

**DKC**  
**M-20**



**CA INTER**  
**Paper -8A**  
**Financial management**  
**Nov-2020**  
**RTP**  
**IN DKC FORMAT**



***Prof Dani Khandelwal***

QNO-1



$$\text{CURRENT RATIO} = \frac{\text{C.A}}{\text{C.L}}$$

$$\text{CURRENT ASSETS } 2.5 \quad \left( \frac{480000 \times 2.5}{1.5} \right) = 800000$$

CURRENT LIABILITIES  
1.00

WORKING CAPITAL  
1.5  
= 480000

$$\left( \frac{800000 \times 1.5}{2.5} \right) = 320000$$

VERIFICATION :-

$$\frac{\text{C.A}}{\text{C.L}} = \frac{800000}{320000} = 2.5$$

$$\frac{\text{CURRENT ASSETS} - \text{STOCK}}{\text{CURRENT LIABILITIES}} = 1.5$$

$$\frac{800000 - \text{STOCK}}{320000} = \frac{1.5}{1}$$

$$480000 = 800000 - \text{STOCK}$$
$$\text{STOCK} = 320000$$

$$\text{PROPRIETARY FUNDS} = 1.00 \quad \left( \frac{480000 \times 1}{.25} \right) = 1920000$$

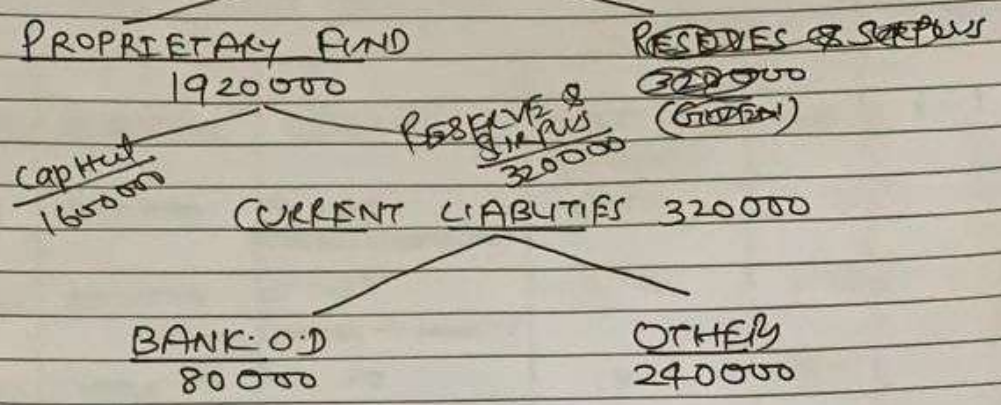
FIXED ASSETS  
.75  
 $\times 1920000$   
 $= 1440000$

NET-WORKING CAPITAL  
.25  
 $= 480000$

U

~~CAPITAL~~ Balance Sheet

DATE: \_\_\_\_\_



BALANCE SHEET - 31-3-2020

	₹		₹
CAPITAL	1600000	F.A.	1440000
RES SUR	320000	STOCK	320000
BANK O.D	80000	OTHER CURRENT	480000
S. CREDITORS	240000	ASSETS	
(320000 - 80000)		(80000 - 320000)	
	2240000		2240000

(No-2)

STATEMENT SHOWING WACC  
(a) BOOK VALUE WEIGHTS

PARTICULARS	Bookvalue	WEIGHT	COST (%) (Not NOI)	WACC (%)
DEBT	500000	$= \frac{125}{(500000 \div 2000000)}$	6.89	1.72%
PREF SHARES	500000	$= \frac{125}{(500000 \div 2000000)}$	4.08	1.02%
EQ-SHARES	1000000	$= \frac{50}{(1000000 \div 2000000)}$	10	5%
	2000000	1.00		7.74%

(b) MARKET VALUE WEIGHTS

PARTICULARS	MARKET VALUE	WEIGHT	COST (%)	WACC (%)
Debt.	$= 525000$ $(500000 \times \frac{105}{100})$	$= \frac{151}{(525000 \div 3475000)}$	6.89	1.04%
Prefer Shares	$= 550000$ $(500000 \times \frac{110}{100})$	$= \frac{158}{(550000 \div 3475000)}$	4.08	.64%
EQUITY	$2400000$ $(1000000 \times \frac{24}{10})$	$= \frac{691}{(2400000 \div 3475000)}$	10	6.91%
	3475000	1.00		8.59%

$$K(e) = \left( \frac{D1}{P_0 - F} + g \right)$$

$$\left( \frac{1}{24 - 4} \right) + .05 = .10 \Rightarrow 10\% =$$

K(P)  $\Rightarrow$

(3)

K1a)



Y.T.M

$$\begin{aligned} \text{CURRENT MARKET PRICE} &= 105 \\ 4\% \text{ FLOATATION COST} &= \frac{(4.20)}{100.80} \end{aligned}$$

YEAR		@ 5% P.V.	@ 7% P.V.
0	<del>(100)</del>	(100.80)	(100.8)
		(100.8 X 1)	(100.8 X 1)
1-10	<del>(10)</del> INTEREST = 10 (10% X 100)	= 54.05	49.17
	Tax-savings 30% = $\frac{(3)}{7}$	(7 X 7.722)	(7 X 7.024)
10	<del>(100)</del> (100 X .614)	61.40	50.8
		(100 X .614)	(100 X .508)
		<del>14.65</del> 14.65	(.83)

$$\text{I.R.R.} = 5\% + \frac{14.65 \times 2 (7-5)}{14.65 + .83} = 15.48$$

$$= \underline{6.89\%}$$

(4)

Y.T.M



YEAR

0

$$\begin{aligned} \text{CURRENT MARKET PRICE} &= 110 \\ \text{FLOATATION COST } 2\% &= (2.2) \\ \hline &107.80 \end{aligned}$$

$$\text{DIVIDEND} = (5\% \times 100) = 5$$

<u>YEAR</u>	3%	5%
(0)	(107.80)	(107.80)
(-10)	= 42.65 (5 X 8.530)	= 38.61 (5 X 7.722)
10	74.4 (100 X .744)	61.4 (100 X .614)
	<hr/> 9.25	<hr/> (7.79)

$$\begin{aligned} \text{I.R.R} &= 3\% + \frac{9.25}{9.25 + 7.79} \times 2 (5-3) \\ &= 17.04 \\ &= \underline{\underline{4.08\%}} \end{aligned}$$

(5)

(QNo 3)  
2



STATEMENT SHOWING ANALYSIS

	PLAN-A ₹	PLAN-B ₹
E.B.I. TAX	480000	480000
INTEREST	(48000) (400000 X 12%)	-
E.B. TAX	432000	480000
TAX 30%	(129600) (432000 X 30%)	(144000) (480000 X 30%)
E.A. TAX	302400	336000
<del>INTEREST</del> PREF DIVIDEND (Bal-fig)	-	* (336000)
EARNING TO EQUITY SHARE HOLDER	<del>302400</del> 302400	302400
÷ NO OF SHARE	÷ 80000 (800000 ÷ 10)	÷ 80000 (800000 ÷ 10)
E.P.S	3.78	3.78

\* BALANCING FIGURE

$$\text{Rate of Pref Dividend} = \frac{(336000 \times 100)}{400000} = 8.4\%$$

(6)

(Q No. 4)  
2



STATEMENT SHOWING ANALYSIS

	YEAR (I) ₹	YEAR (II) ₹
SALES	1200000 (100000 units X 12)	<del>1240000</del> 1200000 (20000 X 12)
V. COST	(800000) (100000 units X 8)	(960000) (20000 X 8)
CONTRIBUTION	400000	480000
FIXED COST	(200000)	(200000)
E.B.I. TAX	200000	280000
INTEREST	(100000) (1000000 X 10%)	(100000)
E.B. TAX	100000 (30000)	180000 (54000)
TAX	(30% X 100000)	(30% X 180000)
E.A. TAX	70000	126000
NO OF EPS	÷ 10000 (1000000 ÷ 100)	÷ 10000 (1000000 ÷ 100)
E.P.S	= 7.00	12.6
(%) DEC IN EPS	$\frac{12.6 - 7}{7} \times 100$ = 44.44	

(7)





		YEAR (A)	YEAR (B)
FINANCIAL LEVERAGE =	$\frac{EBITax}{EBTAX}$	$\frac{200000}{100000}$	$\frac{280000}{180000}$
		= 2	= 1.56
OPERATING LEVERAGE =	$\frac{CONT}{EBITax}$	$\frac{400000}{200000}$	$\frac{480000}{280000}$
		= 2	= 1.71

(8)

Q10-5

STATEMENT SHOWING PROFIT FROM PROCESSING WASTE

	1	2	3	4
(A) SALES	966	966	1254	1254
(B) COST				
(1) MATERIALS	(90)	(120)	(955)	(255)
(2) Wages *	(180)	(195)	(255)	(300)
(3) OTHER EXP	(120)	(135)	(162)	(210)
(4) FACTORY O.H.*	(90)	(90)	(90)	(90)
(5) LOSS OF LEASE (OPPORT) (GIVEN)	(30)	(30)	(30)	(30)
(6) INTEREST (600 ÷ 4) = 150 (600 × 14%)	(84)	(63)	(42)	(21)
(7) Dep (AS PER INCONTRAX)	(150)	(114)	(84)	(63)
A - B = P/B	222	219	336	285
TAX 30%	(66.6)	(65.7)	(100.80)	(85.5)
P/A TAX	155.40	153.30	235.20	199.50
* Wage				
YEAR TOTAL				
1	225	(45)	180	(201)
2	225	(30)	195	(212)
3	255	-	255	(212)
4	300	-	300	(212)
(9)				

IDLE TIME PAYMENT

NET

\*\* F.O



Year	0	1	2	3	4
P.A. Tax		155.40	153.30	235.20	199.5
H) DEP		150	114	84	53
LOAN REPAYMENT (600 ÷ 4)		(150)	(150)	(150)	(150)
COMPENSATION FOR CONTRACT	(90)				
CONTRACT PAYMENT SAVED (NET)		(150 × 70%) 105	(150 × 70%) 105	(150 × 70%) 105	(150 × 70%) 105
MATERIAL (NO. 60)	(60)	(105)			165
PROFIT ON SALE OF MACHINE	-	-	-	-	15 × 8 *

	(150)	155.40	222.30	274.20	397.5
D.F	X 1	X .877	X .769	X .674	X .592

P.V.	(150)	136.28	170.95	184.81	235.32
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N.P.V. = 577.36

DECISION - YES - INSTALL

\* \* COST OF SALE OF MACHINE = 50  
Removal cost =  $\frac{(45)}{15}$

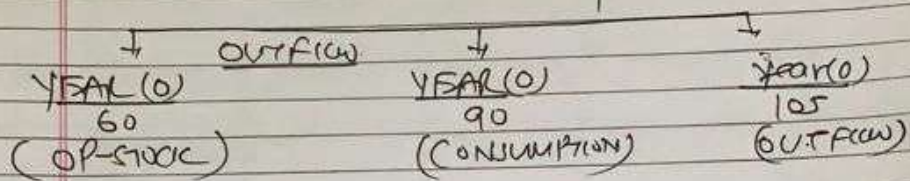
(10)

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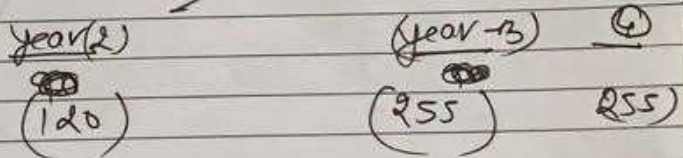
YEAR MATERIAL OUTFLOW

① → CONSUMPTION = 90  
CLOSING STOCK = 165  
OPENING STOCK = (60)  
195



Year (2) / (3) / 4

	2	3	4
CONSUMPTION =	120	255	255
CLOSING STOCK =	165	165	165
OPENING STOCK	(165)	(165)	(165)
	120	255	255



CLOSING STOCK = 165  
FAIF

(11)

(ANN-6) FINANCIAL POLICY

STATEMENT SHOWING ANALYSIS

	PRESENT	PROPOSED			Z
		W	X	Y	
CREDIT PERIOD	45 days	60 days	75 days	90 days	115 days
SALP	900000	960000	990000	1050000	1110000
V. COST	(600000)	(640000)	(660000)	(700000)	(740000)
$(\frac{2}{3})$	$(900000 \times \frac{2}{3})$	$(960000 \times \frac{2}{3})$	$(990000 \times \frac{2}{3})$	$(1050000 \times \frac{2}{3})$	$(1110000 \times \frac{2}{3})$
FIXED COST	(75000)	(75000)	(75000)	(75000)	(75000)
$900000 \times \frac{25}{3}$					
Bad Debt	(9000)	(14400)	(19800)	(31500)	(44400)
	$(900000 \times 1\%)$	$(960000 \times 1.5\%)$	$(990000 \times 2\%)$	$(1050000 \times 3\%)$	$(1110000 \times 4\%)$
OPP. COST	(16875)	(23833)	(30625)	(38750)	(52069)
(NO. IN 100)				204750	
NET PL.	199125	206767	204575	<del>202500</del>	198531

NO. IN 100 (1) INVESTMENT IN  $\frac{213706}{100} =$   
VCOST + FIXED COST

~~PRESENT~~  
 PRESENT (600000 + 75000)  $\times \frac{45}{360} \times \frac{20}{100} = 16875$   
 (640,000 + 75000)  $\times \frac{60}{360} \times \frac{20}{100} = 23833$   
 (660,000 + 75000)  $\times \frac{75}{360} \times \frac{20}{100} = 30625$   
 (700000 + 75000)  $\times \frac{90}{360} \times \frac{20}{100} = 38750$   
 (12) (740,000 + 75000)  $\times \frac{115}{360} \times \frac{20}{100} = 52069$

QNO.7)

STATEMENT SHOWING NET PRESENT VALUE OF PROJECT 'X'

YEAR	CASHFLOW	X C.F	X D.F@5%	= P.V.
1	1650000	X .8	X .947	= 1250040
2	1500000	X .7	X .898	= 942900
3	1500000	X .5	X .851	= 638250
4	2000000	X .4	X .807	= 645600
5	2100000	X .6	X .765	= 963900
				4440690

INITIAL INVESTMENT (4250000)  
 NPV = 190690

STATEMENT SHOWING NET PRESENT VALUE (NPV) OF PROJECT 'Y'

YEAR	CASHFLOW	X C.F	X D.F@5%	= P.V.
1	1650000	X .9	X .947	= 1406295
2	1650000	X .8	X .898	= 1185360
3	1500000	X .7	X .851	= 893550
4	1000000	X .6	X .807	= 645600
5	8500000	X .5	X .765	= 550800
TOTAL				4681605

INITIAL INVESTMENT (4125000)  
 NPV = 565605

DECISION PROJECT 'Y' - HIGHER NPV

(QNO-8)

GORDON MODEL  $\Rightarrow$



$$P_0 = \left( \frac{D_1}{K_e - G} \right) \left( \frac{36}{.15 - .14} \right) = 3600$$

$$E.P.S = 120.00$$

(D1)  $\Rightarrow$  D.P.S  
36  
30%

G = (RETAINED EARNING X R)  
70%  
X 20%

$$\left( \frac{36 \times 100}{120} \right)$$

$$G = 14\%$$

WATER MODEL

$$P_0 = D + \frac{K_v (F - D)}{K_e}$$

$$= 36 + \frac{.20}{.15} (120 - 36)$$

$$P_0 = 986.67$$

(14)

(Q No-9)  
5



(GIVEN)

$$\text{SALES} = 9000000$$



$$\begin{aligned} \text{GROSS-PROFIT} \\ 35\% \times 9000000 \\ = 3150000 \end{aligned}$$

↓

$$\begin{aligned} \text{COST OF GOODS SOLD} \\ 5850000 \end{aligned}$$

$$\text{STOCK TURNOVER RATIO} = \frac{\text{C.O.G.S}}{\text{CLOSING STOCK}}$$

$$6 = \frac{5850000}{x}$$

$$x = 975000$$

$$\text{FIXED ASSETS TURNOVER RATIO} = \frac{\text{C.O.G.S.}}{\text{F.A}}$$

$$1.5 = \frac{5850000}{x}$$

$$x = 3900000$$

$$\text{CURRENT ASSETS } 2.5 = 2437500$$

CURRENT  
LIABILITIES  
1.00

$$= 975000$$

WORKING  
CAPITAL  
~~1.00~~ 1.50

$$= 1462500$$

(15)





$$\text{C.A } 2.5 \quad (975000 \times 2.5)$$

$$= 2437500$$

Stock

1

$$975000$$

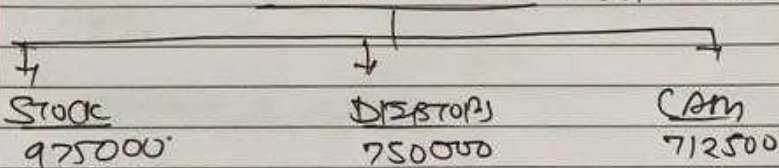
LIQUID ASSETS

1.5

$$\text{DEBTORS} = (9000000 \times \frac{1}{2})$$

$$= 750,000$$

CURRENT ASSETS 2437500



$$\frac{\text{FIXED ASSETS}}{\text{NET WORTH}} = \frac{1.3}{1}$$

$$\frac{3900000}{x} = 1.3$$

$$x = 3000000$$

(14)



NET-WORTH 30,00,000

$$\begin{array}{l} \text{1.15} \\ \text{SHARE CAPITAL} \\ = \frac{(30,00,000 \times 1.5)}{2.5} \\ = 18,00,000 \end{array} \qquad \begin{array}{l} \text{1.00} \\ \text{RESERVE \& SURPLUS} \\ = \frac{(30,00,000 \times 1)}{2.5} \\ = 12,00,000 \end{array}$$

$$\text{CAPITAL GEARING RATIO} = \frac{\text{LONG TERM DEBT}}{\text{EQUITY SHARE HOLDING FUND}}$$

$$0.7875 = \frac{23,62,500}{30,00,000}$$

REFERENCE SKIPPED

(17)

BALANCE SHEET OF COM

	FIGURE AS AT 31-3-2020	FIGURE AS AT 31-3-19
(I) EQUITY AND LIABILITIES		
SHARE HOLDER FUNDS		
(a) SHARE CAPITAL	1800000	
(b) RESERVES & SURPLUS	1200000	
NON CURRENT LIABILITIES		
(a) LONG TERM BORROWINGS	2362500	
CURRENT LIABILITIES	975000	
TOTAL	6337500	
(II) ASSETS		
NON CURRENT ASSETS		
FIXED ASSETS	3900000	
CURRENT ASSETS		
INVENTORIES	975000	
TRADE RECEIVABLE	750000	
CASH AND CASH EQV.	712500	
TOTAL	6337500	

ANSWER (b) STATEMENT SHOWING WORKING CAP

(A) CURRENT ASSETS		₹
(1) INVENTORY (STOCK)		975000
(2) RECEIVABLE (DEBTORS)		750000
(3) CASH IN HAND BANK		712500
TOTAL		2437500

(18)



(B) CURRENT LIABILITIES	975000
NET WORKING CAPITAL =	1462500
(A-B)	
PROVISION FOR CONTINGENCIES	219375
WORKING CAPITAL	1681875

(19)