



MEDICAL COLLEGE

Introduction

Medical College is a school that provides medical education. These institutions may differ from autonomous educational institutions that train doctors, conglomerates that offer training related to all aspects of healthcare. A medical college or medical association is a trade association that unites doctors in a specific geographical area (country, region, or region). Common law countries are often grouped by medical specialties, in order to bring together people working in a medical college, and have been designed to provide education for medical students and qualify them as doctors of specialized disciplines and to manage patients suffering from various ailments. Doctors, with their faithful spirit of the nation as a whole, are providing medicines and treatment for pest control, which is sharing the health and establishing the suffering of humanity. Typically, a medical college is associated with a single hospital.

Market Potential

In the forecast period (2020-2027), the medical education market is expected to grow moderately. With a combined annual growth rate of 4.2% of the market value, it is expected to reach \$ 44 billion by the end of 2027. Drastic changes in healthcare infrastructure that encourage investment in medical education. In addition, the number of medical schools is growing, especially in developing countries

The number of medical schools increased by more than 1/3 in 2009 and again in 2013. In addition, an increase in the number of new and non-traditional medical universities, as well as the migration of students, will require universities and institutes to improve the quality of the education system.

The health market could triple to 8.6 billion rupees (US \$ 133.44 billion) by 2022. In the 2021 Budget, India's public spending on healthcare was 1.2% (as a percentage of GDP). Together with the development of the middle class, combined with an increase in the number of new diseases, the demand for health insurance is stimulated. With the growing demand for affordable and high-quality health care, insurance penetration rates will continue to grow for many years to come. In fiscal year 21, gross written premiums in the healthcare segment increased by 13.7% year-on-year to 58,584.36 crore (US \$ 8.00 billion). In the healthcare segment, its share is 29.5% of the total gross premiums ordered and received in the country.

Cost Of Project

Particulars	Amount (Rs. in Lakhs)
Land own	-
Land Development (Lumpsum)	500.00
Building With Civil Works	5503.00
Medical Equipment	1084.26
Miscellaneous fixed assets	445.37
Fixed Assets as per Annexure	1395.62
DG set	46.40
Escalation & Contingencies	448.73
Preliminary & Preoperative Expenses	708.09
Sub-total (A)	10131.46
Working Capital Margin @40% of Total Working Capital Required	5.00
Total Project Cost	10136.46
Total Working Capital Required (B)	10.00
MEANS OF FINANCE	
Total Funds Required(A+B)	10141.46
<u>Loan Component-</u>	
TERM LOAN	5066.00
WORKING CAPITAL	5.00
Total LOAN AMOUNT (TL+WC)	5071.00
Equity (50% OF THE PROJECT COST)	5070.00
Total	10141.00

Detailed Cost Element

SL	Particulars	Quantity	Amount (Rs. in Lakhs)
	Department of Anatomy		
	Microscope, Monocular	7500	4.50
	Microtome's rotary	8200	0.66
	Cabinet for slides	2200	0.13
	Incubators	22000	1.54
	Paraffin embedding bed	11000	0.77
	Hot plates for flatter section	10000	0.20
	Hot air oven for drying slides 450 c	22000	0.22
	Balance range capacity and idioms sensitivity	15000	0.30
	Refrigerator	5500	0.11
	Distilled water still mystery type campily gallon per	8000	0.16
	Diamond pencils	4500	0.36
	7 color marking pencil	10000	0.80
	Skeleton articulated	5500	0.28
	One disarticulated set	14250	3.56
	Specimen jars	7200	0.14
	Racks steel	8500	0.17
	Rebalancing machines for cadavers	22000	1.32
	Computer for keeping student record	45000	3.60
	Department of Bio Chemistry		
	Fume cupboards	3200	0.06
	Boiling water bath with light having 8-12 holes	16000	0.96
	Balance open pan	32000	1.92
	Autoclave electric	55000	1.10
	Balance semi microbe	32000	0.64
	Balance micro	32000	0.32
	Vortex mixers	21000	0.42
	Union meters	21000	8.40
	Constant temperature bath	2100	0.08
	Ryes tube	11000	0.44
	Incubator electric with thermostat	16200	0.65
	Hot air oven	21000	0.84
	Pump vacuum	55000	1.10
	Calorimetry's	21000	1.26
	Refrigerators	21000	0.84
	Flame photometer	10500	0.21
	Thermometer 0-250 c	10500	0.42
	Thermometer 0-110 c	1100	0.09
	Cock borer set	2100	0.02

	Department of Community Medicals		
	Comparator, Nessler	21000	0.21
	Barometer, folic	11000	0.11
	Extraction, Apparatus, fat, complete	11000	0.11
	Filter, Pasteur, Cham brand, complete set	11000	0.11
	Filterer fed	21000	0.21
	Hydrometer's spin	11000	0.33
	Hydrometer's milk	3200	0.10
	Hydrometers well and dry bulb	11000	0.11
	Incubators electric	11000	0.11
	Projector	120000	1.20
	Computer with laser printer	32500	0.33
	Electric typewriter	11000	0.22
	Slide projector	25000	0.75
	Video cassette/recorder/video cassette player	11000	0.22
	Department of Forensic Medicines		
	Battery operated	10500	0.11
	Slur camera with accessories	22000	0.22
	Microscope student type	21000	4.20
	microscope binocular and research	33000	0.99
	Stopwatch	2100	0.04
	Xray view box one in four	31200	1.25
	View box two in one	3200	0.10
	B.Pd. apparatus	21000	0.84
	Automatic tissue machine	21000	0.21
	Hot pales	21000	0.21
	L Modes	11000	1.32
	Leather strops	5500	0.11
	Paraffin bath embedding	21000	0.21
	Slide warming table	33000	3.30
	Stone carburation	22000	0.44
	Brain knife	11000	0.88
	Brain holder	35000	14.00
	Digital spectrometer	3200	0.03
	Hand set heat sealer	42000	0.42
	Spectroscope	22000	0.44
	Refrigerator	11000	0.11
	Cold storage for keeping dead body	1100	0.01
	Deep freezers for tissues	12000	0.24
	Video camera television	2300	0.07

	Department of Microbiology		
	Weighting machine for caves	22000	0.22
	Rotary microtomes	55000	1.10
	Carbon dioxide cylinder	11000	0.11
	Hot plates	22000	0.44
	Hot air (50 degree Celsius) special staining	22000	0.44
	Paraffin embedding bath	11500	0.23
	Autoclave electric	11000	0.22
	Distilled water	55000	1.10
	Rectangular water bath	32000	0.32
	Magnifying lens	1000	0.06
	Drill for boiling gas	9000	0.18
	Blow piece below for boiling gas	1000	0.02
	Ultraviolet lamp	12000	0.12
	Ph meter electric	11000	0.11
	Department of Obstetrics and Gynecology		
	Ea+Ecc Sales	42000	8.40
	Pct Forceps	22000	2.20
	Microscope	22000	0.44
	VIEW BOX	22000	0.44
	Tuboplasty Set	11000	0.44
	Diagnostic laparoscopy set	125000	2.50
	Operating laparoscopy set	120000	2.40
	Hysteroscopy set	55000	1.10
	Electronic carbon dioxide incubator	240000	9.60
	Colposcope	330000	3.30
	Nst machine	25000	0.75
	Stich removal sets	22000	1.76
	Height scale	2200	0.04
	View box	2200	0.04
	Cytology bottle	33	0.01
	Department of Pharmacology		
	Stimulator electronic arthouse Thomas	10000	0.10
	Electrocardiograph	10000	0.10
	Spectrophotometer Model Du Backman	10000	0.10
	Skin and Rectal thermometer barn	20000	0.20
	Antihistamine chamber with manometer	200000	2.00
	Flame photometer	10000	0.10

	Department of Orthopedics		
	External Flaxton	6000	0.36
	C-Arm	275000	5.50
	Portable x RAY machine	300000	9.00
	Arthroscope	400000	4.00
	Slide projector	100000	8.00
	Overhead projector	150000	12.00
	Departments of ENT		
	Nasal speculum	40000	1.60
	Tongue depressor	3000	0.09
	Laryngeal mirrors	25000	0.50
	Nasopharyngeal mirror	34000	0.34
	Aural spectrum	12000	0.60
	Ear suction	2300	0.07
	Suction applause	34000	0.68
	Sledges spectrum	18000	0.18
	Otoscope	50000	1.50
	Bayonet forces	14000	0.56
	Bulls lump	23000	0.69
	Head lamp	34000	1.70
	Sterilizer	17000	1.36
	Stethoscope	5000	0.05
	Ribbon recreator	3000	0.06
	Needle holder	2000	0.02
	Canula	3000	0.06
	Negus	3000	0.03
	Lighting system	2000	0.02
	Cricoid hook	1500	0.03
	Trochlear dilator	30000	0.30
	Department of Surgical Instruments		
	Ot table hydraulic general	120000	6.00
	Arthropathic attachment	35000	1.75
	Multipara turbos cope	18000	0.90
	Flash sterilizer outgenerals	650000	13.00
	Head lamp	3500	0.18
	Ultra violet lamp	17000	0.85
	Fumigator	10500	0.53
	Labor table ss pericope	32500	1.63
	Chipo scope set	15000	0.75
	Laparoscope set	72000	1.44

	Department of Pathology		
	Thermometers assorted glassware	20000	1.60
	Ph determination apparatus	10000	0.20
	Reagent bottles with stopper 2000cc	40000	9.60
	1000cc	40000	8.00
	500cc	30000	6.00
	250cc	40000	8.00
	100cc	30000	6.00
	50cc	10000	5.00
	Department of Radiology		
	Siemen's magneton harmony	29800000	298.00
	Computer radiology solution	1800000	36.00
	Siemens premium color dapper	2800000	28.00
	Siemens multiphase 15 x ray with kiloton h table	900000	18.00
	Siemens somatic spirit	29800000	298.00
	Department of Phycology		
	Hemoglobinometer	30000	7.20
	Stereoscope	5000	0.60
	Multiple acer prices	5000	0.10
	Polygraph	5000	0.10
	Venue pressure apparatus	150000	6.00
	Dongle's bag complete	9000	0.54
	Algometer	12000	0.36
	Bicycle algometer	30000	1.20
	Orthoscopy	300000	3.00
	Schematic eye	300000	6.00
	Pascoe	500000	10.00
	Maddox rod	400000	4.00
	Dynamometer	200000	2.00
	Newton color wheel	100000	1.00
	Sterilizer electric	900000	18.00
	Other Equipment's		
	Bew saw iron	40000	12.00
	Jambool	20000	3.00
	Piler	20000	3.60
	Motor icon	18000	2.88
	Bucket iron	16000	2.88
	Chisel	27000	3.78
	Tabari iron	23000	2.76
	El bowls	34000	5.78
	Drill machine	16000	1.92
	Chalk clay	23000	2.30
	Mutiny clay	12000	0.96

Old ready	4000	0.48
Gums	1000	0.20
Soap coconut oils	20000	5.60
Usg machine color dropper	250000	10.00
Spirometer	850000	17.00
Tmt machine	870000	17.40
Digital halter recorder	1320000	26.40
Image intensifier	270000	2.70
Steam sterilizer	920000	46.00
Ecg sterilizer	380000	15.20
X ray machine	102000	2.04
Cath lab		4.10
Blood analyzer module	450000	18.00
Digital x ray machine	320000	12.80
Minor ot set	1350000	54.00
Patient monitor	420000	16.80
Total		1084.26

Contingencies and Escalations

It has been assumed at approximately 5% at cost.

Preliminary Expenses

Particulars	Amount (Rs.in Lakhs)
Incorporation Expenses	1.50
Project Report Preparation and Consultation	0.35
Feasibility and Engineer's/Architect's Report and Plans	137.58
Legal Charges - Drafting for agreements, contracts, stamp paper, notary	1.50
Other recurring expenses of revenue nature up to start of commercial	38.16
Interest for Pre-operative expenses	529.00
Total	708.09

Salary

The manpower force will increase year by year according to the capacity of students increased. This is the total manpower required to run a medical college. The Cost which are mentioned below is the one-year cost and it will increase every year. In First Year, Engineer, Engineer Assistant, Plumber & Electrician is not required.

Designation	Manpower	Amount (Rs. In Lakhs)
Principal	1	18.00
Professors	6	72.00
Assistant professors / Trainer	4	38.40
Vice Principal	1	12.00
Lab Assistant	2	7.20
Office Staff/ Administrator etc	4	9.60
Sweeper	2	1.92
Security Guard	2	2.40
Pantry Boy	2	1.92
Warden	4	14.40
Accountant	1	3.60
Engineer	-	-
Engineer Assistant	-	-
Plumber	-	-
Electrician	-	-

Profitability Statement

Amount (Rs. in Lakhs)							
Particulars	Year- 1	Year- 2	Year- 3	Year- 4	Year- 5	Year-6	Year -7
A. INCOME							
Intake Capacity	200	400	600	800	1000	1000	1000
Capacity Utilization	100%	100%	100%	100%	100%	100%	100%
Capacity utilized	200	400	600	800	1000	1000	1000
Annual Receipts	1170.00	2340.00	3510.00	4648.00	5850.00	5850.00	5850.00
Total Income/ annum	1170.00	2340.00	3510.00	4648.00	5850.00	5850.00	5850.00
B. OPERATING EXPENSES							
Consumables	16.00	32.00	48.00	64.00	80.00	80.00	80.00
Expenses on various programmers	60.00	12.00	180.00	240.00	300.00	300.00	300.00
Salary	181.44	271.98	392.60	502.49	620.87	693.49	713.49
Repair &	58.50	117.00	175.50	234.00	292.50	292.50	292.50
Power & utilities	63.54	127.08	190.63	254.17	317.71	317.71	317.71
Research And Development	60.00	100.00	150.00	200.00	250.00	250.00	250.00
Depreciation and amortization	596.39	666.53	1251.08	993.88	993.88	852.26	384.62
Total Operating Expenses	1035.87	1434.60	2387.80	2488.54	2854.95	2785.96	2338.24
Operating Profit (A-B)	134.13	905.40	1122.20	2i91.46	2995.05	3064.04	3511.76
C. FINANCIAL EXPENSES							
Interest on loan	430.61	416.59	376.64	307.57	235.11	148.84	54.66
Interest on WC Loan	0.43	0.43	0.43	0.43	0.43	0.43	0.43
D. Other Expenses							
Administrative and General Expenses	23.40	46.80	175.50	234.00	292.50	292.50	292.50
Total Expenses	454.44	463.81	552.56	542.00	528.04	441.76	347.59
Profit before Tax	-320.30	441.59	569.64	1649.67	2467.01	2622.28	3164.18
Provision for Tax	-80.08	110.40	142.41	412.37	616.75	655.57	791.04
Profit After Tax	-240.23	331.20	427.23	1237.10	1850.26	1966.71	2373.13
Dividend	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retained Profits	-240.23	331.20	427.23	1,237.10	1,850.26	1,966.71	2,373.13

Breakeven Point

Break Even Point (BEP)		Amount (Rs. in Lakhs)						
SL	Particulars	Year – 1	Year - 2	Year - 3	Year - 4	Year - 5	Year - 6	Year - 7
A.	Net Sales	1170.00	2340.00	3510.00	4680.00	5850.00	5850.00	5850.00
B.	Variable Cost							
	Consumables	16.00	32.00	48.00	64.00	80.00	80.00	80.00
	Power and Utility	63.54	127.08	190.63	254.17	317.71	317.71	317.71
	Total Variable Cost	79.54	159.08	552.56	542.00	528.04	441.76	347.59
C.	Contribution (A-B)	1,090.46	2,180.92	2,957.44	4,138.00	5,321.97	5,408.24	5,502.41
D.	Fixed Cost							
	Salary	181.44	271.98	392.60	502.49	620.87	693.49	713.40
	Events	60.00	120.00	180.00	240.00	300.00	300.00	300.00
	Research	60.00	100.00	150.00	200.00	250.00	250.00	250.00
	Repair & Maintenance	58.50	117.00	175.50	234.00	292.50	292.50	292.50
	Interest on term Loan	430.61	416.59	376.64	307.57	235.11	148.84	54.66
	Interest on WC Loan	0.43	0.43	0.43	0.43	0.43	0.43	0.43
	Depreciation	596.39	666.53	1251.08	993.88	993.88	852.26	384.62
	Total Fixed Cost	1387.36	1,692.52	2,526.24	2,478.37	2,692.78	2,537.51	1,995.61
E.	Breakeven Point	127%	78%	85%	60%	51%	47%	36%
F.	Cash BEP	73%	47%	43%	36%	32%	31%	29%

Debt-Service Coverage Ratio

		Amount (Rs. in Lakhs)						
SL	Particulars	Year- 1	Year- 2	Year- 3	Year- 4	Year- 5	Year- 6	Year- 7
i	Profit	-240.23	331.20	427.23	1237.10	1850.26	1966.71	2373.13
ii	Depreciation	596.39	666.53	1251.08	993.88	993.88	852.26	384.62
iii	Interest	430.61	416.59	376.64	307.57	235.11	148.84	54.66
A	Total (i + ii+ iii)	786.77	1414.31	2054.94	2538.55	3079.25	2967.81	2812.42
i	Interest	430.61	416.59	376.64	307.57	235.11	148.84	54.66
ii	Principal repayment	0.00	360.00	600.00	900.00	960.00	1080.00	1166.00
B	Total (i + ii)	430.61	776.59	976.64	1207.57	1195.11	1228.84	1220.66
	DSCR (A / B)	1.83	1.82	2.10	2.10	2.58	2.42	2.30

Interest on Term Loan and Principal Repayment

Refer Annexure I for Loan Repayment Schedule.

We have assumed the repayment tenure of term loan for a period of 7 years, Rate of interest being 8.5% p.a. with a moratorium period of 48 months.

Address of Vendors

Name of Vendor	Address and Contact Number
Micro lab Instruments	3 Akshay Apartments, Ashram Road, Ahmedabad-380009 Ph. 7926575919
Akarui Solution LLP	403 Blue Rose Industrial Estate, Borivali (East), Mumbai, Maharashtra Ph. 07971481657
S.N. Medical System	Door no. 14-11-2, Rama Jogi Peta, Maharani Peta Cell Tower Building Visakhapatnam - 530002, Andhra Pradesh Ph. 08048707084

ANNEXURE- I

Year	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Annually
I													
Principal													
Opening	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	-
Repaid	-	-	-	-	-	-	-	-	-	-	-	-	-
Closing	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	5,066.00	-
Interest	35.88	35.88	35.88	35.88	35.88	35.88	35.88	35.88	35.88	35.88	35.88	35.88	430.61
II													
Principal													
Opening	5,066.00	5,036.00	5,006.00	4,976.00	4,946.00	4,916.00	4,886.00	4,856.00	4,826.00	4,796.00	4,766.00	4,736.00	-
Repaid	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	360.00
Closing	5,036.00	5,006.00	4,976.00	4,946.00	4,916.00	4,886.00	4,856.00	4,826.00	4,796.00	4,766.00	4,736.00	4,706.00	-
Interest	35.88	35.67	35.46	35.25	35.03	34.82	34.61	34.40	34.18	33.97	33.76	33.55	416.59
III													
Principal													
Opening	4,706.00	4,656.00	4,606.00	4,556.00	4,506.00	4,456.00	4,406.00	4,356.00	4,306.00	4,256.00	4,206.00	4,156.00	-
Repaid	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	600.00
Closing	4,656.00	4,606.00	4,556.00	4,506.00	4,456.00	4,406.00	4,356.00	4,306.00	4,256.00	4,206.00	4,156.00	4,106.00	-
Interest	33.33	32.98	32.63	32.27	31.92	31.56	31.21	30.86	30.50	30.15	29.79	29.44	376.64
IV													
Principal													
Opening	4,106.00	4,031.00	3,956.00	3,881.00	3,806.00	3,731.00	3,656.00	3,581.00	3,506.00	3,431.00	3,356.00	3,281.00	-
Repaid	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	900.00
Closing	4,031.00	3,956.00	3,881.00	3,806.00	3,731.00	3,656.00	3,581.00	3,506.00	3,431.00	3,356.00	3,281.00	3,206.00	-
Interest	28.55	28.02	27.49	26.96	26.43	25.90	25.37	24.83	24.30	23.77	23.24	22.71	307.57
V													
Principal													
Opening	3,206.00	3,126.00	3,046.00	2,966.00	2,886.00	2,806.00	2,726.00	2,646.00	2,566.00	2,486.00	2,406.00	2,326.00	-
Repaid	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	960.00
Closing	3,126.00	3,046.00	2,966.00	2,886.00	2,806.00	2,726.00	2,646.00	2,566.00	2,486.00	2,406.00	2,326.00	2,246.00	-
Interest	22.71	22.14	21.58	21.01	20.44	19.88	19.31	18.74	18.18	17.61	17.04	16.48	235.11
VI													
Principal													
Opening	2,246.00	2,156.00	2,066.00	1,976.00	1,886.00	1,796.00	1,706.00	1,616.00	1,526.00	1,436.00	1,346.00	1,256.00	-
Repaid	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	1,080.00
Closing	2,156.00	2,066.00	1,976.00	1,886.00	1,796.00	1,706.00	1,616.00	1,526.00	1,436.00	1,346.00	1,256.00	1,166.00	-
Interest	15.91	15.27	14.63	14.00	13.36	12.72	12.08	11.45	10.81	10.17	9.53	8.90	148.84
VII													
Principal													
Opening	1,166.00	1,071.00	976.00	881.00	786.00	691.00	596.00	501.00	406.00	311.00	216.00	116.00	-
Repaid	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	100.00	116.00	1,166.00
Closing	1,071.00	976.00	881.00	786.00	691.00	596.00	501.00	406.00	311.00	216.00	116.00	0.00	-
Interest	8.26	7.59	6.91	6.24	5.57	4.89	4.22	3.55	2.88	2.20	1.53	0.82	54.66