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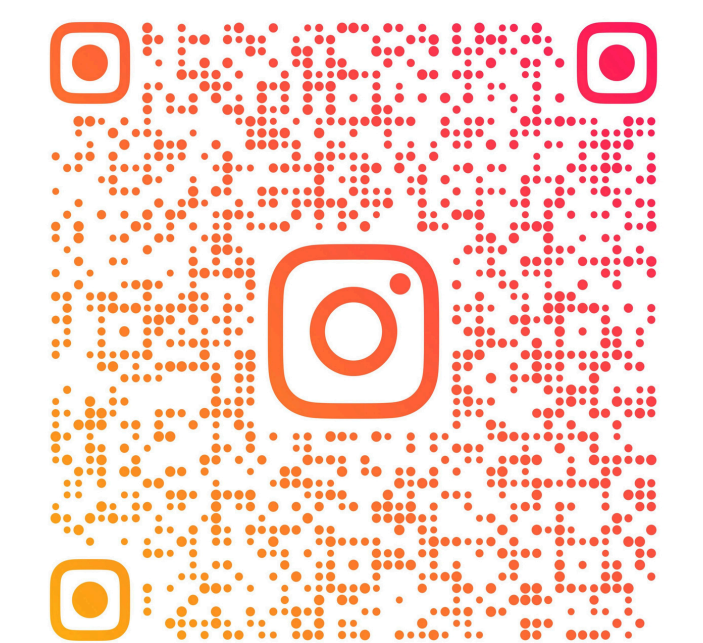


# CA ADARSH JOSHI

CA , B.COM

FOUNDER

- 8+ years of teaching experience in CA education
- Subject Expert in:  
CA Foundation – Paper 2: Business Laws  
CA Intermediate – Paper 2: Corporate and Other Laws
- Has uploaded over 3000+ educational videos for CA Foundation and CA Inter students
- Known for his dynamic, conceptual and “fun-and-learn” teaching style
- Guided thousands of students across India to success in CA exams
- Strong academic background with B.Com (BMCC, Pune) and ACA qualification
- Widely appreciated for his clarity, energy, and practical approach to law subjects
- Through Shikshadwar, offers comprehensive classes, books, tests, and mentorship to CA students



CAADARSHJOSHI



# CA DARSHAN JAIN

CA , CS , LLB , DISA , DIRM , B.COM

CO FOUNDER

- Chartered Accountant by profession & educator by passion
- Teaching Financial Accounting , Financial Management & Strategic Management to CA Students For 12 Years.
- Practicing Chartered Accountant For Past 13 years in The Field of Audit , Direct & Indirect Taxes & Management Consultancy
- Elected as Convenor of The Jalna CA CPE Chapter of WIRC of ICAI For 2 consecutive years 20-21 & 21-22.
- He Has Successfully Completed & Qualified Following Certificate Course Conducted By ICAI
  1. Forensic Accounting & Fraud Detection
  2. Concurrent Audit of Banks
  3. Goods & Service Tax (GST)
  4. Public Finance & Accounting
  5. Drafting & Pleading Before Authorities
  6. Wealth management & Financial Planning
  7. Artificial Intelligence



@CA\_DARSHAN\_JAIN

# CA TUSHAR TAPARIA

CA , LLB

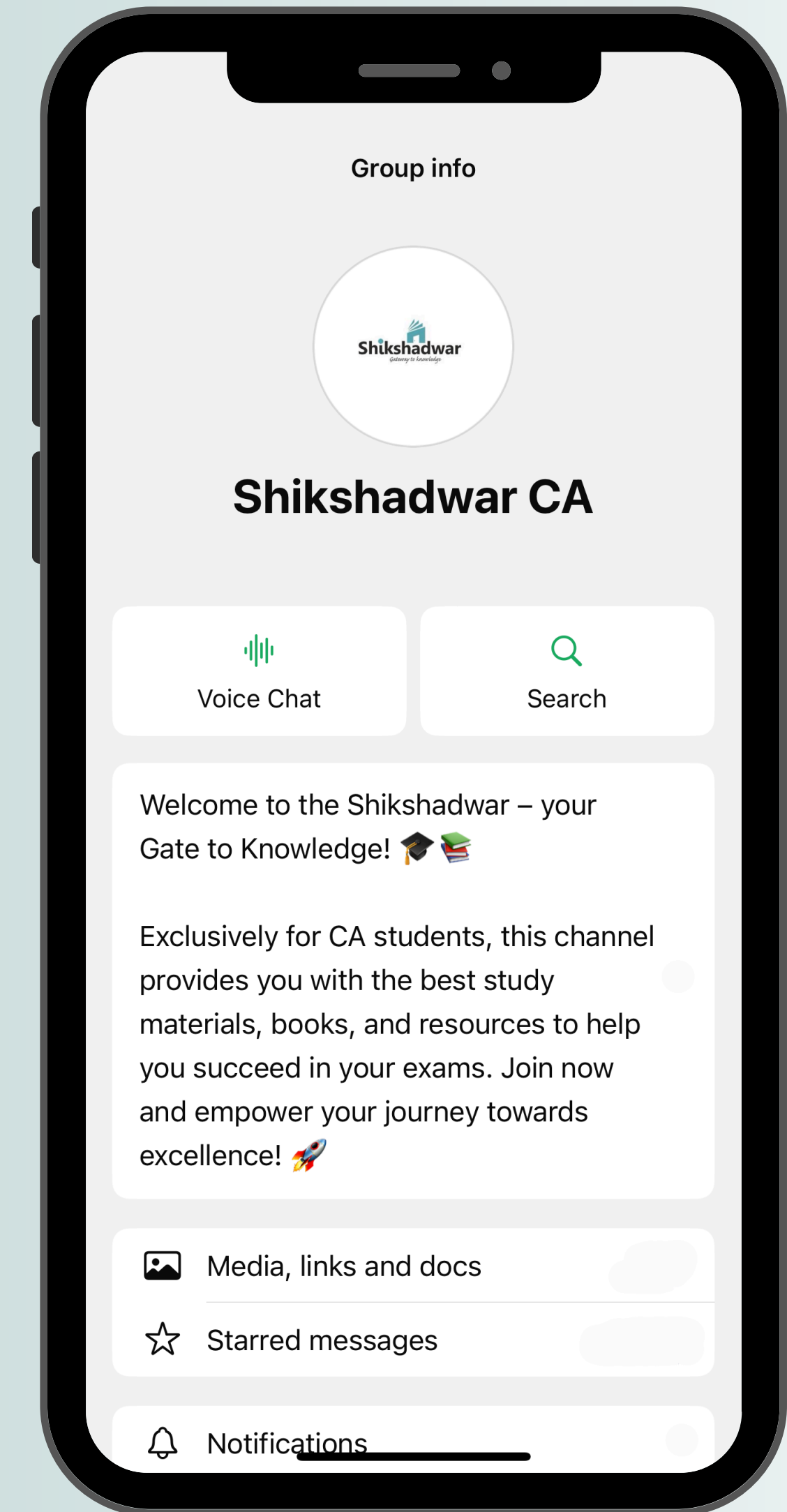
- A multi-faceted professional with a Chartered Accountancy qualification and a Bachelor's degree in Law.
- Brings 7+ years of teaching experience across CA and CS professional courses.
- Specializes in:
  - Taxation at CA Intermediate and CS Executive levels
  - Economics at CA Foundation level
- Known for simplifying complex concepts with crystal-clear explanations and practical insights.
- Expert in delivering Fasttrack batches with proven accelerated learning techniques.
- Frequently invited as a visiting faculty for Taxation at reputed coaching institutes.
- Loved by students for his interactive teaching style, real-life examples, and exam-oriented approach.



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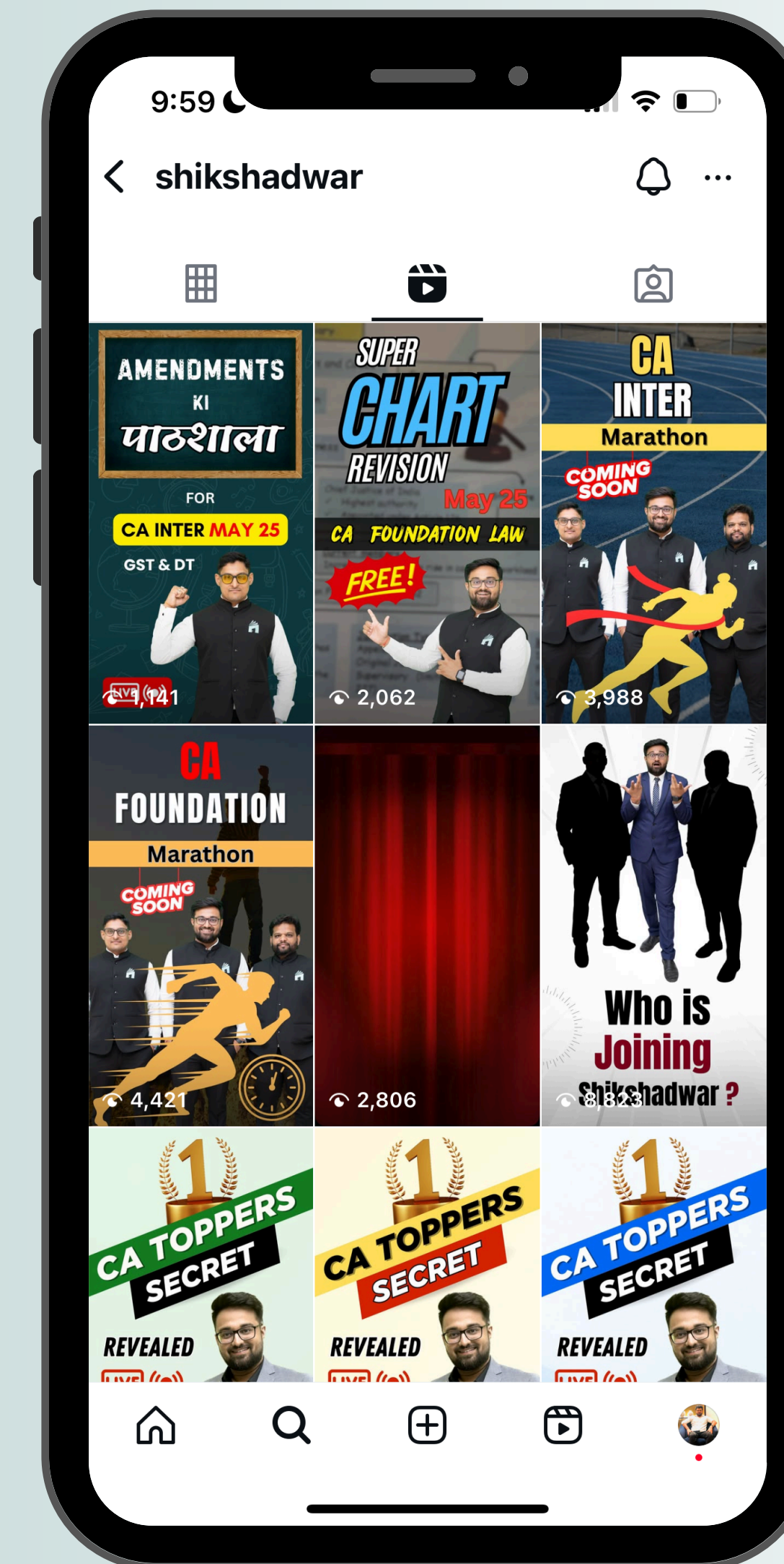
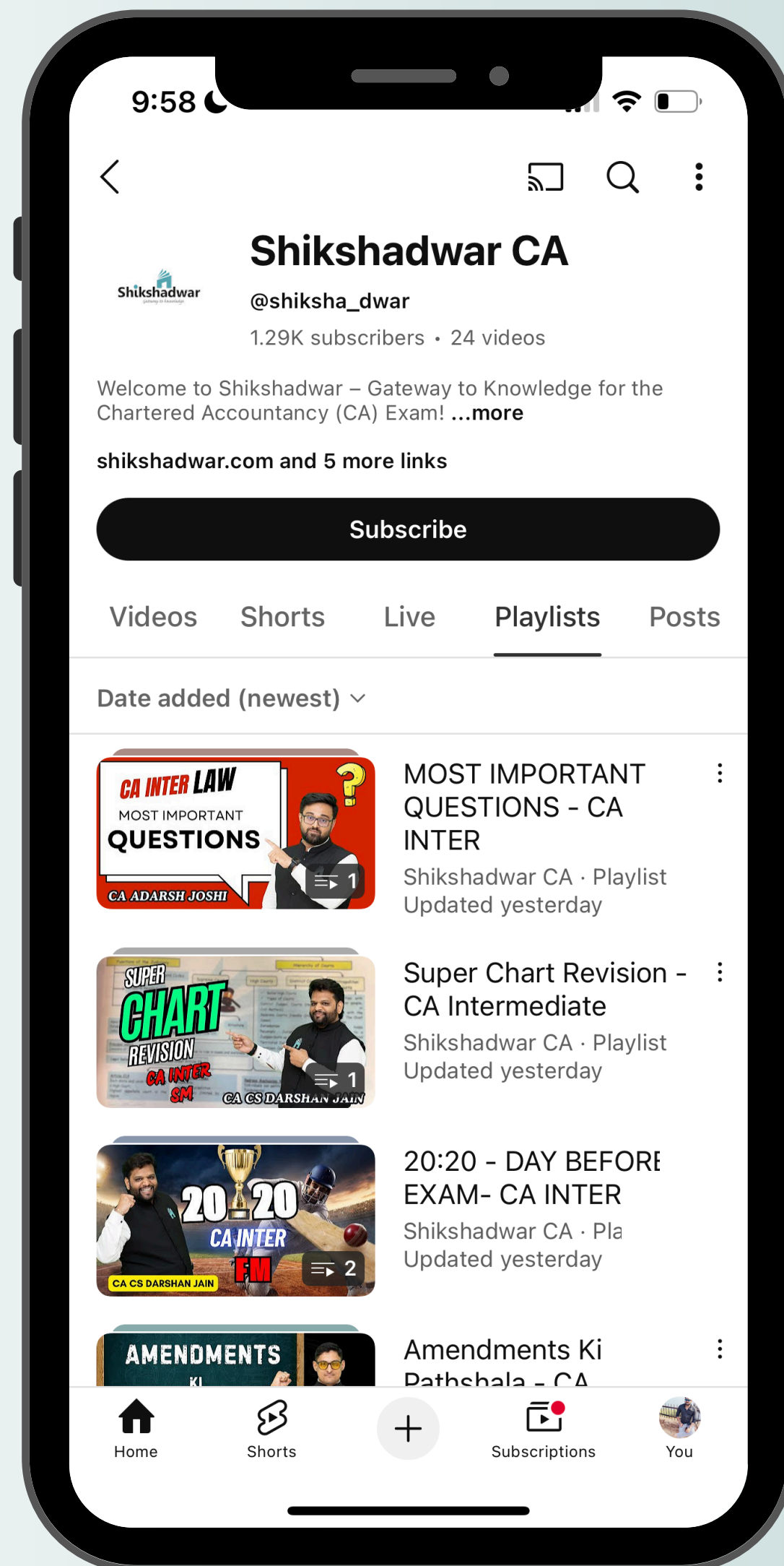


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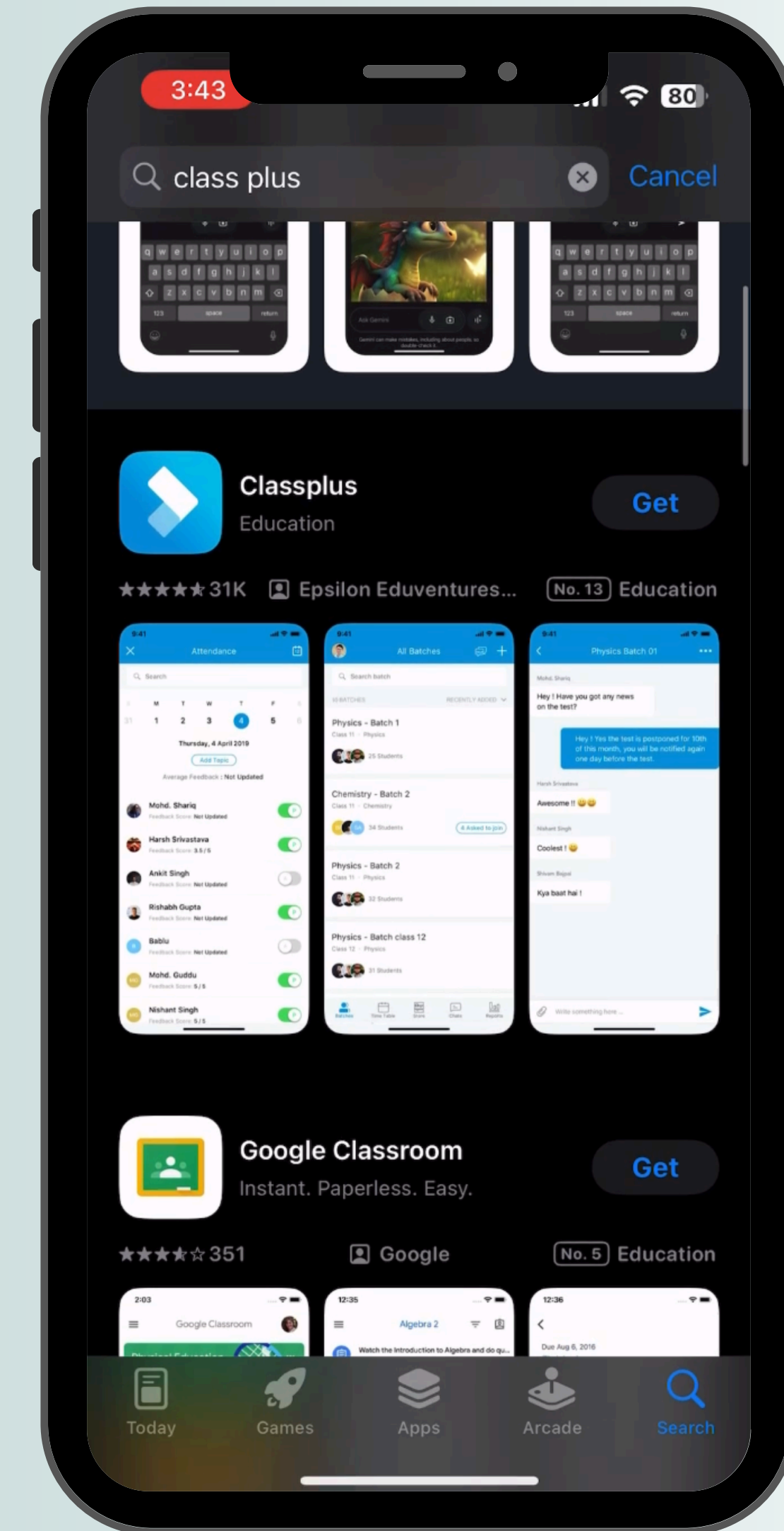
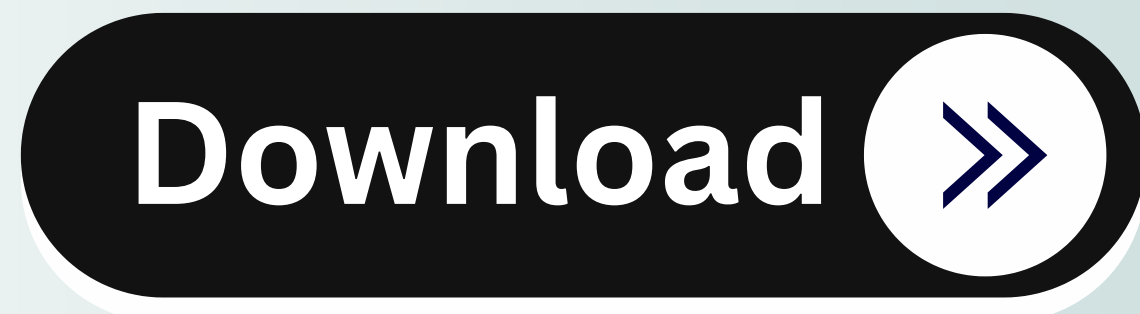
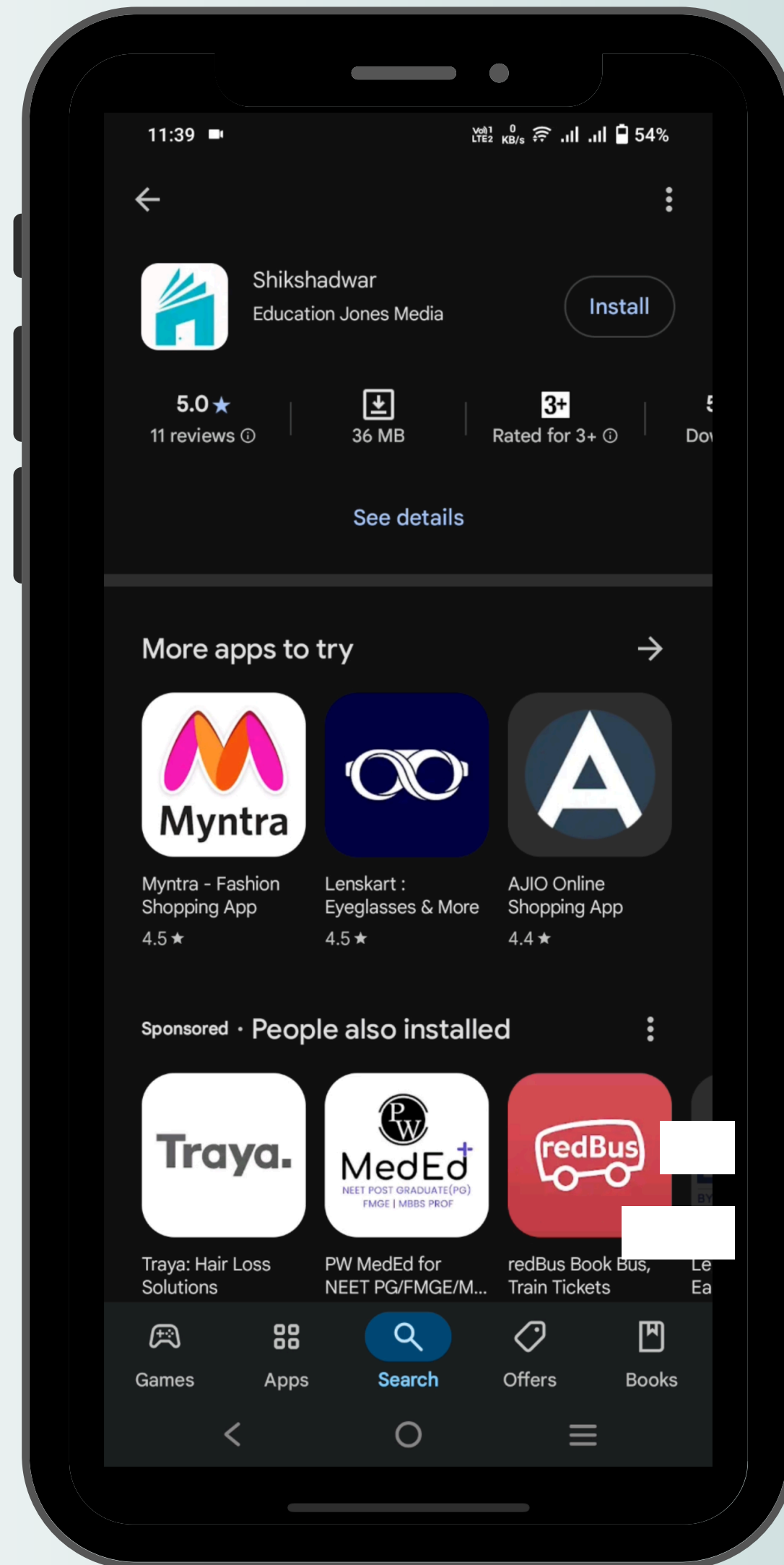
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Website



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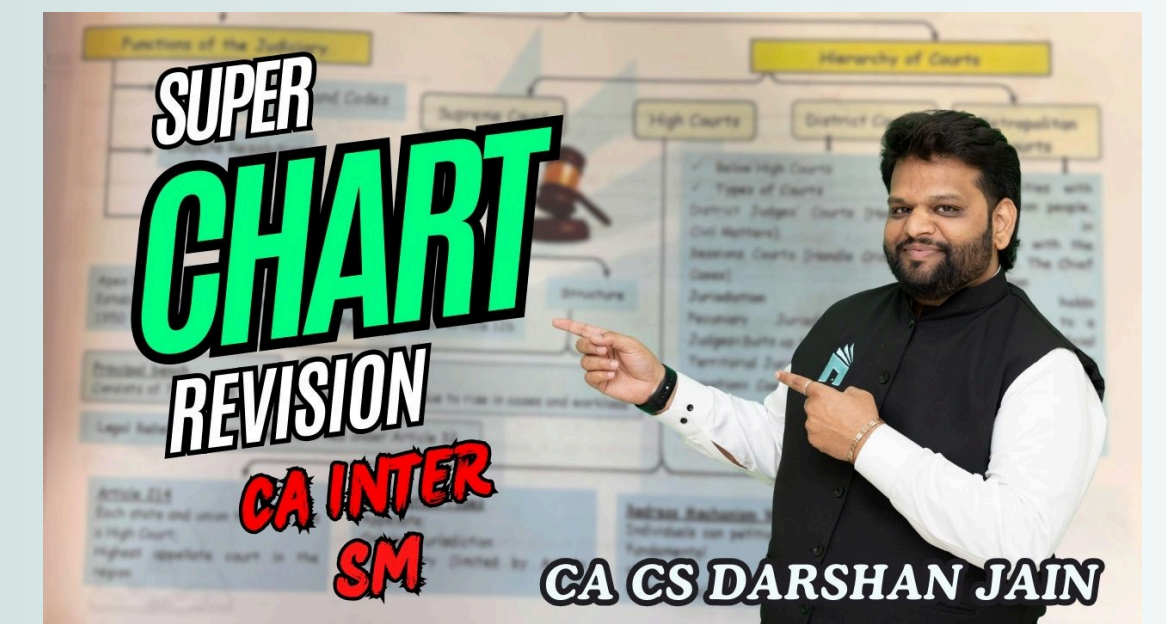
# CA INTERMEDIATE MAY 25

## Marathons Live Streams



RRR - Result Oriented Rapid Revision

Most Imp Questions



One Shot MCQ's Marathon

Super Chart Revision









Amendments Ki Pathshala

20 -20 Series

# CA INTERMEDIATE MAY 25

## Marathons Schedule With Links

DATE	TIME	EDUCATOR	SUBJECT	TOPICS	YOUTUBE LINK
17/4/2025	8.00 AM	CA ADARSH JOSHI	LAW	RRR	
18/4/2025	12.00 NOON	CA TUSHAR TAPARIA	GST	RRR	
19/4/2025	8.00 AM	CA CS DARSHAN JAIN	FM	RRR	
20/4/2025	8.00 AM	CA ADARSH JOSHI	LAW	ONE SHOT MCQ MARATHON	
21/4/2025	2.00 PM	CA TUSHAR TAPARIA	GST	GST AMENDMENTS & ITS IMPORTANT QUESTIONS	
23/4/2025	8.00 AM	CA CS DARSHAN JAIN	FM	ONE SHOT MCQ MARATHON	

DATE	TIME	EDUCATOR	SUBJECT	TOPICS	YOUTUBE LINK
24/4/2025	2.00 PM	CA TUSHAR TAPARIA	DT	DT AMENDMENTS & ITS IMPORTANT QUESTIONS	
27/4/2025	8.00 AM	CA CS DARSHAN JAIN	SM	ONE SHOT MCQ MARATHON	
4/5/2025	8.00 AM	CA ADARSH JOSHI	LAW	MOST IMPORTANT QUESTIONS	
6/5/2025	3.00 PM	CA TUSHAR TAPARIA	TAXATION	20-20	
12/5/2025	8.00 AM	CA CS DARSHAN JAIN	FM	20-20	
13/5/2025	8.00 AM	CA CS DARSHAN JAIN	SM	SUPER CHART REVISION	

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**TEST PAPER  
ON  
CAPITAL BUDGETING**

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Date of Test

11<sup>th</sup> August 2024

## QUESTION 1 (10 MARKS)

GST

Rambow Ltd. is contemplating purchasing machinery that would cost ₹ 10,00,000 plus GST @ 18% at the beginning of year 1. Cash inflows after tax from operations have been estimated at ₹ 2,56,000 per annum for 5 years. The company has two options for the smooth functioning of the machinery - one is service, and another is replacement of parts. The company has the option to service a part of the machinery at the end of each of the years 2 and 4 at ₹ 1,00,000 plus GST @ 18% for each year. In such a case, the scrap value at the end of year 5 will be ₹ 76,000. However, if the company decides not to service the part, then it will have to be replaced at the end of year 3 at ₹ 3,00,000 plus GST @ 18% and in this case, the machinery will work for the 6th year also and get operational cash inflow of ₹ 1,86,000 for the 6th year. It will have to be scrapped at the end of year 6 at ₹ 1,36,000.

Assume cost of capital at 12% and GST paid on all inputs including capital goods are eligible for input tax credit in the same month as and when incurred.

Assume cost of capital at 12% and GST paid on all inputs including capital goods are eligible for input tax credit in the same month as and when incurred.

- (i) DECIDE whether the machinery should be purchased under option 1 or under option 2 or it shouldn't be purchased at all.
- (ii) If the supplier gives a discount of ₹ 90,000 for purchase, WHAT would be your decision?

Note: The PV factors at 12% are:

Year	0	1	2	3	4	5	6
PV Factor	1	0.8928	0.7972	0.7118	0.6355	0.5674	0.5066

Outflow = Inflow (irrelevant)

GST Collected from customer = Pay govt Same year (irrelevant)  
(Inflow) (Outflow)

OPTION 1 - SERVICING OF PART

STATEMENT SHOWING NPV

4

YEAR	CASH FLOW	PRESENT VALUE FACTOR AT 12%	DISCOUNTED CASH FLOW
0	(1000000) <i>Cost</i>	1.000 ✓	(1000000)
1-5	256000 <i>CFAT</i>	3.6047 ✓	922863
2	(100000) <i>servicing cost</i>	0.7972 ✓	(79720)
4	(100000) <i>"</i>	0.6355 ✓	(63550)
5	76000 <i>SV</i>	0.5674 ✓	43122
		NPV	(177345)

OPTION 2 - REPLACEMENT OF PART

4

STATEMENT SHOWING NPV

YEAR	CASH FLOW	PRESENT VALUE FACTOR AT 12%	DISCOUNTED CASH FLOW
0	(100000) <i>Cost</i>	1.00	(100000)
3	(30000) <i>replacement cost</i>	0.7118	(213540)
1-5	256000 <i>CF AT</i>	3.6047	922803
6	186000 <i>Additional CF AT</i>	0.5066	94228
6	136000 <i>CV</i>	0.5066	68898
		NPV	(127611)

## Conclusion

1] As Both the proposals are giving Negative NPV, The machine shouldn't be purchased at all

2] If supplier gives discount of 9000  
NPV under option 1 =  $(177345) + 9000$   
 $= (87345)$

NPV under option 2 =  $(127611) + 9000$   
 $= (97611)$

Even if the supplier gives discount of  
9000 still the machine shouldn't be  
purchased.

## QUESTION 2 (5 MARKS)

$$\frac{8000}{26000} \times 20000$$

Prem Ltd has a maximum of Rs. 8,00,000 available to invest in new projects. Three possibilities have emerged and the business finance manager has calculated Net present Value (NPVs) for each of the projects as follows :

$$\frac{8000}{26000} \times 20000$$

Investment	Initial cash outlay Rs.	NPV Rs.
Alfa ( $\alpha$ )	5,40,000	1,00,000
Beta ( $\beta$ )	6,00,000 ✓	1,50,000 ✓
Gama ( $\gamma$ )	2,60,000	58,000

DETERMINE which investment/combination of investments should the company invest in, if we assume that the projects can be divided?

Since funds available are restricted, the normal Net Present Value (NPV) rule of accepting investments decisions with the highest NPVs cannot be adopted straight way. Further, as the projects are divisible, a Profitability Index (PI) can be utilized to provide the most beneficial combination of investment for Rio Ltd.

Project	PV Per Rs.	Rank as per PI
Alfa ( $\alpha$ )	$\text{Rs. } 6,40,000 / \text{Rs. } 5,40,000 = 1.185$	III
Beta ( $\beta$ )	$\text{Rs. } 7,50,000 / \text{Rs. } 6,00,000 = 1.250$	I
Gama ( $\gamma$ )	$\text{Rs. } 3,18,000 / \text{Rs. } 2,60,000 = 1.223$	II

Therefore Rio Ltd should invest Rs. 6,00,000 into project  $\beta$  (Rank I) earnings Rs. 1,50,000 and Rs. 2,00,000 into project  $\gamma$  (Rank II) earning Rs. 44,615  $\text{Rs. } 2,00,000 / \text{Rs. } 2,60,000 \times \text{Rs. } 58,000$

So, total NPV will be Rs. 1,94,615  $\text{Rs. } 1,50,000 + \text{Rs. } 44,615$  from Rs. 8,00,000 of investment.

## QUESTION 3 (10 MARKS)

*An existing company has a machine which has been in operation for two years, its estimated remaining useful life is 4 years with no residual value in the end. Its current market value is ₹ 3 lakhs. The management is considering a proposal to purchase an improved model of a machine gives increase output. The details are as under:*

<i>Particulars</i>	<i>Existing Machine</i>	<i>New Machine</i>
<i>Purchase Price</i>	₹ 6,00,000	₹ 10,00,000
<i>Estimated Life</i>	6 years	4 years
<i>Residual Value</i>	0	0
<i>Annual Operating days</i>	300	300
<i>Operating hours per day</i>	6	6
<i>Selling price per unit</i>	₹ 10	₹ 10

<i>Material cost per unit</i>	₹ 2	₹ 2
<i>Output per hour in units</i>	20	40
<i>Labour cost per hour</i>	₹ 20	₹ 30
<i>Fixed overhead per annum excluding depreciation</i>	₹ 1,00,000	₹ 60,000
<i>Working Capital</i>	₹ 1,00,000	₹ 2,00,000
<i>Income-tax rate</i>	30%	30%

*Assuming that - cost of capital is 10% and the company uses written down value of depreciation @ 20% and it has several machines in 20% block.*

*Advice the management on the Replacement of Machine as per the NPV method.*

*The discounting factors table given below:*

<i>Discounting Factors</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>
<i>10%</i>	<i>0.909</i>	<i>0.826</i>	<i>0.751</i>	<i>0.683</i>

# STATEMENT SHOWING COMPUTATION OF INCREMENTAL NPV

YEAR	PARTICULARS	CASH FLOW	PVF AT 10%	DCF
0	INITIAL CASH OUTFLOW	(800000)	1	(800000)
1	INCREMENTAL CFAT	259000	0.909	235431
2	INCREMENTAL CFAT	250600	0.826	206996
3	INCREMENTAL CFAT	243880	0.751	183154
4	INCREMENTAL CFAT	238504	0.683	162898
4	RELEASE OF WORKING CAPITAL	100000	0.683	68300
			NPV	56779

**Advice:** Since the incremental NPV is positive, existing machine should be replaced.

# WN 1 - STATEMENT SHOWING INCREMENTAL INITIAL CASH FLOW

SR.NO	PARTICULARS	AMOUNT
A	COST OF NEW MACHINE	1000000
B	LESS - SALE PROCEEDS OF EXISTING MACHINE	300000
C	ADD - WORKING CAPITAL	100000
D	NET INITIAL CASH OUTFLOW	800000

①

7

1000000 -  
300000  
= 700000

# WN 2 COMPUTATION OF WDV OF BLOCK FOR DEP

SR.NO	PARTICULARS	AMOUNT
A	COST OF EXISTING MACHINE	600000
B	LESS - DEP FOR 2 YEARS AS PER WDV METHOD AT 20% PER ANNUM (120000+96000)	216000
C	WDV OF EXISTING MACHINE AT THE END OF 2 YEARS (A-B)	384000
D	SALE VALUE OF MACHINE	300000
E	LOSS ON SALE OF MACHINE TO BE ADDED TO BLOCK	84000
F	AMOUNT OF NEW ASSET	1000000
G	DEPRECIABLE VALUE OF BLOCK AFTER REPLACEMENT (F+E)	1084000
H	INCREMENTAL WDV OF BLOCK (G-C)	700000

Loss = 84000

700000

700000

2

# WN 3 STATEMENT SHOWING INCREMENTAL PROFIT

SR.NO	PARTICULARS	MACHINE	
		EXISTING	NEW
A	OPERATING HOURS PER ANNUM (300*6)	1800	1800
B	OUTPUT PER ANNUM	20	40
C	ANNUAL OUTPUT	36000	72000
D	SELLING PRICE	10	10
E	SALES (C*D)	360000	720000
F	LESS - MATERIAL COST (C*2)	72000	144000
G	LESS - LABOUR COST		
	EXISTING (1800*20)	36000	
	NEW (1800*30)		54000
H	LESS - INDIRECT COST	100000	60000
I	PROFIT BEFORE TAX (E-F-G-H)	152000	462000
J	INCREMENTAL PROFIT		310000

# WN 4 STATEMENT SHOWING INCREMENTAL CFAT

SR.NO	PARTICULARS	1	2	3	4
A	INCREMENTAL PROFIT	310000	310000	310000	310000
B	INCREMENTAL DEPRECIATION	140000	112000	89600	71680
C	INCREMENTAL PROFIT AFTER DEP (A-B)	170000	198000	220400	238320
D	LESS - TAX AT 30%	51000	59400	66120	71496
E	ANNUAL INCREMENTAL CFAT (C-D+B)	259000	250600	243880	238504

## QUESTION 4 (5 MARKS)

A Company has to make a choice between two machines X and Y. The two machines are designed differently, but have identical capacity and do exactly the same job. Machine X costs ₹ 5,50,000 and will last for 3 years. It costs 1,25,000 per year to run. Machine Y is an Economy Model costing 4,00,000 but will last only for two years, and cost 1,50,000 per year to run. These are real cash flows. The costs are forecasted in rupees of constant purchasing power.

Opportunity Cost of Capital is 12% Which Machine should the Company buy? Ignore taxes.

Given

$$PVIF_{0.12,1} = 0.8929$$

$$PVIF_{0.12,2} = 0.7972,$$

$$PVIF_{0.12,3} = 0.7118,$$

$$PVIFA_{0.12,2} = 1.6901,$$

$$PVIFA_{0.12,3} = 2.4019.$$

## Computation of Annual Cost of machine X

$$\text{Annualised Cost} = \text{Cost of machine X} + \text{PV of cost of running of 125000 per year for 3 years}$$

PVAF @ 12% for 3 years

$$= \frac{550000 + (125000 \times 2.4019)}{2.4019}$$

$$= \frac{550000 + 300238}{2.4019}$$

∴ 353986

## Computation of annualised cost of machine

Annualised cost = Cost of machine + P.V. of cost of  
owning of  
15000 for 2  
years

PVIFA @ 12% for  
2 years

$$\begin{aligned} &= \frac{40000 + (15000 \times 1.6901)}{1.6901} \end{aligned}$$

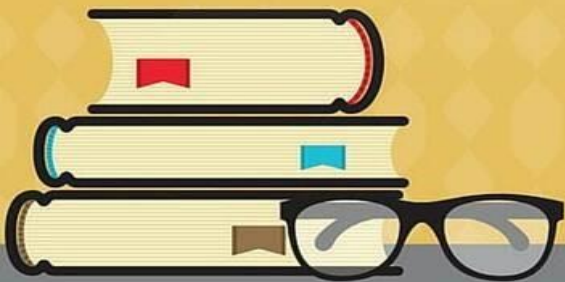
$$= \frac{400000 + 253515}{1.6901}$$

$$= 386672$$

Conclusion:- As machine X is having lower Annualised Cost, it is advised to buy machine X.



**ALL THE  
BEST!**



## Ratio analysis

$$\underline{\underline{g = 12}}$$

6.30 = Dividend  
Decision

Cervical  
Cancer  
at the age  
of 32



thank you!