# 6. Percentage

#### **PART-A**

#### Model 1

- 1. Sameer spends 20% of his monthly salary on house-rent, 25% on food, 10% on transportation, 15% on education of his children and 18% on household expenses. He saves the remaining amount of 4800. What is his monthly salary?
  - 1) 40000
- 2) 28000
- 3) 32000
- 4) 36000 5) None of these
- 2. Ishan spent 35,645 on buying a bike, 24,355 on buying a television, and the remaining 20% of the total amount he had as cash with him. What was the total amount?

  - 1) 60,000 2) 72,000
- 3) 75,000
- 4) 80,000
- 5) None of these
- 3. Sujatha invests 7% i.e. 2170, of her monthly salary in mutual funds. Later she invests 18% of her monthly salary in recurring deposits. Also she invests 6% of her salary on NSC's. What is the total annual income invested by Sujata?
  - 1) 125320
- 2) 113520
- 3) 135120
- 4) 115320 5)None of these
- 4. Sonali invests 15% of her monthly salary in insurance policies. She spends 55% of her monthly salary in shopping and on household expenses. She saves the remaining amount of 12750. What is Sonali's monthly income?
  - 1) 42,500
- 2) 38,800
- 3) 40,000
- 4) 35,500
- 5) None of these
- 5. Gaurav spends 40% of the amount he received from father on hostel expenses, 20%



on books and stationery and 50% of the remaining on transport. He saves 450 which

is half the remaining amount after spending on hostel expenses, books and stationery and transport. How much money did he get from his father?

- 1) 3000
- 2) 6000
- 3) 4500
- 4) 5000
- 5) None of these

## Model 2

- 6. Prerna decided to donate 30% of her monthly income to an orphanage. But on the day of donation, she changed her mind and donated 4200, which is 70% of what she had decided earlier. What should be the actual donation as per her earlier decision?
  - 1) 8000

- 2) 5000 3) 6,000 4) Cannot be determined 5) None of these
- 7. Praveen decided to donate 15% of his salary to a charity. On the day of donation he changed his mind and donated 1,896, which was 80% of what he had decided earlier.

1) 7106

2) 6840

How much is Praveen's salary?

1) 18,500 2) 10,250 3) 15,800 4) Cannot be determined 5) None of these 8. The price of a car is 5, 00,000. It was insured to 90% of its price. The car got completely damaged in an accident and the insurance company paid 80% of the insured amount. What is the difference between the price of the car and the amount of insurance received? 4) 80,000 1) 1,40,000 2) 40,000 3) 70,000 5) None of these 9. The price of a car is 325000. It was insured to 85% of its price. The car was damaged completely in an accident and the insurance company paid 90% of the insurance. What was the difference between the price of the car and the amount received? 1) 32500 2) 48750 3) 76375 4) 81250 5) None of these 10.15% of 45% of a number is 105.3. What is 24% of that number? 2)374.4 3)390 4)375 5) None of these 1)385.5 11.20% of 65% of a number is 130. What is 54% of that number? 1)250 2)540 3)260 4)275 5) None of these Model 3 12. In an election between two candidates, the winner secured 58% of the total votes cast and wins by a majority of 2400 votes. How many votes did the loser get? 1) 6300 2) 7200 3) 3700 4) 4400 5) None of these 13. In an election between two candidates, one gets 72% of the total votes. If the total votes are 8200, by how many votes did the winner win the election? 2) 1835 2) 1722 3) 3608 4) 4428 5) None of these 14. In a college election between two students, 10% of the votes cast are invalid. The winner gets 70% of the valid votes and defeats the loser by 1800 votes. How many votes were totally cast? 3) 1800 2) 7200 3) 5000 4) 3600 5) None of these 15.In a college election fought between two candidates, one candidate got 55% of the total valid votes. 15% of the votes were invalid. If the total votes were 15,200, what is the number of valid votes the other candidate got?

3) 8360

4) 5814

5) None of these

#### Model 4

16.In an examination, Ramesh scored 30% less than Suresh and Mahesh scored 20% less than Suresh. Ramesh's score is what per cent of Mahesh's score?

- 1) 80%
- 2) 70%
- 3) 40%
- 4) 87.5%
- 5) None of these

17.65 is what % of 50?

- 1)250
- 2)240
- 3)160
- 4)130 5) None of these

## Model 5

18. If A's salary is 25% more than B's salary, then by what per cent is B's salary less than A's salary?

- 1) 25%
- 2)20%
- 3)16.66%
- 4) Cannot be determined
- 5)None of these
- 19.If Arjun's salary is 20% more than that of Bheem, then how much percent is Bheem's salary less than that of Arjun?
  - 1) 16.66%
- 2) 20%
- 3) 40%
- 4) 10%
- 5) None of these
- 20. The sale of Company N is 40% less than that of Company T. Then by what per cent is  $\triangleright$ the sale of company T more than that of N?
  - 1) 66%
- 2) 20%
- 3) 40%
- 4) 10%
- 5) None of these
- 21.If A's salary is 25% less than B's salary, then B's salary is what % more than A's salary?
  - 2) Cannot be determined
- 2)21
- 3)33.33
- 4)25
- 5)20

## Model 6

- 22. The profit made by a company in the present year is 15, 00,000. Two years ago, the
  - profit made by the same company was 24, 00,000. What is the percentage change in the profit made by the company?
  - 1) 66.66% inc
- 2) 66.66%dec 3) 37.5% inc 4) 37.5% dec
- 5) None of these

#### Model 7

- 23. The length of a rectangle increased by 40% and its breadth increased by 20%. What will be the percentage change in the area of the rectangle?
  - 1) 50% inc
- 2)10% inc
- 3) 44% inc
- 4) 68% inc
- 5) None of these

24	I.The popula	ation of a tow	n was 4860	00. It incr	eased by 25	% in the first	year and
	decreased	by 8% in the	second ye	ar. What	will be the p	opulation of t	the town at the
	end of two	years?					
	1) 65610	2) 5558	30 3) 6	0750	4) 64850	5) None of	these
25	The revenu	ue of a shop i	n the mont	h of Marc	h was 40,000	). In the mon	th of April, the
▶	shopkeeper	announced a	discount	of 20% ar	nd hence his	sales went u	p by 20%. What
		revenue in th					, ,
	2) 40,000			) 38,400	4) 64,8	300 5) No	ne of these
	2) 10,000	2) 30	,,000	, 50,100	1) 01/0	5, 110	The of these
26	.When the c	ost of petrole	ım increase	es by 40%	, a man redu	ices his annua	al consumption by
	20%. Find	the percentag	e change ir	his annua	al expenditur	e on petroleu	m.
	1) 20%	2)16%	3)	12%	4) 40%	6 5) Nor	e of these
27	-	_	-			_	e decrease in the
		on or sugar b	y a ramily,	such that	their expen	laiture on sug	ar remains the
	same?	2).1.60/	2)	100/	4) 400		6.11
	1) 20%	2)16%	3)	12%	4) 40%	o 5) None	of these
28	3.If the cost	of coriander	sold is incr	eased by	33.33%. Wh	nat should be	the % decrease
	in consum	ption to keep	expenditui	re same?			
	1)29%		5%	3)30%	o 4	1)25%	5)None of these
	,	,		ŕ		•	•
Mode	el 8						
29	).A student	has to secure	40% marl	ks to pass	an examina	ation. He secu	ured 75 marks and
		ed FAIL 45 m		-			
:	1) 600	2) 200	3) 100			5) None of th	
	·	•	•	,		•	
30		-					d to be failed by 4
	marks whe	en he scored 3	38%. What	is the ma	aximum scor	re a student o	can get in this
	exam?						
	1) 100	2) 300	3) 400	4) 200	5) None of	these	
24	A stood set I	h <b>h</b>	200/		haranah TC h	10 ···-	oles and Calla lay
31				-	_	_	rks and fails by
		find the maxi					2000
	1) 600	2) 200	3) 100	4)	300	5) None of th	iese

32	2.75% of a nu	mber when ac	dded to 75 b	ecomes the	number itself. 1	The number is:
Þ	1) 150	2) 200	3) 225	4) 300	5) None	of these
33	3.Difference be		of a number	and 63% of	the same numb	per is 72. What is
	1) 720	2) 600	3) 640	4) 900	5) None of thes	е
34	to its five - s	sixth. What is	the ratio of t	he first num	ber to the seco	
	1) 1:3	2) 2:3	3) 3:2	4) Data in	adequate	5) None of these
35		mber is equal ober and the s			number. What	is the ratio betwee
	1) 5:3	2) 15:16	3) 3:5	4)16:15	5) None of t	these
36	5.Two-fifth of number?	one-third of	three-sevent	h of a num	ber is 15. Wh	at is 40% of that
	1) 72	2) 84	3) 136	4) 14	0 5) Non	e of these
37	correctly. W	_	f the remain	ing 200 que	stions does she	he first 100 question need to answer
	1)75%	2)55%	3)60%	1) Cannot be	e determined	5) None of these
38	total numbe		and each tea	acher got sw	eets that are 2	that are 12% of th 0% of the total
	1) 345	2) 365	3)330	) 4)3	350 5) None	e of these
39	income of A.		come of A, E	3 and C toge		is 120% of the what is C's income
40	money which	n was sufficier	nt to buy 44	quintals at t	ls can be bough he higher price None of these	

#### **Answers:**

1 - 1	2 - 3	3 - 4	4 - 1	5 - 3	6 - 3	7 - 3	8 - 1	9 - 3	10 - 2
11 - 2	12 - 1	13 - 3	14 - 3	15 - 4	16 - 4	17 - 4	18 - 2	19 - 1	20 - 1
21 - 3	22 - 4	23 - 4	24 - 5	25 - 3	26 - 3	27 - 1	28 - 4	29 - 4	30 - 4
31 - 2	32 - 4	33 - 3	34 - 2	35 - 4	36 - 5	37 - 2	38 - 4	39 - 4	40 - 2

## **PART-B**

1.	At an election where there are only two candidates, the candidate who gets 43 percent
	of the votes is rejected by a majority of 420 votes. Find the total number of votes
	recorded.

- 1) 3000
- 2) 600
- 3) 1200
- 4) 2400
- 5) None of these

2. The population of a town is 5000. If the males increase by 6% and females by 14%, the population will be 5500. Find the number of females in the town.

- 1) 5000
- 2) 2000
- 3) 3500
- 4) 2500
- 5) None of these

3. A man spends 70% of his income. His income increases by 24% and his expenditure also increases by 15%. Find the percentage increase in his savings.

- 1) 35%
- 2) 24%
- 3) 45%
- 4) 55%
- 5) None of these

4. Gauri goes to shop and buys a sofa costing Rs.13080. The rate of sales tax is 9%. She asks the shopkeeper to reduce the price of sofa so that she pays Rs.13080 inclusive of tax. Find the percentage reduction needed to satisfy her requirement.

- 1) 8.33%
- 2) 8.26%
- 3) 9%
- 4) 8.5%
- 5) None of these

5. A screwdriver and a hammer have currently the same price. If the price of screwdriver rises by 5% and that of hammer by 3%, how much more will it cost to buy 3 hammers and 3 screwdrivers?

- 1) 3%
- 2) 4%
- 3) 5%
- 4) 24%
- 5) None of these

6. Bill started a business. In the 1st year he earned a profit of 50% and donated 50% of the total capital (initial cap + profit) to a charitable organization. The same was followed in the 2nd and 3rd year. At the end of 3 years he is left with Rs.16875, find the amount donated by him at the end of 2nd year.

- 1) 45000
- 2) 12500
- 3) 22500
- 4) 25200
- 5) None of these

- 7. Two numbers A and B are such that the sum of 5% of A and 4% of B is two-third of the sum of 6% of A and 8% of B. Find the ratio of A:B
  - 1) 4:3
- 2) 2:3
- 3) 5:4
- 4) 1:2
- 5) None of these
- 8. Rajeev buys good worth Rs. 6650. He gets a rebate of 6% on it. After getting the rebate, he pays sales tax @ 10%. Find the amount he will have to pay for the goods.
  - 1) Rs. 6789.10 2) Rs. 6876.10 3) Rs. 5432.10 4) Rs. 6247.10 5) None of these

### **Answers:**

1 - 1	2 – 4	3 - 3	4 - 2	5 - 2	6 - 3	7 – 1	8 – 2
		)		)	)	,	)