B. Mathematics
10/103/17

ta El	Q.P. Code :00025	
(15)	[Time: 2 1/2Hours]	[Total Marks:75
(08) (07) (08) (07)	Please check whether you have got the right question paper.  N.B.: 1. All questions are compulsory and carry equal marks  2. Figures to right indicate full marks.  3. Use of simple calculator is allowed	
-1	Q.1 (A) State whether the following statement are true or false :- (attempt any eight )	
(08)	The triplicate ratio of 1:2 is 1:8	(08)
(07)	2. If a < b, then the ratio a: b is called as a ratio of lesser inequality	
(0	3. C.P. + Profit = N.S.P.	
(07)	4. Present value is just another name for face value.	
(15)	5. A sinking fund is not an annuity.	
,		
-1	<ol> <li>If a share is available at premium, then its face value is less than its market value.</li> <li>A mutual fund will always make profit.</li> </ol>	
-1	8. Annuity calculations usually use compound interest.	
-1	9. The present values is always assets at the present values is always assets at the present values is always assets at the present values as a second pound interest.	
-1	9. The present values is always greater than the future value.  10. Percentage is ratio with 100	
п	10. Percentage is ratio with 100 as its denominator.	
-1	Q 1 (B) Fill the black by choosing correct option (attempt any seven)	
-1		(07)
	1. The full form of SEBI is	
-	a. Stock Exchange Board of India     b. Securities and exchange board of India	
-1	c. Stock exchange board of investment	
. 1	2. A load is expressed as a percentage of	
- 1	a, SIP	
-1	b. NFO c. NAV	
п		
- 1	3. The price at which a share is sold on the stock exchange is called	
- 1	a. race value	
- 1	b. Stock price c. Market value	
	4	

	(	c. Annuity certain	
Ç.	7. 20%	of 360 is	
		a. 7.2	
		0. 720	
		. 72	
	20 00 00		
	8. Cash	discount is usually calculated as a percentage on the	
	а	. Net selling price	
	b	. Invoice price	
	C.	List price	
5	The su	ub-triplicate ratio of 27:8 is	
	a.	3:2	
	b.	9:4	
	- C.	9:2	
S.	100		4
1	0. The in	verse ratio of 9:4 is	
	a.	4:9	
	b.	3:2	
1	C.	1:36	
.2 A	A B and	d C started a business	
	hy A B	d C started a business with a total capital of Rs.1,00,000 and C were Rs.2000, Rs.3000 and Rs.5000 respectively.	At the end of the year, the profits received
	0, 0, 0	and C were Rs.2000, Rs.3000 and Rs.5000 respectively.	Find the amount of capital invested by B.
B,	Aftergi	iving a 15% trade discount and a family	to ashirements and the
	find the	iving a 15% trade discount and a further 5% cash discou	nt, a manufacturer sold a pen set for Rs.452.

OR

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4. A Rs.10 share at a 10% premium has a market price of Rs.

5. An anndity in which all the payments are equal is called

6. An annuity in which the number of payments is fixed, is called

a. Equitable annuity

b. 9 c. 20

b. Annuity duec. Uniform Annuity

a. Fixed annuityb. Limited annuity

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:75]

.2 P. A and B are partners in a business with capitals Rs.45,000 and Rs.36,000 respectively. They admit C in the business, giving him  $1/10^{th}$  share in the total profit, how much capital should  $\hat{\mathbf{C}}$  invest? What is the proportion in which A, B and C will share the profit? Q A salesman gets 7% commission on total sales plus a bonus of 1% on his sales over Rs.25,000. If his (07)commission alone is Rs.2,520 then find his total earnings . .3 A. On what sum of money will the difference between the compound interest and the simple interest for 2 (08)years at 8 % p.a. be Rs.384? B. If an immediate annuity of Rs.60,000 paid for 3 years amounts to Rs.1,98,600. Find the rate of interest (07)compounded p.a. OR 3 P. The simple and compound interest on a sum of money at a certain rate for 2 years is Rs.3000 and Rs.3090 (08)respectively. Find the sum and the rate. Q. A company sets aside Rs.80,000 at the end of every year to create a sinking fund. What will be the amount (07) at the end of 4 years at 9%p.a.? 4 A. By investing Rs.7500 in share of a company that paid 10% divided, an income of Rs.500 was received as (80)divided what was the price paid for each od Rs.100 shares? B. Mr. raj invested Rs.42,000 in SBI mutual fund on 8/2/16, when the NAV was Rs,1133.5761. he redeemed all (07) the units on 22/6/16, when the NAV was Rs.1165.0014. There was no entry load or exit load. Find his gain and the rate of returns. The numbers of units are to be calculated up to 3 decimal places. 4 P. Find the amount required to purchase Rs.100 shares with a total face value of Rs.24,000 at a discount of (08) Rs.8 per share, if the brokerage is 50% Q. Mr. raj purchased 113.151 units of SBI mutual fund on9/4/16 and redeemed all the units on 7/8/16 when (07)the NAV was Rs.35.5573. The entry load was 2.25% and the exit load was 1%. If he gained Rs.483.11, find the NAV on 9/4/16. (80)A. What is annuity? Explain the types of annuity. (07)B. Distinguish between simple interest and compound interest. OR

Q.5 P. Write short notes (any three)

- 1. Proportion
- 2. compound interest
- 3. variation
- 4. Types of shares.
- 5. SIP