

Key to

An Easy Approach to

MATHEMATICS



Based on New Syllabus

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1. (a) Ninety Nine
(b) Nine hundred and Nine
(c) Seven thousand six hundred and twenty one
(d) One thousand one hundred and twenty three
(e) Nine thousand nine hundred and ninety nine
(f) Eight thousand and eighty
(g) Six thousand
(h) Seven thousand seven hundred
2. (a) 808 (b) 3020 (c) 9987 (d) 9090
(e) 8645 (f) 1111 (g) 6066 (h) 4004
3. (a) 2825, 2925, 3025, 3125 (b) 3700, 3800, 3900, 4000
(c) 6305, 6405, 6505, 6605 (d) 5235, 5335, 5435, 5535
(e) 4021, 5021, 6021, 7021
4. (a) 700 (b) 70 (c) 7000 (d) 7
5. (a) 999 (b) 10 (c) 9999 (d) 1000
6. (a) $4000 + 600 + 90 + 7$ (b) $8000 + 600 + 50 + 0$
(c) $3000 + 400 + 20 + 9$ (d) $7000 + 700 + 70 + 7$
(e) $9000 + 0 + 30 + 1$
7. (a) 5306 (b) 3555 (c) 7066 (d) 9009 (e) 5505
8. 9731, 9713, 9371, 9317, 9173, 9137, 7931, 7913, 7391, 7319,
7193, 7139, 3971, 3917, 3791, 3719, 3197, 3179, 1973, 1937,
1793, 1739, 1397, 1379.
9. (a) 70 (b) 8000 (c) 9 (d) 600
10. (a) 3003, 3033, 3303, 3330 (b) 5614, 5641, 6415, 6514
(c) 3456, 4536, 4635, 6435 (d) 5094, 5940, 9054, 9540
11. (a) 7750, 7075, 5770, 5707 (b) 9415, 8214, 1467, 1359
(c) 8710, 7610, 6107, 1760 (d) 6534, 6453, 6435, 3456
12. 1046
13. (a) 5934 (b) 6105 (c) 5727 (d) 7421
14. (a) 8132 (b) 2638 (c) 2647 (d) 2110

15. (a) 2, 5, 1 (b) 6, 1, 7, 0 (c) 4, 3, 7, 7
16. (a) 492 (b) 682 (c) 23,500 (d) 13,260
 (e) 2,268 (f) 2,992 (g) 13,468 (h) 35,415
17. (a) 211 (b) 75 (c) 89 (d) 36
 (e) 25 (f) 522 (g) 50 (h) 111
18. (a) $\frac{5}{9}$ (b) (c) (d)
19. (a) < (b) > (c) = (d) < (e) = (f) <
20. , ,
21. (a) (b) (c) (d) (e) (f)
22. (a) (c) (e) (b) (d) (f)
23. (a) 2735 paise (b) Rs. 52 and 5p (c) 265 cm
 (d) 13007m (e) 7kg 459g (f) 92000 g
 (g) 9347ml (h) 99hours (i) 936 hours
 (j) 1549 minutes
24. Square Triangle Cone Cylinder Rectangle
25. (i) Five line segments. , , , ,
 (ii) Six line segments. , , , , ,
 (iii) Five line-segments. , , , ,
 (iv) Seven line-segments. , , , , , ,
 (v) Eight line-segments. , , , , , , ,
26. 1. surface 2. plane 3. curved 4. 12, 8 5. opposite
 6. 6, 12, 8 7. yes 8. 4 9. 3 10. equal

MULTIPLE CHOICE QUESTIONS

1. (b) 2. (a) 3. (c) 4. (d)
 5. (a) 6. (c) 7. (c) 8. (c)
 9. (b) 10. (b)

1

1. (a) 100000 (b) 10000, 99999
(c) 1000000 (d) 999999
2. (a) Twenty one thousand nine hundred and seventy five
(b) Fifty thousand and ninety seven
(c) Forty five thousand and nine
(d) Twelve thousand three hundred and forty five
(e) Ninety nine thousand nine hundred and ninety nine
3. (a) 16549 (b) 12222 (c) 30540 (d) 60400 (e) 70707
4. (a) 1000 (b) 100 (c) 100000 (d) 999 (e) 99999
(f) 9999 (g) 10000 (h) 999999 (i) 1000000 (j) 99

2

1. 1. Period → Thousands, Place → Ten-Thousands
2. Period → Ones, Place → Tens
3. Period → Lakhs, Place → Lakhs
2. 1. Period → Thousands, Place → Hundred Thousands
2. Period → Millions, Place → millions
3. Period → Thousands, Place → Ten Thousands
4. Period → Ones, Place → Ones
3. 1. Five lakhs thirty two thousand six hundred and fifty one
2. One lakh
3. Eight lakh thirty five thousand two hundred and seven
4. Nine lakh Seventy eight thousand and thirty two
5. Ten lakh
6. Fifty three thousand four hundred and seventy one
7. Seven lakh thirteen thousand and five
8. Nine lakh one hundred and twenty five
9. Fifty thousand and five.
4. 1. 5,60,728 2. 3,60,006 3. 5,66,090
4. 7,85,303 5. 45,33,197 6. 99,99,999
7. 33,33,333

5.
 1. Nine million, Eight hundred and seventy one thousand and twenty three.
 2. Four million, nine hundred and ninety nine thousand three hundred and one.
 3. Six million Seven hundred and eighty three thousand five hundred and twelve.
 4. Seven hundred and seventy six thousand four hundred and fifteen.
 5. Seven million nine hundred and thirteen thousand six hundred and forty.
 6. Eight hundred and sixty five thousand nine hundred and twenty three.
 7. Seven hundred and six thousand three hundred and four.
 8. Three million three hundred and thirty three thousand four hundred and forty four.
6.

1. 628,492	2. 105,248	3. 7,634,425
4. 1,000,001	5. 10,000,000	6. 7,000,077
7. 5,000,555	8. 99,999,999	

3

1.

1. 3,00,000 (Three lakhs)	2. 70,000 (Seventy thousand)
3. 6,000 (Six thousand)	4. 500 (five hundred)
2.

1. 900,000 (Nine hundred thousand)	2. 4,000,000 (Four million)
3. 30,000 (Thirty thousand)	4. 7,000,000 (Seven Million)
3.
 1. ones, tens, hundreds, thousands, ten-thousands, lakhs, ten-lakhs
 2. Ones, tens, hundreds, thousands, ten-thousands, hundred-thousands, millions.
4.
 1. $9 \rightarrow 9, 3 \rightarrow 30, 4 \rightarrow 400, 5 \rightarrow 5,000, 7 \rightarrow 70,000, 8 \rightarrow 8,00,000.$
 2. $5 \rightarrow 5, 9 \rightarrow 90, 8 \rightarrow 800, 4 \rightarrow 4,000, 6 \rightarrow 60,000, 2 \rightarrow 200,000, 7 \rightarrow 7,000,000.$
5.

1. thousand	2. ten	3. hundred
-------------	--------	------------

6. a. 2, 7, 3, 1, 5. b. 9, 7, 3, 4, 8, 6. c. 7, 8, 3, 4, 2, 9.
 d. 3000, 40 e. 90000, 4000, 700, 0, 5
7. 1. 954628 2. 700777 3. 4004044 4. 356245 5. 900864

4

1. 1. < 2. < 3. < 4. > 5. =
 6. < 7. > 8. < 9. >
2. 1. 15903 2. 6506 3. 510112 4. 430301
3. 1. 81,799 2. 93,709 3. 99,990 4. 24,348
4. 1. 70198, 70918, 71098, 79018
 2. 23769, 26763, 27639, 29763
 3. 90841, 93208, 94801, 95802
 4. 66057, 66507, 66570, 66750
 5. 14827, 235131, 413286, 823141
5. 1. 68609, 68608, 48608, 46806
 2. 24606, 23947, 20444, 17405
 3. 32144, 31411, 14411, 14144
 4. 91520, 91340, 91232, 90420
 5. 6606660, 666660, 666606, 666066
6. 1. 543210 2. 965321
7. 1. 103678 2. 102345
8. 1. 999999 2. 99999 3. 9999 4. 999
9. 1. 100 2. 10 3. 10 4. 10

MULTIPLE CHOICE QUESTIONS

1. (b) 2. (d) 3. (d) 4. (d)
 5. (a) 6. (c) 7. (a) 8. (c)
 9. (d) 10. (c)

Unit III

1

1. 1. 8358 2. 8759 3. 2450 4. 6694
 2. 1. 560 2. 970 3. 770
 3. 1. 180 2. 86 3. 2380
 4. 1. 7947 2. 3932, 7947 3. 1565, 5195
 5. 1. 5672 2. 3462 3. 89256 4. 6701

2

1. 1. 140972 4. 133766 7. 1146966 10. 812181
 2. 827499 5. 672228 8. 1418510 11. 517504
 3. 1636592 6. 1368651 9. 776481 12. 716034
2. a. 3, 3, 1, 0 b. 3, 1, 2, 4, 3 c. 2, 5, 3, 2, 0
 d. 6, 0, 6, 1, 2 e. 6, 5, 1, 6, 8 f. 5, 0, 7, 1, 8, 6

3

1. 51,65,545 2. Rs. 97,574 3. 44,290
 4. Rs. 5,21,525 5. 25,155 6. Rs. 7,47,756
 7. 1, 44, 949 8. 73,785 9. 7,96,975

4

1. 1. (i) $15 - 8 = 7$ 4. (i) $90 - 33 = 57$
 (ii) $15 - 7 = 8$ (ii) $90 - 57 = 33$
 2. (i) $17 - 8 = 9$ 5. (i) $19 - 12 = 7$
 (ii) $17 - 9 = 8$ (ii) $19 - 7 = 12$
 3. (i) $30 - 19 = 11$ 6. (i) $100 - 45 = 55$
 (ii) $30 - 11 = 19$ (ii) $100 - 55 = 45$
2. 1. 50 2. 35 3. 32 4. 5 5. 21 6. 25
 3. 1. 341 3. 367 5. 393 7. 6278
 2. 4979 4. 2017 6. 5178 8. 6353

5

1. 1. 35765 2. 374557 3. 660958
 4. 100 5. 474355 6. 107542
2. 1. 36253 2. 310969 3. 287859 4. 43145
 5. 27156 6. 217898 7. 531212 8. 516707
 9. 410528 10. 28466 11. 37672 12. 475663
 13. 234673 14. 368008 15. 200174 16. 641976
 17. 270427 18. 188877
3. (a) $\begin{array}{r} 8695 \\ -5362 \\ \hline 3333 \end{array}$ (c) $\begin{array}{r} 888888 \\ -765342 \\ \hline 123546 \end{array}$ (e) $\begin{array}{r} 593810 \\ -162306 \\ \hline 431504 \end{array}$

$$\begin{array}{r} \text{(b)} \quad 63207 \\ - 27455 \\ \hline 35752 \end{array}$$

$$\begin{array}{r} \text{(d)} \quad 56012 \\ - 33073 \\ \hline 22939 \end{array}$$

$$\begin{array}{r} \text{(f)} \quad 754672 \\ - 415442 \\ \hline 339230 \end{array}$$

6

1. 6,28,898
2. Rs. 77,600
3. Rs. 90,068
4. Rs. 1,12,440
5. 1,46,400
6. Anand's flat costs Rs. 1,84,000 more than Pramod's flat.
7. 34,714
8. 3232
9. Rs. 18,500
10. 3,93,019
11. Rs. 30,00,000

7

1. (a) 443 (b) 106 (c) 600 (d) 100
2. (a) 15 (b) 60 (c) 607 (d) 8278

8

1. (a) 219 (b) 1256 (c) 530 (d) 314 (e) 0
(f) 690 (g) 1900 (h) 0 (i) 700
2. (a) 7,000 (b) 16,000 (c) 1,80,000 (d) 1,47,000 (e) 32,000
(f) 27,000 (g) 72,000 (h) 90,000 (i) 15,75,000
3. (a) 125 (b) 87 (c) 109 (d) 363
(e) 6 (f) 246 (g) 893

9

1. (a) 5190 (b) 289173 (c) 3238836
(d) 9198 (e) 1421142 (f) 1632668
(g) 14292 (h) 1167975 (i) 1532283
(j) 185220 (k) 1528800 (l) 1725780
(m) 282699 (n) 1673820 (o) 759384

10

1. 77904 candles
2. 34960 persons
3. 25126 km
4. 21315 toys
5. 58500 apples
6. Rs. 472305
7. 5985 kg
8. 105024 quires
9. Rs. 925875
10. 1162965 oranges

11

1. (a) 8 (b) 1 (c) 9 (d) 1345 (e) 0 (f) 1
 2. (a) 49 (b) 65 (c) 28
 3. (a) 95 (b) 85 (c) 54 (d) 66 (e) 53 (f) 106
 (g) 103 (h) 144 (i) 848 (j) 203 (k) 805 (l) 907

12

- (a) 21157 (b) 12344 (c) 12656 (d) 13547
 (e) 24312 (f) 8437 (g) 23132 (h) 149875
 (i) 211743 (j) 142324 (k) 83567 (l) 66278
 (m) 136767 (n) 95984 (o) 124686

13

- (a) 25 (b) 23 (c) 21 (d) 15 (e) 41 (f) 22
 (g) 15 (h) 385 (i) 226 (j) 192 (k) 116 (l) 19
 (m) 243 (n) 1788 (o) 1764

14

- (a) $Q = 9514, R = 3$ (b) $Q = 317, R = 4$
 (c) $Q = 403, R = 11$ (d) $Q = 5, R = 3$
 (e) $Q = 26, R = 12$ (f) $Q = 48, R = 5$
 (g) $Q = 26, R = 0$ (h) $Q = 13, R = 10$
 (i) $Q = 720, R = 5$ (j) $Q = 971, R = 2$
 (k) $Q = 868, R = 4$ (l) $Q = 161, R = 4$
 (m) $Q = 215, R = 18$ (n) $Q = 215, R = 3$
 (o) $Q = 213, R = 40$

15

- (a) $Q = 9, R = 340$ (f) $Q = 9000, R = 42$
 (b) $Q = 31900, R = 0$ (g) $Q = 369, R = 40$
 (c) $Q = 70060, R = 5$ (h) $Q = 500, R = 0$
 (d) $Q = 2756, R = 3$ (i) $Q = 800, R = 75$
 (e) $Q = 4860, R = 0$

16

1. 137 bunches 2. 43 days 3. 236 4. 25 boxes
 5. 38 soldiers 6. 23 pieces 7. 324 m 8. 44km

9. 359 pencil boxes and 8 pencils will be left over.
 10. 314 carts.

MULTIPLE CHOICE QUESTIONS

- | | | | |
|---------|---------|---------|---------|
| 1. (c) | 2. (b) | 3. (a) | 4. (b) |
| 5. (a) | 6. (a) | 7. (a) | 8. (a) |
| 9. (b) | 10. (c) | 11. (c) | 12. (d) |
| 13. (b) | 14. (a) | 15. (c) | 16. (a) |
| 17. (b) | 18. (a) | 19. (b) | 20. (c) |

Unit IV

1

- A.** (a)× (b)✓ (c)✓ (d)× (e)× (f)✓
B. (a) XV (b) XXXIII (c) XLII (d) XVI (e) XXXVI
 (f) XXIII (g) XXXV (h) XLVIII (i) XLV (j) XXXIX
C. (a) 16 (b) 39 (c) 24 (d) 47
 (e) 43 (f) 18 (g) 26 (h) 25
D. (a) < (b) = (c) > (d) <

MULTIPLE CHOICE QUESTIONS

- | | | | |
|--------|---------|--------|--------|
| 1. (b) | 2. (b) | 3. (d) | 4. (d) |
| 5. (a) | 6. (d) | 7. (a) | 8. (c) |
| 9. (c) | 10. (a) | | |

Unit V

1

- 1.** 1. Ordinal number 2. Cardinal number 3. Ordinal number
 4. Cardinal number 5. Ordinal number 6. Ordinal number
 7. Ordinal number
2. 1. 5th 2. 9th 3. 13th 4. 17th 5. 21st
 6. 25th 7. 3rd 8. 2nd 9. 10th

2

- 1.** 1. × × ✓ × ✓ ✓ × ✓ ✓ × × × ✓ ✓
 2. 19, 21, 23, 25
 3. 28, 30, 32, 34, 36

4. 61, 63, 65, 67, 69, 71, 73, 75, 77, 79
 5. 82, 84, 86, 88, 90, 92, 94, 96, 98, 100
2. 1. Odd number because it has 5 in one's place
 2. Even number because it has 6 in one's place
 3. Odd number because it has 1 in one's place
 4. Even number because it has 0 in one's place
 5. Odd number because it has 9 in one's place
 6. Even number because it has 8 in one's place
 7. Even number because it has 2 in one's place
 8. Odd number because it has 9 in one's place.
3. 1. 98 2. 99 3. 998 4. 101 5. 999
4. 1. 20, 21, 22, 23, 24
 2. 83, 84, 85, 86, 87, 88, 89, 90, 91, 92
 3. 93, 94, 95, 96, 97, 98, 99
- I. (a) 84 even (b) 132 even (c) 139 odd
 (d) 102 even (e) 112 even (f) 92 even
- II. (a) 62 even (b) 54 even (c) 53 odd
 (d) 544 even (e) 552 even (f) 467 odd

MULTIPLE CHOICE QUESTIONS

1. (b) 2. (a) 3. (d) 4. (d)
 5. (b) 6. (a) 7. (c) 8. (c)
 9. (a) 10. (b)

Unit VI

1

1. 1. 1 2. 2 3. 1
2. 1. A number which has only 2 factors (unity & itself) is called a prime number.
 2. Numbers which have more than 2 factors are called composite numbers.
 3. 2 and 3.
 4. 3 and 5, 11 and 13, 17 and 19.
 5. 2 and 3, 2 and 5, 2 and 11, 2 and 17, 2 and 41.
 6. 3 and 5, 5 and 7.

3. 1. 2 2. 1 3. 2 4. 1 5. 2
4. 1. 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47.
 2. 4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20, 21, 22, 24, 25, 26, 27, 28, 30, 32, 33, 34, 35, 36, 38, 39, 40, 42, 44, 45, 46, 48 and 49.

MULTIPLE CHOICE QUESTIONS

1. (d) 2. (c) 3. (a) 4. (c)
 5. (a) 6. (a) 7. (c) 8. (a)
 9. (d) 10. (a)

Unit VII

1

1. 470, 1340, 9000
2. 78, 159, 585, 6240, 3324
3. 625, 750, 9010, 995, 4830
4. 128, 240, 728, 954, 1436, 4232, 5310, 8000
5. 315, 477, 801, 2169, 8235
6. 870 is divisible by 2. 870 is divisible by 3. 870 is divisible by 5 and 10. But 870 is not divisible by 9.
7. 20 and 30, $20 + 30 = 50$ it is divisible by 5.
8. 50 and 70.
9. $984 + 642 = 1626$, Sum of digits = $1 + 6 + 2 + 6 = 15$ Divisible by 3.
10. $3459 - 1857 = 1602$, Sum of digits = $1 + 6 + 0 + 2 = 9$. It is divisible by 3 \therefore Difference is divisible by 3.
11. 1. 0 2. 1 3. 0 4. 5 5. 5

MULTIPLE CHOICE QUESTIONS

1. (d) 2. (a) 3. (c) 4. (a)
 5. (c) 6. (a) 7. (d) 8. (a)
 9. (d) 10. (c)

2

- | | |
|---|--|
| <p>1. (a) $25 = 5 \times 5$
 (c) $21 = 3 \times 7$
 (e) $36 = 2 \times 2 \times 3 \times 3$
 (g) $72 = 2 \times 2 \times 2 \times 3 \times 3$
 (i) $93 = 3 \times 31$
 (k) $85 = 5 \times 17$
 (m) $120 = 2 \times 2 \times 2 \times 3 \times 5$
 (o) $108 = 2 \times 2 \times 3 \times 3 \times 3$
 (q) $104 = 2 \times 2 \times 2 \times 13$
 (s) $132 = 2 \times 2 \times 3 \times 11$</p> | <p>(b) $48 = 2 \times 2 \times 2 \times 2 \times 3$
 (d) $54 = 2 \times 3 \times 3 \times 3$
 (f) $45 = 3 \times 3 \times 5$
 (h) $70 = 2 \times 5 \times 7$
 (j) $63 = 3 \times 3 \times 7$
 (l) $49 = 7 \times 7$
 (n) $135 = 3 \times 3 \times 3 \times 5$
 (p) $156 = 2 \times 2 \times 3 \times 13$
 (r) $144 = 2 \times 2 \times 2 \times 2 \times 3 \times 3$
 (t) $256 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$</p> |
|---|--|

3

- | | |
|--|---|
| <p>1. (a) $12 = 2 \times 2 \times 3$
 $15 = 3 \times 5$
 common factor = 3
 (c) $26 = 2 \times 13$
 $65 = 5 \times 13$
 common factor = 13
 (e) $21 = 3 \times 7$
 $35 = 5 \times 7$
 common factor = 7
 (g) $15 = 3 \times 5$
 $21 = 3 \times 7$
 common factor = 3</p> | <p>(b) $22 = 2 \times 11$
 $33 = 3 \times 11$
 common factor = 11
 (d) $21 = 3 \times 7$
 $28 = 2 \times 2 \times 7$
 common factor = 7
 (f) $28 = 2 \times 2 \times 7$
 $35 = 5 \times 7$
 common factor = 7
 (h) $26 = 2 \times 13$
 $39 = 3 \times 13$
 common factor = 13</p> |
|--|---|
2. (a) 5, 10, 15, 20 (b) 9, 18, 27, 36 (c) 30, 60, 90, 120
 (d) 10, 20, 30, 40 (e) 6, 12, 18, 24 (f) 7, 14, 21, 28
 (g) 2, 4, 6, 8 (h) 8, 16, 24, 32 (i) 4, 8, 12, 16
 (j) 11, 22, 33, 44
3. 1. 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95.
 2. 30, 40, 50, 60, 70, 80, 90, 100, 110
 3. 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28
 4. 9, 18, 27, 36, 45, 54, 63, 72, 81, 90, 99
 5. 8, 16, 24, 32, 40

4

1. (a) 6 (b) 12 (c) 14 (d) 20 (e) 10 (f) 24
 (g) 8 (h) 24 (i) 15 (j) 21 (k) 18 (l) 30

2. (a) 6, 12, 18 lowest = 6 (b) 12, 24, 36 lowest = 12
 (c) 9, 18, 27 lowest = 9 (d) 12, 24, 36 lowest = 12
 (e) 6, 12, 18 lowest = 6 (f) 8, 16, 24 lowest = 8
 (g) 10, 20, 30 lowest = 10 (h) 8, 16, 24 lowest = 8
 (i) 4, 8, 12 lowest = 4 (j) 15, 30, 45 lowest = 15

5

1. (a) $8 = 2 \times 2 \times 2$ (b) $36 = 2 \times 2 \times 3 \times 3$
 $12 = 2 \times 2 \times 3$ $65 = 5 \times 13$
 H.C.F. = $2 \times 2 = 4$ H.C.F. = 1
 (c) $18 = 2 \times 3 \times 3$ (d) $28 = 2 \times 2 \times 7$
 $24 = 2 \times 2 \times 2 \times 3$ $42 = 2 \times 3 \times 7$
 H.C.F. = $2 \times 3 = 6$ H.C.F. = $2 \times 7 = 14$
 (e) $30 = 2 \times 3 \times 5$ (f) $30 = 2 \times 3 \times 5$
 $24 = 2 \times 2 \times 2 \times 3$ $45 = 3 \times 3 \times 5$
 H.C.F. = $2 \times 3 = 6$ H.C.F. = $3 \times 5 = 15$
 (g) $10 = 2 \times 5$ (h) $32 = 2 \times 2 \times 2 \times 2 \times 2$
 $12 = 2 \times 2 \times 3$ $48 = 2 \times 2 \times 2 \times 2 \times 3$
 H.C.F. = 2 H.C.F. = $2 \times 2 \times 2 \times 2 = 16$
 (i) $18 = 2 \times 3 \times 3$ (j) $54 = 2 \times 3 \times 3 \times 3$
 $30 = 2 \times 3 \times 5$ $72 = 2 \times 2 \times 2 \times 3 \times 3$
 H.C.F. = $2 \times 3 = 6$ H.C.F. = $2 \times 3 \times 3 = 18$
 (k) $45 = 3 \times 3 \times 5$ (l) $36 = 2 \times 2 \times 3 \times 3$
 $63 = 3 \times 3 \times 7$ $48 = 2 \times 2 \times 2 \times 2 \times 3$
 H.C.F. = $3 \times 3 = 9$ H.C.F. = $2 \times 2 \times 3 = 12$

6

1. (a) $8 = 2 \times 2 \times 2$ (b) $9 = 3 \times 3$
 $12 = 2 \times 2 \times 3$ $12 = 2 \times 2 \times 3$
 $= 2 \times 2 \times 2 \times 3 = 24$ $= 3 \times 2 \times 2 \times 5 = 60$
 (c) $12 = 2 \times 2 \times 3$ (d) $10 = 2 \times 5$
 $15 = 3 \times 5$ $25 = 5 \times 5$
 $= 3 \times 2 \times 2 \times 5 = 60$ $= 5 \times 2 \times 5 = 50$

(e) $10 = 2 \times 5$
 $12 = 2 \times 2 \times 3$
 $= 2 \times 5 \times 2 \times 3 = 60$

(g) $9 = 3 \times 3$
 $15 = 3 \times 5$
 $= 3 \times 3 \times 5 = 45$

(i) $10 = 2 \times 5$
 $15 = 3 \times 5$
 $= 5 \times 2 \times 3 = 30$

(k) $12 = 2 \times 2 \times 3$
 $18 = 2 \times 3 \times 3$
 $= 2 \times 3 \times 2 \times 3 = 36$

(f) $18 = 2 \times 3 \times 3$
 $27 = 3 \times 3 \times 3$
 $= 3 \times 3 \times 2 \times 3 = 54$

(h) $15 = 3 \times 5$
 $25 = 5 \times 5$
 $= 5 \times 3 \times 5 = 75$

(j) $21 = 3 \times 7$
 $18 = 2 \times 3 \times 3$
 $= 3 \times 2 \times 3 \times 7 = 126$

(l) $15 = 3 \times 5$
 $21 = 3 \times 7$
 $= 3 \times 5 \times 7 = 105$

MULTIPLE CHOICE QUESTIONS

- | | | | |
|--------|---------|--------|--------|
| 1. (b) | 2. (a) | 3. (c) | 4. (a) |
| 5. (b) | 6. (d) | 7. (c) | 8. (b) |
| 9. (b) | 10. (a) | | |

Unit IX

1

1. (a) Rs. 130 – Rs. 125 = Rs. 5 (b) Rs. 160 – Rs. 150 = Rs. 10
(c) Rs. 100 – Rs. 80 = Rs. 20 (d) Rs. 180 – Rs. 176 = Rs. 4
(e) Rs. 300 – Rs. 270 = Rs. 30 (f) Rs. 200 – Rs. 150 = Rs. 50
(g) Rs. 30 – Rs. 25 = Rs. 5 (h) Rs. 90 – Rs. 83 = Rs. 7
(i) Rs. 80 – Rs. 76 = Rs. 4 (j) Rs. 400 – Rs. 370 = Rs. 30
2. (a) Rs. 55 – Rs. 50 = Rs. 5 (b) Rs. 46 – Rs. 42 = Rs. 4
(c) Rs. 3 – Rs. 2 = Rs. 1 (d) Rs. 20 – Rs. 11 = Rs. 9
(e) Rs. 150 – Rs. 125 = Rs. 25 (f) Rs. 112 – Rs. 100 = Rs. 12
(g) Rs. 200 – Rs. 180 = Rs. 20 (h) Rs. 30 – Rs. 28 = Rs. 2
(i) Rs. 80 – Rs. 50 = Rs. 30 (j) Rs. 46 – Rs. 42 = Rs. 4
3. (a) Profit : Rs. 18 – Rs. 15 = Rs. 3
(b) Loss : Rs. 20 – Rs. 18 = Rs. 2
(c) Profit : Rs. 70 – Rs. 60 = Rs. 10
(d) Profit Rs. 98 – Rs. 90 = Rs. 8
(e) Loss : Rs. 100 – Rs. 87 = Rs. 13

(f) Profit : Rs. 220 – Rs. 200 = Rs. 20

(g) Loss : Rs. 300 – Rs. 260 = Rs. 40

(h) Profit : Rs. 31 – Rs. 30 = Rs. 1

(i) Loss : Rs. 80 – Rs. 72 = Rs. 8

(j) Profit : Rs. 111 – Rs. 100 = Rs. 11

Unit X

1

1. 1. 4, 1, 2. 6, 1, 3. 8, 1, 4. 9, 4,

5. 12, 5, 6. 4, 3, 7. 5, 1, 8. 8, 2,

9. 6, 3, 10. 5, 1,

2. (a) Two-thirds (b) Three-fifths (c) Seven-ninths

(d) two-tenths (e) One-fourth (f) One-sixth

(g) Three-fourths

3. (a) (b) (c) (d) (e) (f)

4. (a) num = 3 (b) num = 9 (c) num = 6
deno = 7 deno = 15 deno = 19

(d) num = 11 (e) num = 13
deno = 18 deno = 20

2

1. (a) (b) (c) (d) (e) (f)

2. (a) (b) (c) (d) (e) (f)

3. (a) , , , (b) , , , , , , , ,

5. (a) less (b) less (c) less (d) less

(e) greater (f) greater (g) greater (h) greater

3

1. , , ,

3. (a) , , , (c) , , ,

(b) , , , (d) , , ,

4. (a) , , (b) $\div =$ (c) $\div =$

$\div =$ $\div =$

5. (a) 2 (b) 3 (c) 8 (d) 9

(e) 15 (f) 24 (g) 44 (h) 35

6. (a) 2, 9, 4, 15 (b) 8, 6, 16, 10

(c) 6, 9, 12, 15 (d) 8, 12, 16, 20

4

1. , , ,

2. , , ,

3. 1 , 2 , 6 , 3 , 5

4. 1 , 2 , 5

5. (a) , , , ,

(b) , , , ,

(c) , ,

(d) , ,

I. (a) 1 (b) 3 (c) 1 (d) 3 (e) 1 (f) 1

(g) 1 (h) 3 (i) 1 (j) 2 (k) 4 (l) 4

II. (a) (b) (c) (d) (e) (f)

(g) (h) (i) (j) (k) (l)

5

1. (a) , , (b) , ,
 (c) , , (d) , ,
2. (b) $4 + 5 = 9$ (c) $2 + 1 = 3$ (d) $3 + 8 = 11$
 (e) $2 + 3 = 5$ (f) 17 (g) $2 + 3 + 4 = 9$
 (h) $4 + 6 + 7 = 17/19$
3. (a) (b) (c) (d) (e) (f)
 (g) (h) (i) (j) (k) (l)
4. (a) + = (b) + = (c) + =
5. (a) (b) (c)
6. (a) (b) 924 (c)
 100

6

1. (a) (b) (c) (d) (e) (f) =
 (g) (h) (i) (j) (k) (l) =
 (m) = (n) (o)
2. (a) = + = +
 = + = = 2
 (b) = + = +
 = = 5

$$(c) = + = +$$

$$= = = 4$$

$$(d) = + = +$$

$$= + = = 9$$

$$(e) = + = +$$

$$= + = = 3 = 3$$

$$(f) = + = +$$

$$= = =$$

$$(g) = + = +$$

$$= = = 5$$

$$(h) + = +$$

$$= = = 4$$

7

1. (a) 4 (b) 3 (c) = (d) =

2. (a) (b) (c) (d) (e) (f)

(g) (h) (i) (j) (k) (l)

3. (a) (b) (c) (d) (e) (f)

(g) (h) (i) (j) (k) (l)

4. (a) (b) (c) (d)

8

1. (a) (b) (c) (d) (e) (f)
(g) (h) (i) (j) (k) (l)
(m) (n)

2. (a) (b) (c) (d) (e) (f)
(g) (h) (i) (j) (k) (l)

9

1. (a) (b) (c) (d) (e) (f)
(g) (h) (i) (j) (k) (l)
(m) (n) (o) (p)

2. (b) (c)

1. (a) (b) (c) (d)
(e) 2 (f) 2 (g) 9 (h) 8

2. (a) 20paise (b) 10paise

3. (a) Rs. 40 (b) Rs. 6 (c) Rs. 12

MULTIPLE CHOICE QUESTIONS

- | | | | |
|---------|---------|---------|---------|
| 1. (c) | 2. (b) | 3. (a) | 4. (c) |
| 5. (c) | 6. (a) | 7. (a) | 8. (b) |
| 9. (a) | 10. (a) | 11. (d) | 12. (b) |
| 13. (a) | 14. (b) | 15. (a) | 16. (b) |
| 17. (a) | 18. (a) | 19. (b) | |

UNIT XI

1

1. 1. 1000 2. 100 3. 10 4. 1000 5. 10
6. 100 7. 10 8. 1000 9. 1,00,000
10. 10,00,000

2

1. (a) 9856m (b) 7145m (c) 2082m (d) 4301m
2. (a) 597cm (b) 485cm (c) 701 cm (d) 936cm
3. (a) 7135m (b) 9250m (c) 6025m
(d) 5300m (e) 2600m (f) 3505m
4. (a) 6m 2dm 3cm (f) 5km 1hm 2dam 3m
(b) 8m 2dm 7cm (g) 7km 6hm 5dam 4m
(c) 7m 4dm 5cm (h) 6km 5hm 4dam 3m
(d) 3m 1dm 5cm (i) 9km 2hm 5dam 6m
(e) 9m 0dm 6cm (j) 3km 7hm 4dam 2m

3

1. 1. 19m 3dm 9cm 2. 20m 6dm 4cm
3. 18m 9dm 4cm 4. 23m 0dm 9cm
5. 23km 5hm 9dam 9m 6. 20km 1hm 9dam 7m
7. 16km 9hm 0dam 6m 8. 17km 0hm 9dam 1m

4

1. 1. 6m 3dm 0cm 2. 5m 3dm 7cm
3. 3m 3dm 7cm 4. 7km 3hm 7dam 4m
5. 2km 7hm 2dam 8m 6. 2km 2hm 1dam 6m

5

1. 1. 51m 1dm 8cm 2. 77m 9dm 2cm
3. 38m 4dm 5cm 4. 39m 7dm 6cm
5. 34m 5dm 6cm 6. 47m 9dm 6m
7. 2km 8hm 6dam 0m 8. 59km 7hm 0dam 4m
9. 62km 8hm 3dam 2m 10. 116km 9hm 4dam 0m
11. 273km 9hm 2dam 4m 12. 744km 8hm 5dam 5m
13. 1102km 3hm 7dam 4m 14. 1956km 0hm 0dam 5m

15. 20km 625m

16. 37km 240m

17. 61km 8m

18. 88km 830m

6

1. (a) 1m 2dm 8cm

(b) 2m 4dm 3cm

(c) 1m 3dm 7cm

(d) 9hm 7dam 7m

(e) 1km 3hm 2dam 3m

(f) 9hm 7dam 3m

(g) 4km 2hm 8dam 3m

(h) 2km 4hm 9dam 7m

(i) 7km 3hm 2dam 3m

(j) 8m 1dm 7cm

7

1. 81m 3dm 8cm

2. 46m 6dm

3. 669km 890m

4. 43m 1dm 7cm

5. 25m 37cm

6. 40m

7. 12hm 3dam 3m

8. 6dm 6cm

9. 1m 3dm 5cm

10. 912m

MULTIPLE CHOICE QUESTIONS

1. (c)

2. (c)

3. (a)

4. (b)

5. (a)

6. (b)

7. (a)

8. (b)

9. (c)

10. (b)

UNIT XII

1

1. 1. 1000g

2. 5400g

3. 6350g

4. 7000g

5. 7050g

6. 10275g

2. 1. 5kg 0g

2. 6kg 25g

3. 9kg 0g

4. 8kg 175g

5. 2kg 500g

6. 15kg 475g

7. 6kg 727g

8. 9kg 5g

9. 18kg 375g

10. 4kg 600g

2

1. (a) 658cg

(b) 895cg

(c) 587cg

(d) 215cg

2. (a) 2574g

(b) 9086g

(c) 5403g

3. (a) 4g 7dg 5cg

(b) 4g 6dg 7cg

(c) 2g 9dg 6cg

(d) 5g 5dg 5cg

(e) 7kg 4hg 2dag 6g

(f) 3kg 4hg 3dag 2g

(g) 9kg 0hg 7dag 5g

(h) 6kg 5hg 4dag 3g

3

- | | | |
|----------------------|---------------------|---------------------|
| 1. 1. 15g 7dg 6cg | 2. 13g 9dg 2cg | 3. 12g 5dg 7cg |
| 4. 15g 1dg 6cg | 5. 19g 0dg 7cg | 6. 13g 8dg 8cg |
| 7. 23g 3dg 5cg | 8. 20kg 7hg 1dag 8g | 9. 15kg 0hg 9dag 7g |
| 10. 17kg 9hg 8dag 5g | | 11. 28kg 700g |
| 12. 25kg 650g | 13. 55kg 300g | 14. 60kg 170g |
| 15. 30kg | 16. 62kg 900g | |

4

- | | | |
|------------------|---------------|---------------|
| 1. 1. 2g 3dg 3cg | 2. 4g 3dg 5cg | 3. 4g 3dg 3cg |
| 4. 1g 6dg 9cg | 5. 3g 3dg 4cg | 6. 1g 5dg 9cg |
| 7. 5g 2dg 8cg | 8. 2g 9dg 4cg | 9. 5g 2dg 5cg |

5

- | | | |
|------------------|---------------|----------------|
| 1. 1. 8g 6dg 4cg | 2. 28g 7dg | 3. 50g 8dg 2cg |
| 4. 52g 3dg 6cg | 5. 25kg 040g | 6. 21kg 200g |
| 7. 25kg 500g | 8. 42kg 300g | 9. 84g 6dg |
| 10. 51g 9dg 2cg | 11. 88kg 200g | 12. 112kg 500g |

6

- | | |
|----------------------------|--------------------------|
| 1. 1. Quotient = 4g 3dg 2g | 2. Quotient = 5g 6dg 4cg |
| 3. Quotient = 9g 2dg 7cg | 4. Quotient = 8g 4dg 6cg |
| 5. Quotient = 48g 2dg 1cg | 6. Quotient = 7g 8dg 3cg |
| 7. Quotient = 2Kg 500g | 8. Quotient = 7Kg 600g |
| 9. Quotient = 0g 7dg | 10. Quotient = 0g 8dg |
| 11. Quotient = 0g 8dg | 12. Quotient = 0g 9dg |

7

- | | | |
|--------------------|--------------|---------------|
| 1. 11g 8dg 8cg | 2. 15kg 900g | 3. 136kg 500g |
| 4. 12g 8dg 5cg | 5. 57kg 500g | 6. 88g 8dg |
| 7. 126g 7dg | 8. 21kg | |
| 9. 3kg 7hg 5dag 1g | 10. 150g | |

MULTIPLE CHOICE QUESTIONS

- | | | | |
|--------|---------|--------|--------|
| 1. (d) | 2. (d) | 3. (a) | 4. (b) |
| 5. (d) | 6. (a) | 7. (c) | 8. (a) |
| 9. (b) | 10. (a) | | |

UNIT XIII

1

1. 2000 ml 2. 1000 ml 3. 10,000 ml
4. 12,000 ml 5. 13 l 6. 5l
1. 6250 ml 2. 15167 ml 3. 6l 175 ml 4. 3l 50 ml

2

1. 18l 7dl 1cl 2ml 2. 24l 3dl 1cl 9ml 3. 28l 7dl 6cl 3ml
4. 19l 3dl 6cl 8ml 5. 19l 3dl 6cl 8ml 6. 29l 5dl 7cl 5ml
7. 24l 0dl 7cl 7ml 8. 11l 8dl 4cl 9ml 9. 23l 100ml
10. 25l 100ml 11. 58l 700ml 12. 55l 000ml

3

1. 3l 3dl 3cl 4ml 2. 3l 3dl 2cl 3ml 3. 5l 4dl 4cl 7ml
4. 3l 2dl 1cl 4ml 5. 3l 8dl 4cl 6ml 6. 6l 2dl 8cl 7ml
7. 5l 530ml 8. 3l 700ml 9. 4l 750ml

4

1. 7 2 9 6 2. 18 4 6 8 3. 29 2 5 0
4. 37 4 9 6 5. 64 3 8 6 6. 72 400
7. 77 640 8. 92 015 9. 49 840
1. 1l 9dl 3cl 5ml 2. 6dl 4cl 3ml 3. 0l 715ml

5

1. 19l 250ml 2. 22l 150ml 3. 255l 7dl 0cl
4. 43l 3dl 3cl 5. 5l 600ml 6. 461l 500ml
7. 164l 4dl 0cl 8. 62l 500ml 9. 6l
10. 11l 8dl 4cl

MULTIPLE CHOICE QUESTIONS

1. (c) 2. (a) 3. (b) 4. (a)
5. (c) 6. (c) 7. (b) 8. (d)
9. (a) 10. (b)

Unit XIV

1

1. (a) (b) (c) (d) (e) 1 (f) 1
 (g) 1 (h) 1 (i) 1 (j) 2 (k) 2 (l)
 (m) (n) 4 (o) 8 (p) 9
2. (a) .1 (b) .3 (c) .6 (d) .9 (e) 1.1 (f) 1.2
 (g) 1.5 (h) 5.1 (i) 7.6 (j) 1.13 (k) 2.25 (l) 5.39

2

1. (a) point five (b) point seven (c) point one two
 (d) three point four (e) point nine eight (f) point seven one five
 (g) point six two three (h) point zero six five
 (i) point seven zero five (j) two point seven six five
 (k) twenty three point four two seven
 (l) six hundred and twenty seven ⁵point three zero seven
 (m) two point seven nine eight ¹⁰⁰⁰
 (n) sixty five point one zero seven
 (o) one hundred and twenty seven point three two one
 (p) seven hundred and eighty six point four three five
 (q) six thousand five hundred and twenty seven point zero one
 (r) Nine hundred and forty six point four three eight
2. (a) .3 (b) .7 (c) .34 (d) .25 (e) .04
 (f) .596 (g) .607 (h) .09 (i) .005 (j) .765
 (k) 1.2 (l) 3.526 (m) 6.204

3

1. (a) $2000 + 100 + 60 + 4 + \quad + \quad +$
 (b) $5000 + 600 + 70 + 3 + \quad + \quad +$

(c) $4000 + 800 + 20 + 5 + \quad + \quad +$

(d) $8000 + 0 + 60 + 2 + \quad + \quad +$

(e) $1000 + 400 + 60 + 0 + \quad + \quad +$

2. (a) $4000 + 500 + 60 + 4 + .2 + .07 + .003$

(b) $3000 + 200 + 70 + 3 + .1 + .08 + .005$

(c) $5000 + 100 + 80 + 5 + .7 + .03 + .002$

(d) $7000 + 500 + 30 + 4 + .8 + .00 + .007$

(e) $1000 + 800 + 0 + 6 + .2 + .03 + .001$

3. (b) 1363.963 (c) 7857.127 (d) 6111.111

(e) 3242.484 (f) 9735.659 (g) 5698.348

4. (b) 2436.624 (c) 4265.137 (d) 5183.476

(e) 7452.184 (f) 8074.396 (g) 9321.678 (h) 3849.435

4

1. 1. 163.38 2. 66.02 ~~98~~ 3. 162.48 4. 165.53

5. 174.37 6. 205.94 ~~1000~~ 7. 1048.62 8. 1525.72

2. (a) .9 (b) 1.7 (c) 2.1 (d) 4.9 (e) 14.9

(f) 1.89 (g) 9.08 (h) 15.42 (i) 106.2 (j) 53.6

5

1. (a) .2 (b) .12 (c) .64 (d) .25

2. 1. 2.313 2. 2.232 3. 22.2 4. 36.43

5. 56.73 6. 396.46 7. 416.83 8. 367.72

9. 590.73 10. 507.67 11. 520.66 12. 477.76

6

1. 22.9 kg 2. Rs. 472.85 3. 118.16 m

4. 630.05 m 5. 23.746 6. 16.68 m

7. Rs. 210.50 8. 14.5 kg 9. 349.5 l

7

1. (a) 46.4 (b) 84.6 (c) 101.72 (d) 238.0
 (e) 271.6 (f) 13.84 (g) 42.36 (h) 121.12
 (i) 136.29 (j) 96.96 (k) 124.85 (l) 101.710
 (m) 134.742 (n) 145.452 (o) 232.624 (p) 148.022

8

1. (a) 1.82 (b) 1.12 (c) 1.07 (d) 0.63 (e) 1.53
 (f) 0.91 (g) 1.44 (h) 0.64 (i) 0.26 (j) 0.23
 (k) 0.54 (l) 0.35 (m) 0.49 (n) 0.59 (o) 2.03

MULTIPLE CHOICE QUESTIONS

1. (b) 2. (c) 3. (a) 4. (c)
 5. (a) 6. (b) 7. (b) 8. (b)
 9. (b) 10. (b)

UNIT XV**2**

1. (a) 214min (b) 315min (c) 387min (d) 512min (e) 465min
 2. (a) 580sec (b) 377sec (c) 516sec (d) 479sec
 3. (a) 15325sec (b) 26550sec (c) 33040sec (d) 23450sec
 4. (a) 46 days (b) 59 days (c) 33 days
 (d) 55 days (e) 65days (f) 82 days
 5. (a) 2weeks 6days (b) 5weeks 4days (c) 5weeks 6days
 (d) 8weeks 1day (e) 9weeks (f) 7weeks 3days
 (g) 10hrs 50min (h) 12hrs 5min (i) 13hrs 52min
 (j) 15hrs 15min (k) 12hrs 55min (l) 12hrs 25min
 (m) 1hr 15min (n) 1hr 6 min 40sec (o) 1hr 6min 25sec
 (p) 1hr 34min 32sec (q) 1hr 29min 30sec (r) 1hr 10min 40sec

3

1. 1. 14-6 2. 19-1 3. 18-0 4. 21-3
 2. 1. 4-4 2. 3-5 3. 4-5 4. 6-6
 I. (a) 14-20 (b) 21-20 (c) 16-03 (d) 10-34
 (e) 17-20 (f) 17-00 (g) 15-00 (h) 19-15

- | | | | |
|-------------|----------|----------|----------|
| II. 1. 5-20 | 2. 2-40 | 3. 3-40 | 4. 2-38 |
| 5. 2-25 | 6. 5-18 | 7. 0-30 | 8. 2-06 |
| 9. 2-50 | 10. 4-15 | 11. 4-43 | 12. 2-45 |

4

- | | | |
|---------------------|-------------------|-------------------|
| 1. 26 days | 2. 62 days | 3. Rs. 4,400 |
| 4. 6 hrs. 40 min. | 5. 5 hrs. 10 min. | 6. 4 hrs. 40 min. |
| 7. 3 hrs. 30 min. | 8. 2 hrs. 50 min. | 9. 3 hrs. 45 min. |
| 10. 5 hours 40 min. | | |

MULTIPLE CHOICE QUESTIONS

- | | | | |
|--------|---------|--------|--------|
| 1. (c) | 2. (a) | 3. (d) | 4. (a) |
| 5. (a) | 6. (c) | 7. (c) | 8. (d) |
| 9. (d) | 10. (d) | | |

UNIT XVI

1

1. (i) A point is a fine dot made by a sharp pencil.
(ii) No
(iii) Points
2. 5cm. 6cm. 7cm. 8cm. 10cm.
4. $AB=3.7\text{cm}$ $BC=2.2\text{cm}$
 $CD=3.7\text{cm}$ $DA=2.2\text{cm}$
 $\therefore AB = CD$ and $BC = DA$
 $PQ=2.5$, $QR=2.5$
 $RS=2.5$, $SP=2.5$
 $\therefore PQ=RS=QR=SP$
 $MN=3.2\text{cm}$, $NO=2.3\text{cm}$
 $OP=3.2\text{cm}$, $PM=2.3\text{cm}$
 $\therefore MN=OP$ and $NO = PM$

2

1. $\angle AOB$ $\angle XYZ$ $\angle PQR$
2. (i) $\angle ABD$
(ii) $\angle DBC$
(iii) $\angle ABC$

3. Vertex = B Arms = AB & BC.	Vertex = Q Arms = PQ & QR	Vertex = Y Arms = XY & YZ
4. (i) 72 (iv) 45	(ii) 65 (v) 32	(iii) 90 (vi) 113

3

- | | | |
|---|--|--|
| 1. 112°
Obtuse
112°
Obtuse | 90°
Right
180°
Straight | 60°
Acute
65°
Acute |
|---|--|--|
- $89^\circ, 1^\circ, 70^\circ, 35^\circ, 63^\circ$
 - $91^\circ, 100^\circ, 110^\circ, 165^\circ, 179^\circ$.
 - An angle which is exactly 180° is called a straight angle.
 - An angle which is greater than 90° but less than 180° is called an obtuse angle.
 - An angle which is exactly 90° is called a right angle.
 - An angle which is greater than 0° but less than 90° is called an acute angle.

4

- $AB = 5\text{cm}, BC = 3.5\text{cm}$
 $CD = 5\text{cm}, DA = 3.5\text{cm}, AC = 6\text{cm}$
Perimeter = $5 + 5 + 3.5 + 3.5 = 17\text{cm}$
 - $PQ = 8\text{cm}, QR = 5.5\text{cm}, RS = 8\text{cm},$
 $SP = 5.5\text{cm}, QS = 9.6\text{cm}$
Perimeter = $8\text{cm} + 5.5\text{cm} + 8\text{cm} + 5.5\text{cm} = 27\text{cm}$
- A plane figure bounded by 4 straight line-segments is called a quadrilateral.
 - If a quadrilateral has all its sides equal and if each of its four angles is a right angle, it is called a square.
 - If a quadrilateral has its opposite sides equal and each angle is a right angle, it is called a rectangle.
 - Yes
 - No

5

3. radius = OC diameter = AOB chord = DE
4. (a) The boundary of the circle is called the circumference of the circle.
- (b) The diameter is a line-segment joining two points on the circumference and passing through the centre of the circle.
- (c) The line-segment joining the centre of a circle to any point on the circumference is called the radius of the circle.
- (d) A line-segment joining any two points on the circumference of a circle is called a chord of the circle.
5. (a) 6cm (b) 2.6cm (c) 8cm (d) 5cm (e) 8.4cm (f) 9.6cm
6. (a) 3cm (b) 3.5cm (c) 2.5cm (d) 4cm (e) 4.5cm (f) 2.4cm

6

1. Fig. 1. 3cm, 3cm Fig. 2. 4cm, 4cm Fig. 3. 6cm, 3cm
2. Fig. 1. sides 2cm, 2 cm; area 4 sq. cm
 Fig. 2. sides 5cm, 3cm; area 15 sq. cm
 Fig. 3. sides 3cm, 3cm; area 9 sq. cm
 Fig. 4. sides 4cm, 2cm; area 8 sq. cm
3. Fig. 1. 8 sq. cm Fig. 2. 15 sq. cm
 Fig. 3. 12 sq. cm Fig. 4. 10sq. cm.

MULTIPLE CHOICE QUESTIONS

- | | | | |
|---------|---------|---------|---------|
| 1. (a) | 2. (b) | 3. (a) | 4. (a) |
| 5. (b) | 6. (a) | 7. (d) | 8. (c) |
| 9. (a) | 10. (c) | 11. (b) | 12. (b) |
| 13. (c) | 14. (d) | 15. (c) | 16. (b) |
| 17. (c) | 18. (c) | 19. (d) | 20. (a) |

UNIT XVII**1**

- Example 1.** 1. 20 2. 8 3. 7 4. 5 5. by school bus 6. 40
- Example 2.** 1. 10 2. 8 3. 30
- Example 3.** 1. 45 2. 2 3. 38 4. 10
- 6.** 41 stickers **7.** 48 stickers **8.** scale : 1 sticker = 5students

10. (a) Johny = 48runs, Rahul = 20runs, Naren = 12, Rajni = 20
 (b) Naren (c) Johny
11. (a) 50 marks (b) 70 marks (c) 95 marks (d) 65 marks
 (e) 60 marks (f) 340 marks (g) Mathematics (h) English

Model Question For Quarterly Examination

PART : A

1. (b) 2. (a) 3. (c) 4. (c) 5. (a)
 6. (b) 7. (a) 8. (c) 9. (a) 10. (d)

PART : B

2. 1. Nine million eight hundred and fifty four thousand and seventy six
 2. 30,45,021 3. (a) 70,07,001 (b) 9900009
 4. (a) 2,00,000 (b) 2,000 5. (a) xix (b) xxix
 6. (a) 218 (b) 215 7. 999
 8. 101, 102, 103, 104, 105, 106, 107
 9. A prime number is a number that cannot be exactly divided except by itself and the number 1.
 10. (i) 6,57,200 (ii) 30,45,000 11. 503
 12. A line-segment can be represented by drawing the point of a sharp pencil over a surface.

PART : C

- III. 1. 70,00,777, 70,07,770, 70,70,707, 70,77007
 2. 66,06,660 66,00,606, 60,60,006 60,06,666
 3. $6 \times 1,00,000 + 5 \times 10,000 + 4 \times 1,000 + 3 \times 100 + 2 \times 10 + 7$
 6 lakhs + 5 ten thousands + 4 thousands + 3 hundreds + 2 tens + 7 ones
 $6,00,000 + 50,000 + 4,000 + 300 + 20 + 7$
 4. 800148 5. 551375 6. 1896289
 7. 367688 8. 346185 9. 3310984
 10. 142324 11. 43440 12. $Q = 317$ $R = 4$

Model Questions for Half-Yearly Examination

PART : A

1. 1. (b) 2. (a) 3. (c) 4. (a)
 5. (c) 6. (c) 7. (b) 8. (c)
 9. (b) 10. (c)

PART : B

2. 1. 315, 477, 801, 2169, 8235. 2. $165 = 3 \times 5 \times 11$
3. 30, 60, 90; lowest = 30 4. 12 5. 72
6. 83567 7. 2246283 8. Loss = Rs. 400 – Rs. 380 = Rs. 20.
9. = 10. 2, 9, 4, 15

11. An angle which is exactly 180° is called a straight angle.
12. An angle which is greater than 90° but less than 180° is called an obtuse angle.

PART : C

3. 1. $44502 - 22450 = 22052$ 2. $1716 - 1093 = 623$
3. 346185 4. 243 5. 61, 63, 65, 67, 69, 71, 73, 75, 77, 79
6. 4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20, 21, 22, 24, 25, 26, 27, 28
10. = = = 11. 12.

Model Questions For Annual Examination


PART : A

1. 1. (c) 2. (a) 3. (c) ⁹¹
6. (c) 7. (a) 8. (b) ¹² 9. (a) 10. (c)

PART : B

2. 1. 7135m 2. 7kg 4hg 2dag 6g
3. (i) 6250 (ii) 6-175 4. 5.39
5. $2000 + 100 + 60 + 4 + .5 + .03 + .007$
8. 1m 7dm 9m 9. 76kg 500g 10.
11. Pictograph is a method of giving information by means of pictures.
12. The boundary of a circle is called the circumference of a circle.

PART : C

- III. 1. 17-0-9-1 2. 38-355 3. 110-250 4. 174.36
5. 477.76 6. 14-20 7. 3-40 8. 6-4-3
9. 136.29 10. 0.59
11.  12. 41 stickers