Q1. In the following question, Select the related number from the given alternatives .
167:14::143:?
(a) 7 (b) 8 (c) 6 (d) 5

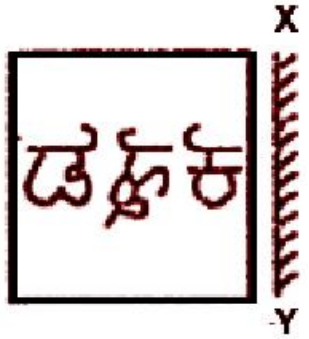
Q2. If in a certain code, RAMAYANA is written as PYKYWYLY, then how MAHABHARATA can be written in that code?
(a) NBIBCIBSBUB (b) LZGZAGZQZSZ
(c) MCJCDJCTCVC (d) KYFYZFYPYRY

Q3. In the following question, a series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.
14, 19, 29, 49, 89, ?
(a) 139 (b) 149 (c) 159 (d) 169

Q4. 'Country' is related to 'President' in some way, in the same way, 'State' is related to:
(a) Chief Minister (b) Prime Minister
(c) Speaker (d) Governor

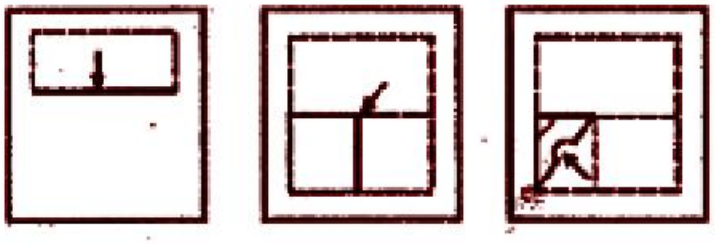
Q5. If - stands for division, + for multiplication, ÷ for subtraction and × for addition, then which one of the following equations is correct?
(a) 19 + 5-4 × 2 ÷ 4 = 11 (b) 19 × 5-4 ÷ 2 + 4 = 16
(c) 19 ÷ 5 + 4-2 × 4 = 13 (d) 19 ÷ 5 + 4 + 2 ÷ 4 = 20

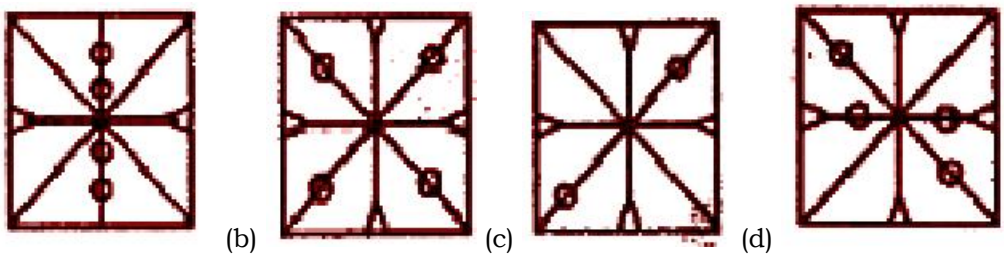
Q6. Which of the answer figures is exactly the mirror image of the given figure when the mirror is held as shown?



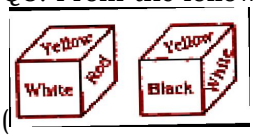
(a)  (b)  (c)  (d) 

Q7. In the following question a piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened?




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

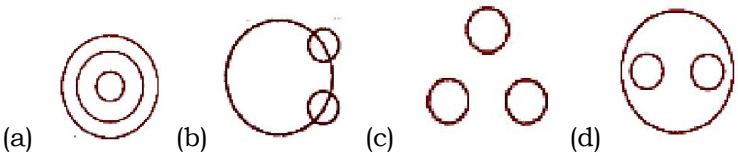
Q8. From the following two different appearances of die, find out the colour which is opposite to Red :



(a) Blue (b) Black
(c) White (d) Yellow

Q9. If CAT is coded as 3120, what code number can be given to NAVIN?
(a)14122914 (b)49274654 (c)73957614 (d)None of these

Q10. Which one of the following Venn diagrams represents the best relationship between Snake, Lizard, Reptiles?

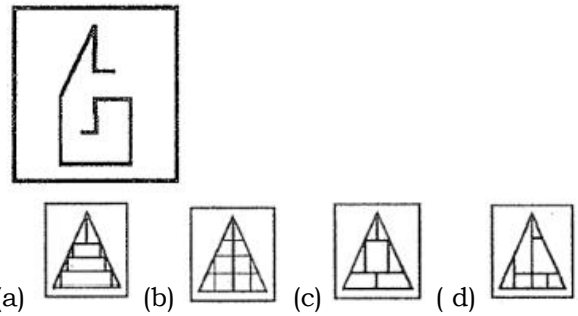

(a) (b) (c) (d)

Q11. In the following question, select the missing number from the given responses.

6	9	12
36	81	144
24	63	?

(a) 120 (b) 80 (c) 94 (d) 102

Q12. In this question the given question figure is embedded in which of the given answer figures?


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

Q13.In the following question a series is given, with one term missing. Choose the correct alternatives from the given ones that will complete the series.
6, 7, 18, 23, 38 ? .
(a) 49 (b) 47 (c) 87 (d) 92

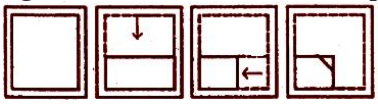
Q14. In the following question, a series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series
WORLD, XPSME, ?, ZRUOG
(a) YQTNF (b) YRTNF (c) YTQNF (d) YQNTF

Q15. In a family Mr. Prakash has his wife and his two married brothers of whom one has two children and another has no children. How many members are there in the family ?
(a) 12 members (b) 8 members
(c) 6 members (d) 10 members

Q16. In the following question which one of the given responses would be a meaningful order of the following ?
(1) Birth (2) Death
(3) Childhood (4) Infancy
(5) Adolescence (6) Adulthood
(7) Old age
(a) 2, 6, 7, 5, 4, 3, 1 (b) 1, 4, 3, 5, 6, 7, 2
(c) 1, 4, 3, 6, 5, 7, 2 (d) 2, 7, 6, 4, 5, 3, 1

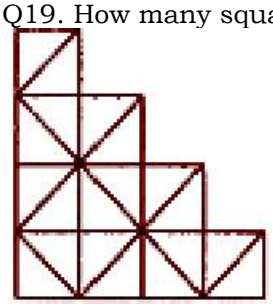
Q17. In the following question, find the odd word from the given alternatives:
(a) Gallon (b) Ton
(c) Quintal (d) Kilogram

Q18. In the following question, a piece of paper is folded and cut as shown below. From the given answer figures indicate how it will appear when opened.



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

Q19. How many squares are there in the given figure?



(a)10 (b)11 (c)12 (d)14

Q20. In the following questions, select the related word from the given alternatives.
Editor : Newspaper :: __ : __
(a) Table : Carpenter
(b) Journal : Journalist
(c) Author : Novel
(d) Blacksmith : Furnace

Q21. Which of the conclusions given in the options, logically follow given statements, disregarding commonly known facts.
Statements
1.Some blues are green.
2.All pink is green
(a) Some blues are pink.
(b) Some green are pink.
(c) Either 1 or 2 follows.
(d) Some pinks are blues.

Q22. In the following question, find the odd number pair from the given alternatives:
(a)120-560 (b)91-299 (c)78-169 (d)104- 429

Q23. In the following question, select the missing number from the given responses:

7	3	2
4	9	6
2	1	5
69	91	?

(a) 58 (b) 51 (c) 65 (d) 64

Q24. In the following question, select the one which is different from the other responses.
(a) ACDF (b) TUOP (c) HIVW (d) FGKL

Q25. Vivek and Ashok start from a fixed point. Vivek moves 3 km north and turns right and then covers 4 km. Ashok moves 5 km west and turns right and walks 3 km, Now how far are they apart ?
(a) 10 km (b) 9 km (c) 8 km (d) 6 km

Q1. In a class of 60 students, 60% are girls and the remaining are boys. If the average marks of girls is 42 and that of the boys is 36, what is the average marks of the whole class?
(a) 39 (b) 39.6 (c) 39.5 (d)39.3

Q2. Find the value of
$\cot^2 81° - \sec^2 9° + \tan^2 30° - sin\, 30° + cosec\, 30°$?
(a) 5/6
(b) 1
(c) 1/3
(d) 1/4

Q3.Find the value of 7.5 + (9.6 ÷ 0.24 × 0.2) - 5×0.6 ÷ 0.12 + 3
(a) -6 (b) -6.6 (c) -6.5 (d) -7.7

Q4. If a + b + c = 8 and ab + bc + ca = 6 , then $a^3 + b^3 + c^3 - 3abc$ is equal to :
(a) 365 (b) 368 (c) 367 (d) 362

Q5. A train without stoppage travels with an average speed of 75 km/h and with stoppage, it travels with an average speed of 25 km/h. For how many minutes does the train stop on an average per hour?
(a) 41 (b) 42 (c) 45 (d) 40

Q6. The radii of two circular faces of the frustum of a cone of height 35 cm are 3 cm and 5 cm respectively. What is the volume of the frustum of the cone in cubic cm? (Take π = 22/7)
(a)1796.66 (b)1795.66 (c)1796.55 (d)1796.56

Q7. Chords BA and DC of a circle, when produced, meet at point P outside the circle. If PB = 8 cm, CD = 6 cm and PD = 9 cm, then PA is equal to :
(a) 27/8 (b) 27/7 (c) 26/7 (d) 22/7

Q8. The difference between the compound interest and simple interest on Rs x at 12.5% per annum for 2 years is Rs88. What is the value of x?
(a) 5635 (b) 5633 (c) 5631 (d) 5632

Q9. $\Delta ABC \sim \Delta PRQ$ and PQ=10, QR=12 and PR=8. If ar(ΔABC) : ar(ΔRPQ) = 1:9 then AB = ?
(a) 7/3 (b) 8/3 (c) 5/3 (d) 7/3

Q10. The price of sugar has increased by 12.5%. A person wants to increase its expenditure by 10% only. By what percentage should he decrease his consumption?
(a) 20/9
(b) 40/9
(c) 08/9
(d) 07/9

Q11. If (a+ b) = 12 cm and ab = 3 , then is equal to $a^3 + b^3$
(a) 1688 (b) 1677 (c) 1685 (d) 1680

Q12. What is the value of x such that the seven-digit number 8459x80 is divisible by 88?
(a) 1 (b) 6 (c) 8 (d) 9

Q13. If a : b = 4 : 9 , c : b = 7 : 2 , then a : b : c is equal to :
(a) 9 : 16 : 82 (b) 7 : 5 : 45 (c) 6 : 2 : 9 (d) 8 : 18 : 63

Q14. In a circle with center O, AB is diameter and CD is chord such that ABCD is a quadrilateral. If $\angle BAC$ = 51° then ∠CDA is:
(a) 141 ° (b) 142 ° (c) 145 ° (d)144 °

Q15. An article is sold for Rs. 550 after successive discounts of 45% and 20%. What is the marked price of the article?
(a) 1250 (b) 1200 (c) 1148 (d) 1192

Q16. If sin θ +cosec θ = 2, then what is the value of ($\sin^{153}\theta + cosec^{253}\theta$) ?
(a) 1 (b)3 (c) 4 (d) 2

Q17. Two articles were sold for Rs. 1080 each. On one, the seller gains 8% and on the other he loses 46%. What is his overall gain or loss %?
(a) 26% (b) 29% (c) 23% (d) 28%

Q18.In ΔPQR , PX is a median and G is a point on it such that PG:GX=5:3, the find the ar(ΔQGX) : ar(ΔPQR).
(a) 3:16 (b) 3:7 (c) 7:16 (d) 6:7

Q19. A is 25% more efficient than B and C is 75% less efficient then B. Working together, they can finish work in 10 days. In how many days, will A alone complete 50% of the work?
(a) 11 days (b) 10.5 days (c) 11.5 days (d) 10 days

Q20. If Sin(4θ)= Cos(5θ) then θ is equal to ?
(a) 15 ° (b) 10 ° (c) 12 ° (d) 13 °

Q[21-24]. The table below indicates the percentage of students and the ratio of boys and girls in the various streams of a college. (Total students = 3500)

Stream	CE	CS	IT	ME	EC
%Students	30%	22%	19%	13%	16%
Boys : Girls	3:2	5:6	4:1	6 :7	6:8

Q21. If the data about the number of girls enrolled in the various streams is represented by a pie-chart, what is the central angle of the sector representing the number of girls in the ME stream, to the nearest whole degree?
(a) 55 ° (b) 57.35 ° (c) 54.32 ° (d) 56 °

Q22. What is the ratio of students studying in CS and IT?
(a) 15 : 32 (b) 22 : 19 (c) 11 : 7 (d) 24 : 35

Q23. In which stream, the difference between boys and girls is minimum?
(a) CS (b) IT (c) CE (d) ME

Q24. What is the ratio of boys and girls in college?
(a) 931/759
(b) 981/769
(c) 931/769
(d) 981/759

Q25. If $X+\frac{1}{X} = \sqrt{3}$, then what is the value of $(X^5 + \frac{1}{X^5})$?
(a) $\sqrt{2}$ (b) $3\sqrt{3}$ (c) $2\sqrt{2}$ (d) $-\sqrt{3}$