

73. All animals are:

- (a) parasitic (b) saprophytic (c) autotrophic (d) heterotrophic

74. Immuno-deficiency syndrome could develop due to:

- (a) defective liver (b) defective thymus (c) AIDS virus (d) weak immune system

75. If RBC s are placed in distilled water, they will:

- (a) shrink and collapse (b) slide together
(c) slide together (d) increase in volume and burst

76. How do gases move in and out of leaves?
(a) by diffusion (b) by osmosis (c) by transpiration (d) by evaporation
77. The primary purpose of stratification or layering in epithelial tissue is for increased:
(a) protection (b) secretion (c) absorption (d) thickening
78. All of the following organelles are associated with protein synthesis except:
(a) ribosomes (b) rough endoplasmic reticulum
(c) nucleus (d) smooth endoplasmic reticulum
79. A microorganism, when viewed under a compound microscope with an objective lense of 40X and eye piece of 10X, magnification was 4000μ in size. The same microorganism when observed under a dissection microscope with a lens of 10X, magnification would measure:
(a) 10μ (b) 40μ (c) 100μ (d) 400μ
80. The vaccine taken against tuberculosis:
(a) MMR (b) DTP (c) BCG (d) TT
81. The scientific name of the national bird of India is:
(a) *Psittacula eupatra* (b) *Pavo cristatus* (c) *Passer domesticus* (d) *Crovis splendens*
82. Entomology is the science that studies:
(a) Human behaviour (b) insects (c) rocks (d) birds
83. Hitler's party which came in to power in 1933 is known as:
(a) Labour Party (b) Nazi Party (c) Ku-Klux-Klan (d) Democratic Party
84. Epsom (England) is the place associated with:
(a) Horse Racing (b) Polo (c) Shooting (d) snooker
85. Thomas cup is associated with:
(a) Badminton (b) Billiards (c) Lawn Tennis (d) Table tennis
86. Trans World Airlines is an international airlines of:
(a) UK (b) USA (c) Russia (d) Scandinavia
87. Tomb of vasco- da-gama is situated at:
(a) Chittorgarh (Rajasthan) (b) Kochi (Kerala)
(c) Coimbatore (Tamil Nadu) (d) Durgapur (West Bengal)
88. Who is the author of the book "Nineteen Eighty Four"?
(a) Thomas Hardy (b) Emily Zola (c) George Orwell (d) Walter Scott
89. The Great Victoria Desert is located in
(a) Canada (b) Australia (c) West Africa (d) North America

90. “.MOV” extension refers usually to what kind of file?
(a) Image file (b) Animation/ Movie file (c) Audio file (d) MS office document
91. Amar Singh Sokhi is remembered for his performance in:
(a) Archery (b) Cycling (c) Swimming (d) Athletics
92. The Pentium is related to:
(a) DVD (b) Hard disk (c) Mouse (d) Micro processor
93. Chausa, Totapuri, Jahangir and Rumani are different varieties of:
(a) Mango (b) Orange (c) Apple (d) Pineapple
94. A Ph.D Scholarship at St.John’s College, Cambridge is named after which Indian Prime Minister?
(a) Pandit Jawaharlal Nehru (b) Dr. Manmohan Singh
(c) Indira Gandhi (d) Lal Bahadur Shastri
95. Which district has become the first one in India to have High Speed Rural Broad Band Network?
(a) Ajmer of Rajasthan (b) Vidisha of Madhya Pradesh
(c) Idukki of Kerala (d) Kamrup of Assam
96. The instrument used to measure altitudes in aircrafts...
(a) Ammeter (b) Odometer (c) Altimeter (d) Anemometer
97. Who decides whether a Bill is an ordinary Bill or a Money Bill?
(a) Prime Minister (b) Speaker of Lok Sabha
(c) Chairperson of Rajya Sabha (d) Home Minister
98. Jains in India and abroad follow the teachings of:
(a) Buddha (b) Mahavira (c) Manu (d) Bodhisattva
99. The Indian river known as ‘Dakshin Ganga’ is:
(a) Cauvery (b) Krishna (c) Mahanadi (d) Godavari
100. Apart from India, in which of the following two countries, Tamil is an official language?
(a) Mauritius and Malaysia (b) Sri Lanka and Mauritius
(c) Malaysia and Indonesia (d) Sri Lanka and Singapore

