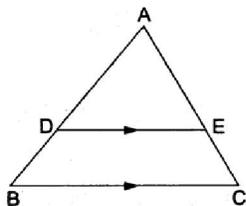
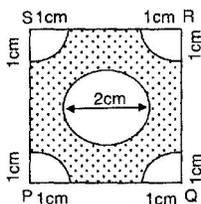


Mathematics (20)

23. Write the value of k for which the system of equations $x + ky = 0, 2x - y = 0$ has unique solution. 1
24. The sum and product of the Zeroes of a quadratic polynomial are $-\frac{1}{2}$ and -3 respectively. What is the quadratic polynomial. 1
25. What is the distance between two parallel tangents of a circle of radius 6 cm? 1
26. Write 5th term from the end of the A.P. 3, 5, 7, 9, ,201. 2
27. Write the set of values of 'a' for which the equation $x^2 + ax + 1 = 0$ has real roots. 2
28. If the sum of first p term of an A.P. is $ap^2 + bp$, find its common difference. 2
29. D and E are points on the sides AB and AC respectively of a ΔABC such that $DE \parallel BC$. Find the value of x , when $AD = x$ cm, $DB = (x - 2)$ cm, $AE = (x + 2)$ cm and $EC = (x - 1)$ cm. 2



30. Prove that 3
- $$\sqrt{\frac{1 + \sin\theta}{1 - \sin\theta}} + \sqrt{\frac{1 - \sin\theta}{1 + \sin\theta}} = 2\sec\theta.$$
31. In Fig. PQRS is a square of side 4cm. Find the area of the shaded square. 3



32. The height of a solid cylinder is 15 cm. and the diameter of its base is 7 cm. Two equal conical holes each of radius 3 cm, and height 4 cm are cut off. Find the volume of the remaining solid. 3

English (20)

33. Read the following passage carefully:
- (1) Although everybody has a creative spark, the potential is not always fully utilized. How does one recognize those who are developing their creative energies to the fullest? Mad painters and tormented poets are only comic stereotypes of the creative personality. The essential traits of creativity are found among a wide variety of less conspicuous creators, people in all walks of life. Unfortunately, the structure of our social and educational environment does not always promote its growth.
- (2) Generally speaking, creative people often believe their purpose in life is to discover and implement the interrelatedness of things, to make order out of disorder. They also see problems where others see none and question the validity of even the most widely accepted answers. Creative persons are compulsive problem seekers, not so much because they thrive on problems, but because their senses are attuned to a world that demands to be put together, like a jigsaw puzzle scattered on a table.
- (3) Several tests now in use reveal that highly creative people are much more open and receptive to the complexities of experience than less creative people. The creative temperament has a tendency to break problems down into their most basic elements and then reconstruct them into whole new problems, thereby discovering new relationships and new solutions.
- (4) Highly creative people aren't afraid to ask what may seem to the naive or silly questions. They ask questions like, "Why don't spiders get tangled up in their own webs?" and, "Why do dogs turn in circles before lying down?". Such questions may seem childlike, and in a way they are.

(5) Unlike children, creative people appear to have vast stores of patience to draw upon. Months, years, even decades can be devoted to a single problem. The home that encourages inquisitiveness contributes to creative development. The teacher who stresses questions rather than answers and rewards curiosity rather than restricting it, is teaching a child to be creative.

(6) To be extremely intelligent is not the same as to be gifted in creative work. The Quiz Kids are often referred to as geniuses. They would undoubtedly score high in memory functions. But it is doubtful whether they are also fluent in producing ideas. Contrary to popular myths that glorify youth, more creative achievements are likely to occur when people grow older. While memory may falter with age, creativity is ageless.

(A) Answer questions in brief: 2

(i) Why is each person not able to use his/her creativity fully? 2

(ii) Mention two of the three traits of highly creative people, that we get to know from the passage. 1

(iii) How can teachers promote creativity among students? 1

(iv) What is the most essential prerequisite for full creative functioning?

34. Write a letter to the editor of the 'Environment and You' newspaper about the menace of food stall being set up inside parks. Sign yourself as Mohita/Mohit a concerned citizen residing in House No. 4 opposite Swadeshi Park, Elegant Road, Kolkata. 3

35. Complete the story with the help of outline given. 3
Once I was going to a forest, suddenly I felt that I lost the way.....

36. The following passage has not been edited. There is one error in each of the lines. Write the incorrect word and the correction in the space provided 4

	Error.	Correction
Community service sensitise people to	(a)
other's needs and supports inclusive	(b)
development to the underprivileged	(c)
sections with the society. Courses about social	(d)
work prepares frontline workers to	(e)
takes up assignments in social welfare	(f)
organisations. Practical work including	(g)
50 hour of structured internship to man projects.	(h)

37. 1. Fill in the blanks with the correct forms of verbs given in brackets 2

We (a)____(live) in the 21st century and (b)------(come) a long way since the generation of our parents and grandparents, but the idea of feminism, where a woman (c)------(value) as equally as her male counterpart, is a seed that have been sown since time immemorial. we (d) women from Rani of Jhansi to Shabana Azami to Oprah in today's times who Who are considered feminists.

38. Rearrange the following to make meaningful sentences. The first one has been done as an example: 2

e.g., England/good/many/lived/a/years/king/ago/wise/there/and/in Many years ago there lived a wise and good king in England.

(a) so much/man/his country/did/other/ever/for/as he/no/did

(b) the world/speak/Alfred/people/of/all over/the Great/now/as/him