2023

Time - 1 hour

Full Marks - 25

*Answer **all groups** as per instructions.*
Figures in the right hand margin indicate marks.
Candidates are required to answer
in their own words as far as practicable.

GROUP - A

1. Fill in the blanks. (<u>any five</u>) [1 × 5

   (a) Knowledge is _____ of an individual.

   ଜ୍ଞାନ ହେଉଛି ଜଣେ ବ୍ୟକ୍ତିର _____ ।

   (b) Real education builds _____ .

   ପ୍ରକୃତ ଶିକ୍ଷା _____ ସୃଷ୍ଟି କରେ ।

   (c) _____ is the real meaning of education.

   _____ ହେଉଛି ଶିକ୍ଷାର ପ୍ରକୃତ ଅର୍ଥ ।

   (d) Name any two of the challenges that obstruct the ethical practices in our educational institutions.

   ଆମର ଶିକ୍ଷାନୁଷ୍ଠାନଗୁଡ଼ିକରେ ନୈତିକ ଅଭ୍ୟାସରେ ବାଧା ସୃଷ୍ଟି କରୁଥିବା ଯେକୌଣସି ଦୁଇଟି ଆହ୍ୱାନକୁ ଉଲ୍ଲେଖ କର ।

(e) Students should not adopt _____ means in examination.

ବିଦ୍ୟାର୍ଥୀମାନେ ପରୀକ୍ଷାରେ _____ ଉପାୟ ଅବଲମ୍ୟନ କରିବା ଉଚିତ୍ ନୁହେଁ ।

(f) Education helps to learn positive inter-personal relationship among the _____.

ଶିକ୍ଷା _____ ମଧ୍ୟରେ ସକାରାତ୍ମକ ଆନ୍ତଃ ବ୍ୟକ୍ତିଗତ ସମ୍ପର୍କ ଶିଖ୍ବାରେ ସାହାଯ୍ୟ କରେ ।

(g) A Learner in school learns the _____ of Leadership.

ବିଦ୍ୟାଳୟରେ ଜଣେ ଶିକ୍ଷାର୍ଥୀ ନେତୃତ୍ଵର _____ ଶିଖ୍‌ଥାଏ ।

(h) _____ activities in institutions provide scope for development of aesthetic sense.

ଶିକ୍ଷାନୁଷ୍ଠାନଗୁଡ଼ିକରେ _____ କାର୍ଯ୍ୟକଳାପ ସୌନ୍ଦର୍ଯ୍ୟବୋଧର ବିକାଶର ସୁଯୋଗ ପ୍ରଦାନ କରିଥାଏ ।

GROUP - B

2. Answer <u>any five</u> of the following questions within two or three sentences each.   [2 × 5

(a) Define the concept of 'Education' in your own words.

'ଶିକ୍ଷା'ର ପରିକଳ୍ପନାକୁ ନିଜ ଭାଷାରେ ବ୍ୟାଖ୍ୟା କର ।

(b) State the differences between academic qualification and ability.

ଶିକ୍ଷାଗତ ଯୋଗ୍ୟତା ଏବଂ ସାମର୍ଥ୍ୟ ମଧ୍ୟରେ ପାର୍ଥକ୍ୟ ଦର୍ଶାଅ।

(c) Define the concept 'ragging' in educational institutions.

ଶିକ୍ଷାନୁଷ୍ଠାନଗୁଡ଼ିକରେ 'ରାଗିଂ' ଧାରଣାକୁ ବ୍ୟାଖ୍ୟା କର।

(d) Write two sentences of positive friendship.

ସକାରାତ୍ମକ ବନ୍ଧୁତା ବିଷୟରେ ଦୁଇଟି ବାକ୍ୟ ଲେଖ।

(e) State two traits of leadership.

ନେତୃତ୍ବର ଦୁଇଟି ଲକ୍ଷଣ ଦର୍ଶାଅ।

(f) Mention any two importances of co-curricular activities.

ସହ-ପାଠ୍ୟକ୍ରମ କାର୍ଯ୍ୟକଳାପର ଯେକୌଣସି ଦୁଇଟି ଗୁରୁତ୍ବ ଉଲ୍ଲେଖ କର।

(g) Distinguish between co-curricular and extra-curricular activities.

ସହ-ପାଠ୍ୟକ୍ରମ ଏବଂ ଅତିରିକ୍ତ-ପାଠ୍ୟକ୍ରମ କାର୍ଯ୍ୟକଳାପ ମଧ୍ୟରେ ପାର୍ଥକ୍ୟ ଦର୍ଶାଅ।

GROUP - C

3. Answer any two the questions within 300 words each.   [5 × 2

(a) Real education is not for degree acquisition but for man making. Explain.

ପ୍ରକୃତ ଶିକ୍ଷା ଡିଗ୍ରୀ ହାସଲ ପାଇଁ ନୁହେଁ ବରଂ ମଣିଷ ତିଆରି ପାଇଁ — ବ୍ୟାଖ୍ୟା କର।

(b) How to develop interpersonal relation and community life in Higher Education institution ?

ଉଚ୍ଚଶିକ୍ଷା ପ୍ରତିଷ୍ଠାନରେ ପାରସ୍ପରିକ ସମ୍ପର୍କ ଏବଂ ସମ୍ପ୍ରଦାୟ ଜୀବନକୁ କିପରି ବିକାଶ କରାଯିବ ?

(c) Give a note on ethical leadership in academic institution.

ଶିକ୍ଷାନୁଷ୍ଠାନରେ ନୈତିକ ନେତୃତ୍ୱ ଉପରେ ଏକ ଟିପ୍ପଣୀ ଦିଅ ।

(d) What is cheating in Examination ? How can it be checked ?

ପରୀକ୍ଷାରେ ନକଲ କଣ ? ଏହାକୁ କିପରି ନିୟନ୍ତ୍ରଣ କରାଯାଇପାରିବ ?

2023

Time - 3 hours

Full Marks - 80

*Answer **both groups** as per instructions.*
Figures in the right hand margin indicate marks.

GROUP - A

Answer <u>all</u> questions by choosing the correct answer
from the given alternatives.   [1 × 40

1. If $5^n = 125$, then the value of 2^{n-2} is _____.

    (i)   1   (ii)   2

    (iii) 3   (iv)   4

2. An equilateral triangle has all angles measuring _____.

    (i) 30^0 (ii) 45^0

    (iii) 60^0 (iv) 75^0

3. The side of an equilateral triangle is 1 cm. Then area of the tri-
    angle = _____.

    (i) $\frac{\sqrt{3}}{4}$ cm^2 (ii) $\frac{4}{\sqrt{3}}$ cm^2

    (iii) $\frac{1}{\sqrt{2}}$ cm^2 (iv)   1 cm^2

4. The triangle whose two sides are of equal length is called as
_____ triangle.

(i) equilateral   (ii) isosceles

(iii) right   (iv) none of these

5. Find the area of the square having sides 3 cm.

(i) 6 cm   (ii) 6 cm^2

(iii) 9 cm^2 (iv) 9 cm

6. Find the mean of 2, 8, 11, 7.

(i) 7   (ii) 9

(iii) 28   (iv) 14

7. Find the median for the data 36, 53, 1.2, 3.9, 4.7, 12.6.

(i) 36   (ii) 24.3

(iii) 23.4   (iv) 63

8. A coin is tossed twice. Find the probability of getting at least one head.

(i) $\dfrac{2}{3}$ (ii) $\dfrac{3}{4}$

(iii) $\dfrac{4}{3}$ (iv) 1

9. Find the probability of getting an even number when a dice is thrown.

(i) $\dfrac{1}{6}$

(ii) $\dfrac{1}{4}$

(iii) $\dfrac{1}{3}$

(iv) $\dfrac{1}{2}$

10. What is the values of $(4)^{\frac{5}{2}}$?

(i) 8

(ii) 16

(iii) 32

(iv) 64

11. Which number would replace in the series 1, 2, 6, 7, 21, 22, 66, 67, _____ ?

(i) 51

(ii) 101

(iii) 201

(iv) 251

12. Divide 120 into two parts in the ratio 2 : 3.

(i) 48, 72

(ii) 60, 60

(iii) 70, 50

(iv) 80, 40

13. Express speed 144 km/hr in m/s.

(i) 10 m/s

(ii) 15 m/s

(iii) 30 m/s

(iv) 40 m/s

14. Find the median for the set containing squares of all the even numbers between 1 to 20.

(i) 10

(ii) 100

(iii) 12

(iv) 144

15. Find the area of the circle having radius 14 cm.

(i) 616 cm²

(ii) 616 cm

(iii) 161 cm

(iv) 161 cm²

16. Find the area of the rectangle having length 6 cm and breadth 2 cm.

(i) 12 cm

(ii) 21 cm²

(iii) 12 cm²

(iv) 21 cm

17. "Every integer is a rational member."

(True or False)

18. Find the value of $\dfrac{x^m}{x^n}$ where m = n.

(i) 0

(ii) 1

(iii) x

(iv) −1

19. Angles greater than 90^0 are called _____ angles.

(i) acute

(ii) obtuse

(iii) right

(iv) none of these

20. State true or false : $\sqrt{0.4} = 0.2$.

21. Arrange the following words in a meaningful order :

(1) Grass (2) Curd (3) Milk (4) Cow (5) Butter

(i)   1, 2, 3, 4, 5   (ii)   2, 3, 4, 5, 1

(iii) 4, 1, 3, 2, 5   (iv) 5, 4, 3, 2, 1

22. Which fraction comes in the sequence $\dfrac{9}{32}, \dfrac{7}{16}, \dfrac{5}{8}$, _____.

(i) $\dfrac{3}{2}$ (ii) $\dfrac{1}{3}$

(iii) $\dfrac{3}{4}$ (iv) $\dfrac{4}{3}$

23. Solve the series : ELFA, GLHA, ILJA, _____, MLNA.

(i)   OLPA   (ii)   LLMA

(iii) KLMA   (iv) KLLA

24. How many terms are there in the series : 201, 208, 215, _____, 369 ?

(i)   23   (ii)   24

(iii) 25   (iv) 26

25. FRUIT : BANANA : : MAMMAL : _____.

(i)   LIZARD   (ii)   FISH

(iii) PIGEON   (iv) COW

26. BOOK : READ : : TELEVISION : _____.

    (i)   WATCH   (ii)   EAT

    (iii) SLEEP   (iv) WALK

27. Find 25% of 160.

    (i)   50   (ii)   40

    (iii) 60   (iv) 20

28. In the series 7, 14, 28, ..., what will be the 15th term ?

    (i)   1792   (ii)   2456

    (iii) 3584   (iv) 4096

29. Write the relation between speed, distance and time.

    (i) $\text{Speed} = \dfrac{\text{Distance}}{\text{Time}}$ (ii) $\text{Distance} = \dfrac{\text{Time}}{\text{Speed}}$

    (iii) Distance × Time = Speed (iv) None of these

30. Find S.I. on ₹ 2000 at the rate of interest 10% p.a. for 2 years.

    (i)   ₹ 200   (ii)   ₹ 400

    (iii) ₹ 600   (iv) ₹ 800

31. Divide 18 by $3\sqrt{3}$.

    (i) $2\sqrt{3}$ (ii) $3\sqrt{2}$

    (iii) $3\sqrt{3}$ (iv) $2\sqrt{2}$

32. Simplify $(25)^{-3/2}$.

(i) $\dfrac{1}{25}$

(ii) $\dfrac{1}{5}$

(iii) $\dfrac{1}{125}$

(iv) 125

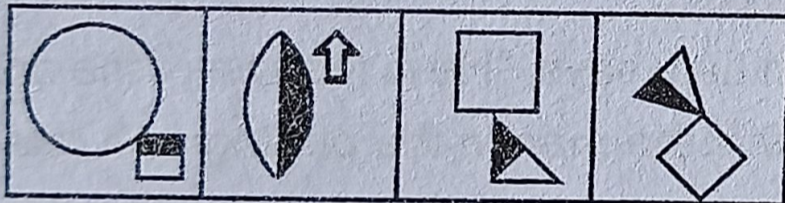33. Find the circumference of a circle of radius 14 cm.

(i) 88 cm^2

(ii) 88 cm

(iii) 44 cm

(iv) 44 cm^2

34. Select a figure from amongst the answer figures which would be fifth figure to continue the series.
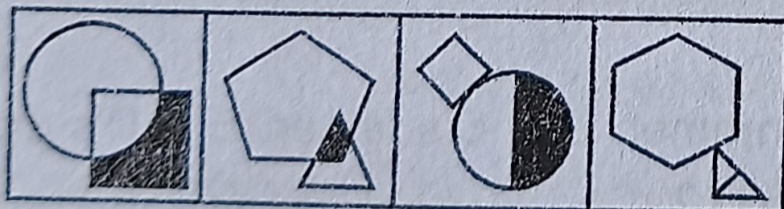
Question figure

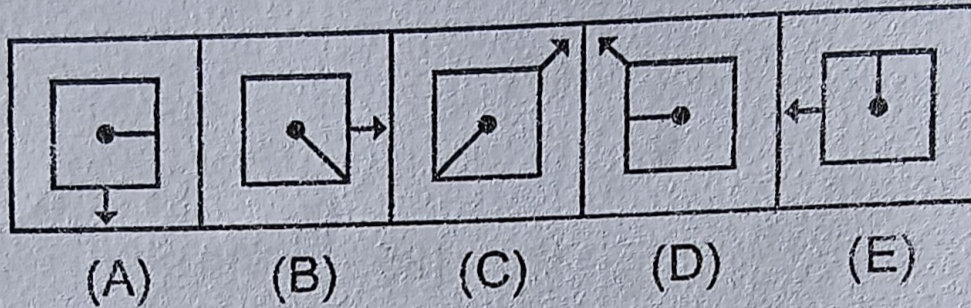(a) (b) (c) (d)

Answer figure

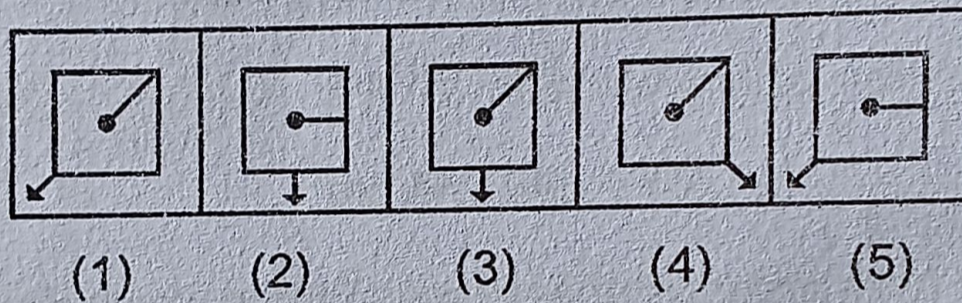(1) (2) (3) (4)

(i) (1)

(ii) (2)

(iii) (3)

(iv) (4)

35. Which figure can be placed in place of question mark ?

Problem figures

(A)   (B)   (C)   (D)   (E)

Answer figures

(1)   (2)   (3)   (4)   (5)

(i)   (1)   (ii) (2)

(iii) (3)   (iv) (4)

36. Pointing to a photograph Lata says, "He is the son of the only son of my grandfather." How is the man in the photograph related to Lata ?

(i)   Brother   (ii) Sister

(iii) Aunt   (iv) Uncle

37. A is B's sister. C is B's mother. D is C's father. E is D's mother. Then, how is A related to D ?

(i)   grandfather   (ii) grandmother
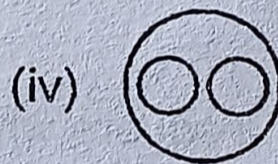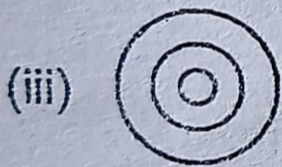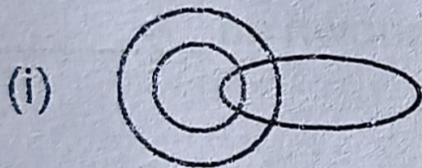
(iii) daughter   (iv) granddaughter

38. In a code language if TRAINS is coded as RTIASN, how PISTOL will be coded in the same language ?

(i)   SITLOP   (ii)   IPSTLO

(iii) SIPTLO   (iv) IPTSLO

39. If PAINT is coded as 74128 and EXCEL is coded as 93596, then how would you encode ACCEPT ?

(i)   455978   (ii)   547978

(iii) 554978   (iv) 735961

40. Which of the following diagrams indicates the best relation between Women, Mothers and Engineers ?

(i)   (ii)

(iii)   (iv)

GROUP - B

Answer all questions by choosing the correct answer
from the given alternatives.   [2 × 20

41. Gopal's salary is increased from ₹ 76,000 to ₹ 80,560. Find the increased %.

(i)   9   (ii)   6

(iii) 8   (iv) 10

42. 16 : 56 : : 32 : _____ ?

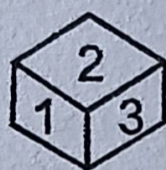   (i)   96   (ii)   112

    (iii) 120   (iv) 128

43. Which digit will appear on the face opposite to the face with number 4 ?

    (i)   3   (ii)   6

    (iii) 5   (iv) None of these

44. A pipe which is connected to fill a tank is known as _____ .
       (Inlet pipe / Outlet pipe)

45. Find 5% of 580.

46. Find the area of a square whose diagonal is 5 cm.

47. Find the area of the semicircle having radius r = 3 cm.

48. A person purchased a pen for ₹ 85 and sold it for ₹ 120. Find his % of profit.

49. Find simple interest of ₹ 2500 at the rate of interest 10% per annum for 3 years.

50. Find the value of $\sqrt{78961}$.

51. A car travelling at a speed of 60 km / hr takes 15 hours to complete a journey. What will be the time taken to complete the same journey by a train whose speed is 90 km / hr ?

52. In what time will ₹ 3100 amount to ₹ 6200 at 4% per annum ?

53. The product of two numbers is 18 and the sum of their squares is 45. Then find the sum of the numbers.

54. State true or false : "Every square is a quadrilateral".

55. Express 20 km/hr in m/s.

56. If "DELHI" is coded as "73541" and "CALCUTTA" as '82589662' how can 'CALICUT' be coded ?

    (i)   5279431   (ii)   5978213

    (iii) 8251896   (iv)   8543691

57. Which number would replace in the series : 8, 13, 20, _____, 40 ?

    (i)   29   (ii)   28

    (iii) 27   (iv)   26

58. Which is the number that comes next in the following sequence :
    5, 7, 14, 16, 32, 34, _____.

    (i)   64   (ii)   68

    (iii) 72   (iv)   60

59. Test the divisibility of the number 7248 (i) by 2 (ii) by 9 ?

60. In the series 7, 14, 28, _____, what will be the 9th term ?

(i)   1792

(ii)   2456

(iii) 3584

(iv) 4096