(Pages : 3) **B – 1632**

Reg. No. : .....

Name : .....

Fifth Semester B.B.A. Degree Examination, November 2016
(Career Related First Degree Programme Under CBCSS)
Group 2(b)
Core Course
BM 1542 : RESEARCH METHODOLOGY
(2013 Admn.)

Time : 3 Hours Max. Marks : 80

SECTION – A

Write short answers to **ten** questions in **one** or **two** sentences **each**. **Each** question carries 1 mark.

1. Define research.
2. Define sampling.
3. What is a research synopsis ?
4. What is induction ?
5. What is exploratory research ?
6. What is meant by plagiarism ?
7. What is a schedule ?
8. What is tabulation ?
9. What is bivariate analysis ?
10. What is a pilot study ?

P.T.O.

SECTION – B

Answer **any eight** questions in **not** exceeding **one** paragraph. **Each** question carries **2** marks.

11. What is a research design ?

12. Explain the meaning of random sampling.

13. Give a note on sampling error.

14. What is hypothesis ?

15. What is stratified sampling ?

16. What do you mean by review of literature ?

17. Define observation.

18. What is extraneous variable ?

19. What is scaling ?

20. What is a histogram ?

21. What do you mean by bibliography ?

22. What are the different sources of secondary data ?

SECTION – C

Answer **any six** questions in **not** exceeding **one** page **each**. **Each** question carries **4** marks.

23. What are the precautions to be taken by the researcher while using secondary data ?

24. Explain the scaling techniques used in research.

25. Point out the stages of report writing.

26. Distinguish questionnaire from schedule.

27. Give short notes on : a) Snow-ball sampling b) Quota sampling.

28. List the features of a research design.

29. Discuss the significance of research.

30. What are the important principles of sampling ?

31. Explain the steps involved in constructing a questionnaire.

SECTION – D

Answer **any two** questions in **not** exceeding **four** pages **each**. **Each** question carries **15** marks.

32. Describe the research process in detail.

33. What is graphical representation of data ? What are the types of graphs used in research ?

34. Explain important methods of sampling.

35. Illustrate some descriptive statistical measures used for data analysis.

(Pages : 2) **B – 1707**

Reg. No. : .....

Name : .....

Fifth Semester B.B.A. Degree Examination, November 2016
(Career Related First Degree Programme under CBCSS)
Group 2(b)
Core Course
BM 1542 : RESEARCH METHODOLOGY
(2014 Admn.)

Time : 3 Hours Max. Marks : 80

SECTION – A

I. Answer **all** questions in **one** or **two** sentences. **Each** question carries 1 mark.

1) Define Research.
2) What is Pure Research ?
3) What is Periodic Evaluation ?
4) What is survey ?
5) What do you mean by Hypotheses ?
6) Define 'Primary Data'.
7) What is Observation ?
8) What do you mean by Coding ?
9) What is Research Report ?
10) What is Bibliography ? **(10×1=10 Marks)**

SECTION – B

II. Answer **any 8** questions. **Each** question carries **2** marks.

11) What are Foot notes ?
12) What is Pilot Study ?
13) What is Replication ?
14) Explain projective technique.
15) What is measurement ?

P.T.O.

16) Explain data processing.

17) What is cross-sectional survey ?

18) What is basic research ?

19) What do you mean by classification ?

20) What is Diagnostic study ?

21) What is meant by Action Research ?

22) What is Research Problem ?

(8×2=16 Marks)

SECTION – C

III. Answer **any 6** questions. **Each** question carries **4** marks.

23) Explain the functions of Research Report.

24) Explain the qualities of a good Hypotheses.

25) Briefly describe the steps involved in survey.

26) Explain the different sources of problems.

27) Explain briefly the various methods of data collection.

28) Explain the functions of Pilot study.

29) Briefly explain the different types of Reports.

30) Explain the components of a Table.

31) Briefly explain the interviewing process.

(6×4=24 Marks)

SECTION – D

IV. Answer **any 2** questions. **Each** question carries **15** marks.

32) Explain the contents of a Research Report.

33) What do you mean by Research Problem Identification ? Explain the criteria for selection of a research problem.

34) What do you mean by Research Design ? Explain its importance.

35) What is Tabulation ? State the contents of a Table.

(2×15=30 Marks)

(Pages : 3) **B – 1634**

Reg. No. : .....

Name : .....

Fifth Semester B.B.A. Degree Examination, November 2016
(Career Related First Degree Programme Under CBCSS)
Group 2(b)
Core Course
BM 1544 : OPERATIONS MANAGEMENT
(2013 Admn.)

Time : 3 Hours Max. Marks : 80

SECTION – A

Write short answer to **ten** questions in **one** or **two** sentences. **Each** question carries **one** mark.

1. Define the term 'Operations Management'.
2. What is location planning ?
3. Explain the term 'Material Handling'.
4. What is production planning ?
5. What is sampling inspection ?
6. What is quality planning ?
7. Explain reliability prediction.
8. What is project scheduling ?
9. What do you mean by inventory management ?
10. What is Economic Order Quantity ? **(10×1=10 Marks)**

P.T.O.

SECTION – B

Answer **any eight** questions in **not** exceeding **one** paragraph. **Each** question carries **2** marks.

11. State the scope of operations management.

12. Explain the principles of scheduling.

13. List out the factors influencing the plant layout.

14. What are the objectives of quality control ?

15. What is master production schedule ?

16. What is work place design ?

17. What do you mean by quality parameter ?

18. What do you mean by control chart ?

19. State the objectives of material management.

20. What is J.I.T. inventory system ?

21. What do you mean by curve quality circle ?

22. Explain about 'Acceptance sampling'. **(8×2=16 Marks)**

SECTION – C

Answer **any six** questions **not** exceeding **one** page **each**. **Each** question carries **4** marks.

23. Explain the functions of an operations manager.

24. List out the characteristics of a product.

25. Explain various stages in production planning.

26. Briefly state the scope of materials handling.

27. Explain the concept of total quality management.

28. What are the principles of good plant layout ?

29. Explain different types of control chart.

30. Discuss various methods of inventory control.

31. Distinguish between quality control and inspection. **(6×4=24 Marks)**

SECTION – D

Answer **any two** questions, **each** carries **15** marks.

32. What is production plan ? Explain the steps and the factors influence the production plan.

33. Define control chart. Explain its objectives and types of control chart.

34. *Write a note on :*
    A) Material requirement planning.
    B) Product tree structure.

35. Explain plant location. Write about Brown and Gibson model. **(2×15=30 Marks)**

(Pages : 4) **B – 1706**

Reg. No. : .....

Name : .....

Fifth Semester B.B.A. Degree Examination, November 2016
(Career Related First Degree Programme Under CBCSS)
Group 2(b)
Core Course
BM 1541 – QUANTITATIVE TECHNIQUE FOR MANAGEMENT
(2014 Admn.)

Time : 3 Hours Max. Marks : 80

SECTION – A

I. Answer **all** the questions in **one** or **two** sentences. **Each** question carries **1** mark. **(10×1=10 Marks)**

1) Define linear programming.
2) Basic feasible solution.
3) Surplus variable.
4) Give two situations where represent is carried out.
5) Dummy job.
6) Unbalanced assignment problem.
7) Total Float.
8) Event.
9) Latest start time and earliest completion time.
10) Critical path.

SECTION – B

II. Answer **any 8** questions. **Each** question carries **2** marks. **(8×2=16 Marks)**

11) Define operations research. Give any two characteristics.
12) What is modelling in operations research ?
13) Distinguish assignment and transportation problem.

P.T.O.

14) What do you mean by group replacement policy ? When is it suitable ?

15) What do you understand by infeasible optimal solution ?

16) Give any four advantages of PERT.

17) What are the steps in critical path method ?

18) What are the steps in the operation research process ?

19) What are the advantages of linear programming ?

20) When does multiple optimal solution arise in L.P.P. ?

21) State complete enumeration method of assignment problem.

22) What is maximisation transportation problem ?

SECTION – C

III. Answer **any 6** questions. **Each** question carries **4** marks. **(6×4=24 Marks)**

23) What are the assumptions of L.P.P. ?

24) Mention a few applications of assignment method.

25) What are the steps in the graphical method of Linear programming problem ?

26) What are the applications of operations research in financial management ?

27) Compare PERT and CPM.

28) A firm produces three products. These products are processed on three different machines. The time required to manufacture one unit of each of the three products and the daily capacity of the three machines are given in the table below :

Machine	**Time per unit (minutes)**			**Machine capacity (minutes/day)**
	Product 1	Product 2	Product 3	
M1	2	3	2	440
M2	4	–	3	470
M3	2	5	–	430

It is required to determine the daily number of units to be manufactured for each product. The profit per unit for product 1, 2 and 3 are Rs. 4, Rs. 3 and Rs. 6 respectively. It is assumed that the amounts produced are consumed in the market. Formulate the mathematical model for the problem.

29) The maintenance cost and resale value per year of a machine whose purchase price is Rs. 7,000 are given below :

Year	1	2	3	4	5	6	7	8
Maintenance cost in Rs.	900	1200	1600	2100	2800	3700	4700	5900
Resale value in Rs.	4000	2000	1200	600	500	400	400	400

When should the machine be replaced ?

30) From the following draw network diagram, find critical path and the project time duration.

Activity	Time
1 – 2	2
1 – 4	2
1 – 7	1
2 – 3	4
3 – 5	1
4 – 6	5
4 – 8	8
5 – 6	4
6 – 9	9
7 – 8	3
8 – 9	5

31) What are the requirements for employing linear programming techniques ?

SECTION – D

IV. Answer **any two** questions. **Each** question carries **15** marks. **(2×15=30 Marks)**

32) Solve the following by simplex method.

Max $z = 800x_1 + 600x_2 + 300x_3$

s.t. $10x_1 + 4x_2 + 5x_3 \leq 2000$

$2x_1 + 5x_2 + 4x_3 \leq 1009$

$x_1 \geq 0, x_2 \geq 0, x_3 \geq 0.$

33) Solve the following transportation problem.

		I	II	III	
	1	2	7	4	5
	2	3	3	1	8
Demand	3	5	4	7	7 **Supply**
	4	1	6	2	14
		7	9	18	

34) The following details are given for a project A.

Activity :	1 – 2	1 – 3	1 – 4	2 – 5	4 – 6	3 – 7	5 – 7	6 – 7	5 – 8	6 – 9
Duration	10	8	9	8	7	16	7	7	6	5

Activity :	7 – 10	8 – 10	9 – 10
Duration	12	13	15

You are required to construct network diagram, determine T_E and T_L values, EST, LST, EFT and LET values of all activities. Also identify critical path.

35) A company has 4 machines, on which to do 3 jobs. Each job can be assigned to one and only one machine. The cost of each job on such machine is given in the following table :

		Machines			
		W	X	Y	Z
	A	18	24	28	32
Jobs	B	8	13	17	19
	C	10	15	19	22

Determine the allocation that minimises the cost.

(Pages : 2) **B – 1710**

Reg. No. : .....

Name : .....

Fifth Semester B.B.A. Degree Examination, November 2016
(Career Related First Degree Programme Under CBCSS)
Group 2(b)
Elective Course
BM 1561.2 : CUSTOMER RELATIONSHIP MANAGEMENT
(2014 Admn.)

Time : 3 Hours Max. Marks : 80

SECTION – A

I. Answer **all** questions in **one** or **two** sentences. **Each** question carries **one** mark.

1) CRM
2) Customer profitability
3) Public relation parties in hotels
4) Guest History Card
5) Call centre
6) Event
7) Analytical CRM
8) Data analysis
9) Managing customer relationship
10) Food festivals. **(10×1=10 Marks)**

SECTION – B

II. Answer **any 8** questions. **Each** question carries **2** marks.

11) What are the opportunity management in CRM ?
12) What do you mean by sale in CRM ?
13) What is marketing planning in CRM ?
14) What is customer service in CRM ?
15) Distinguish supply chain management and customer relationship management.

P.T.O.

16) What is sales force ?

17) Define data bases.

18) What is business plan ?

19) What is E-Business ?

20) What is complacency ?

21) Who is a supplier ?

22) Who is a customer ? **(8x2=16 Marks)**

SECTION – C

III. Answer **any 6** questions. **Each** question carries **4** marks.

23) What are the six stages in the customer care life cycle ?

24) Define customer satisfaction and discuss how companies attract new customers and retain them.

25) Write a note on strategic perspective of CRM.

26) What are the key benefits of CRM ?

27) Explain evolution of CRM.

28) Explain importance of CRM.

29) List and elaborate data mining benefit.

30) What are the major support and challenges the organization faces in implementing a CRM system ?

31) Discuss various tools of E-CRM with suitable examples. **(6x4=24 Marks)**

SECTION – D

IV. Answer **any 2** questions. **Each** question carries **15** marks.

32) What are the seven building blocks of CRM and explain with examples.

33) Discuss various types of CRM initiatives.

34) Maintaining customer loyalty is your top priority, but how to do it ?

35) Discuss the main objectives and need for customer relationship management.

(2x15=30 Marks)

(Pages : 3) **B – 1633**

Reg. No. : .....

Name : .....

Fifth Semester B.B.A. Degree Examination, November 2016
(Career Related First Degree Programme Under CBCSS)
Group 2(b)
Core Course
BM 1543 : RETAIL MANAGEMENT
(2013 Admn.)

Time: 3 Hours Max. Marks : 80

SECTION – A

Write short answers to **ten** questions in **one** or **two** sentences **each**. **Each** question carries a mark of **1**.

1. What is meant by retail business ?
2. What is a Convenience Store ?
3. What do you mean by classy retailing ?
4. What is meant by positioning in retail management ?
5. What is discriminatory pricing ?
6. What is E-tailing ?
7. What is visual merchandising ?
8. What are private labels ?
9. What do you mean by impulse purchase ?
10. What is the meaning of customer loyalty ? **(10×1=10 Marks)**

P.T.O.

SECTION – B

Answer **any eight** questions in **not** exceeding **one** paragraph. **Each** question carries **2** marks.

11. Distinguish between supermarket and hyper market.

12. Enumerate the pull factors for global retailers to India.

13. What is a boutique style layout ?

14. What is a solitary site ?

15. Who are Balance Seekers ?

16. What are the ways in which retailers can ensure safety and security of their outlets ?

17. What is franchising ?

18. Distinguish between single brand retailing and multi brand retailing.

19. Whom do you consider as a reference group for a purchase ?

20. Who are known as technologies babies ?

21. What is meant by store atmosphere ?

22. What is skimming pricing ? **(8×2=16 Marks)**

SECTION – C

Answer **any six** questions in **not** exceeding **one** page. **Each** question carries **4** marks.

23. What are the benefits of standalone stores ?

24. Narrate the key considerations for a retailer before entering a rural market.

25. What are the main objectives of a good store design ?

26. What are the different types of sales promotion ?

27. What do you mean by retail mix ?

28. What are the factors affecting the choice of communication methods by a retailer ?

29. Classify the customers visiting retail outlets.

30. What are the benefits of online retailing ?

31. What are the stages in consumer buying process ? **(6×4=24 Marks)**

SECTION – D

Answer **any two** questions in **not** exceeding **four** pages. **Each** question carries **15** marks.

32. Examine in detail the factors affecting retail pricing.

33. Explain the different forms of retail promotion and communication with customers.

34. Give an account of the growth of retail industry in India.

35. Assuming yourselves to be a retailer, what are the points you consider to ensure store loyalty ? **(2×15=30 Marks)**

(Pages : 4) **B – 1631**

Reg. No. : .....

Name : .....

Fifth Semester B.B.A. Degree Examination, November 2016
(Career Related First Degree Programme under CBCSS)
Group 2(b)
Core Course
BM 1541 – OPERATIONS RESEARCH
(2013 Admn.)

Time : 3 Hours Max. Marks : 80

SECTION – A

Write short answers to **ten** questions in **one** or **two** sentences **each**. **Each** question carries a mark of **1**.

1. What is a network ?
2. What is meant by unbalanced assignment problem ?
3. What is operations research ?
4. What is the value of game ?
5. What is float in a network ?
6. Find the trace of $M = \begin{bmatrix} 5 & 2 & 7 \\ -1 & 3 & 2 \\ 0 & 7 & 1 \end{bmatrix}$.
7. What is Linear Programming ?
8. What is meant by transportation problems ?
9. What is meant by sequencing problems ?
10. What do you mean by zero sum game ?

SECTION – B

Answer **any eight** questions in **not** exceeding **one** paragraph. **Each** question carries **2** marks.

11. Explain modeling in OR.
12. List the replacement situations.

P.T.O.

13. What is the value of the game for the following pay off matrix ? Who will win and why ?

$$\begin{array}{c} \\ X \end{array}\begin{array}{c} \begin{matrix} Y \end{matrix} \\ \begin{bmatrix} -2 & 1 \\ -1 & 2 \end{bmatrix} \end{array}$$

14. Compare between slack and float.

15. Differentiate between slack and surplus variable in LPP.

16. List the limitations of CPM.

17. Solve the following game by applying the principle of dominance.

$$\begin{array}{c} \\ X_1 \\ X_2 \\ X_3 \end{array}\begin{array}{c} \begin{matrix} Y_1 & Y_2 & Y_3 \end{matrix} \\ \begin{bmatrix} 1 & 3 & 1 \\ 0 & -4 & -3 \\ 1 & 5 & -1 \end{bmatrix} \end{array}$$

18. Vitamin A & B are available in two different products X & Y. One unit of X contain 2 unit of Vitamin A and 3 unit of Vitamin B. One unit of Y contain 10 units of Vitamin A and 8 unit of Vitamin B. The minimum daily consumption of Vitamin A and Vitamin B should be 1000 and 1500 respectively. One unit of X costs Rs. 6/- and one unit of Y costs Rs. 7/-. What should be the intake of P & Q inorder to minimise cost.

19. Find the determinant $\begin{bmatrix} 2 & 1 & 5 \\ 1 & 2 & 0 \\ 2 & 1 & 3 \end{bmatrix}$.

20. Solve the following TP using least cost entry method.

	Destination			
Sources	P	Q	R	Supply
X	5	4	1	2
Y	0	6	2	4
Z	1	3	4	6
Demand	1	8	3	

21. Construct a network diagram from the following data :

Activity :	1 – 2	1 – 3	1 – 4	2 – 6	4 – 5	3 – 6	5 – 6
Duration :	5	2	1	7	3	2	4

22. What are maximin and minimax ?

SECTION – C

Answer **any six** questions in **not** exceeding **one** page **each**. **Each** question carries **4** marks.

23. Solve graphically

Maximise $z = 10x + 20y$

subject to $3x + 2y \leq 36$

$x + 2y \leq 20$

$3x + 4y \leq 42$

$x, y \geq 0$

24. Explain basic assumptions of LPP.

25. Find the inverse of $A = \begin{bmatrix} 1 & -1 & 2 \\ 0 & 2 & 3 \\ 3 & -2 & 4 \end{bmatrix}$.

26. Solve the following game problem graphically.

		Player B	
		B_1	B_2
Player A	A_1	−2	5
	A_2	−5	3
	A_3	0	−2
	A_4	−3	0
	A_5	1	4

27. From the following table construct a network diagram and find the critical path and project duration.

Jobs	:	1–2	1–6	2–3	2–4	3–5	4–5	5–8	6–7	7–8
Most likely	:	6	5	12	5	11	6	4	9	19
Optimistic	:	3	2	6	2	5	3	1	3	4
Pessimistic	:	*15*	*14*	*30*	*8*	*17*	*15*	*7*	*27*	*28*

28. Solve the minimal assignment problem

		Job			
		1	2	3	4
Man	A	11	29	20	14
	B	17	32	8	30
	C	43	24	20	20
	D	13	29	28	13

29. Explain the sequencing problem with its assumptions.

30. Briefly explain VAM in transportation problem.

31. Find the initial basic feasible solution of the transportation problem using North West Corner Rule.

	Destination			
Sources	A	B	C	Supply
1	2	7	4	5
2	3	3	1	8
3	5	4	7	7
4	1	6	2	14
Demand	7	9	18	

SECTION – D

Answer **any two** questions in **not** exceeding **four** page **each**. **Each** question carries **15** marks.

32. Solve LPP using simplex method

Maximise $z = 10x_1 + 6x_2$

subject to $2x_1 + 2x_2 \leq 4$

$10x_1 + 4x_2 \leq 20$

$6x_1 + 16x_2 \leq 24$

$x_1, x_2 \geq 0$

33. Solve the following assignment problem.

	I	II	III	IV	V
A	2	4	3	4	7
B	3	5	4	2	6
C	6	7	4	5	7
D	4	2	5	3	3
E	2	6	7	6	5

34. What are transportation problem ? Explain MODI method of solution to TP.

35. What is meant by replacement problem ? What should be the replacement policy when money value doesnot change with time ?

(Pages : 4) **B – 1706**

Reg. No. : .....

Name : .....

Fifth Semester B.B.A. Degree Examination, November 2016
(Career Related First Degree Programme Under CBCSS)
Group 2(b)
Core Course
BM 1541 – QUANTITATIVE TECHNIQUE FOR MANAGEMENT
(2014 Admn.)

Time : 3 Hours Max. Marks : 80

SECTION – A

I. Answer **all** the questions **in one** or **two** sentences. **Each** question carries **1** mark. **(10×1=10 Marks)**

1) Define linear programming.

2) Basic feasible solution.

3) Surplus variable.

4) Give two situations where represent is carried out.

5) Dummy job.

6) Unbalanced assignment problem.

7) Total Float.

8) Event.

9) Latest start time and earliest completion time.

10) Critical path.

SECTION – B

II. Answer **any 8** questions. **Each** question carries **2** marks. **(8×2=16 Marks)**

11) Define operations research. Give any two characteristics.

12) What is modelling in operations research ?

13) Distinguish assignment and transportation problem.

P.T.O.

14) What do you mean by group replacement policy ? When is it suitable ?

15) What do you understand by infeasible optimal solution ?

16) Give any four advantages of PERT.

17) What are the steps in critical path method ?

18) What are the steps in the operation research process ?

19) What are the advantages of linear programming ?

20) When does multiple optimal solution arise in L.P.P. ?

21) State complete enumeration method of assignment problem.

22) What is maximisation transportation problem ?

SECTION – C

III. Answer **any 6** questions. **Each** question carries **4** marks. **(6×4=24 Marks)**

23) What are the assumptions of L.P.P. ?

24) Mention a few applications of assignment method.

25) What are the steps in the graphical method of Linear programming problem ?

26) What are the applications of operations research in financial management ?

27) Compare PERT and CPM.

28) A firm produces three products. These products are processed on three different machines. The time required to manufacture one unit of each of the three products and the daily capacity of the three machines are given in the table below :

Machine	**Time per unit (minutes)**			**Machine capacity (minutes/day)**
	Product 1	Product 2	Product 3	
M1	2	3	2	440
M2	4	–	3	470
M3	2	5	–	430

It is required to determine the daily number of units to be manufactured for each product. The profit per unit for product 1, 2 and 3 are Rs. 4, Rs. 3 and Rs. 6 respectively. It is assumed that the amounts produced are consumed in the market. Formulate the mathematical model for the problem.

29) The maintenance cost and resale value per year of a machine whose purchase price is Rs. 7,000 are given below :

Year	1	2	3	4	5	6	7	8
Maintenance cost in Rs.	900	1200	1600	2100	2800	3700	4700	5900
Resale value in Rs.	4000	2000	1200	600	500	400	400	400

When should the machine be replaced ?

30) From the following draw network diagram, find critical path and the project time duration.

Activity	Time
1 – 2	2
1 – 4	2
1 – 7	1
2 – 3	4
3 – 5	1
4 – 6	5
4 – 8	8
5 – 6	4
6 – 9	9
7 – 8	3
8 – 9	5

31) What are the requirements for employing linear programming techniques ?

SECTION – D

IV. Answer **any two** questions. **Each** question carries **15** marks. **(2×15=30 Marks)**

32) Solve the following by simplex method.

Max $z = 800x_1 + 600x_2 + 300x_3$

s.t. $10x_1 + 4x_2 + 5x_3 \leq 2000$

$2x_1 + 5x_2 + 4x_3 \leq 1009$

$x_1 \geq 0, x_2 \geq 0, x_3 \geq 0.$

33) Solve the following transportation problem.

		I	II	III	
	1	2	7	4	5
	2	3	3	1	8
Demand	3	5	4	7	7
	4	1	6	2	14
		7	9	18	

Supply

34) The following details are given for a project A.

Activity :	1 – 2	1 – 3	1 – 4	2 – 5	4 – 6	3 – 7	5 – 7	6 – 7	5 – 8	6 – 9
Duration	10	8	9	8	7	16	7	7	6	5

Activity :	7 – 10	8 – 10	9 – 10
Duration	12	13	15

You are required to construct network diagram, determine T_E and T_L values, EST, LST, EFT and LET values of all activities. Also identify critical path.

35) A company has 4 machines, on which to do 3 jobs. Each job can be assigned to one and only one machine. The cost of each job on such machine is given in the following table :

		Machines			
		W	X	Y	Z
	A	18	24	28	32
Jobs	B	8	13	17	19
	C	10	15	19	22

Determine the allocation that minimises the cost.

(Pages : 2) **B – 1708**

Reg. No. : .....

Name : .....

Fifth Semester B.B.A. Degree Examination, November 2016
(Career Related First Degree Programme Under CBCSS)
Group 2(b) : Core Course
BM 1543 : OPERATIONS MANAGEMENT
(2014 Admn.)

Time : 3 Hours Max. Marks : 80

SECTION – A

I. Answer **all** questions in **one** or **two** sentences. **Each** question carries **1** mark.

1) Define Operations Management.
2) What is Quality Control ?
3) What is meant by plant location ?
4) What is MRP ?
5) What is Inventory ?
6) What is Routing ?
7) What is Dispatching ?
8) What is Material Control ?
9) Define Quality Assurance.
10) Define TQM. **(10×1=10 Marks)**

SECTION – B

II. Answer **any 8** questions. **Each** question carries **2** marks.

11) Explain Non-manufacturing operations.
12) What is break down maintenance ?
13) What is capacity planning ?

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14) Write a note on process layout.
15) What is material control cycle ?
16) Explain control chart.
17) Explain strategic planning.
18) What is operational planning ?
19) What is Inventory Management ?
20) What is Assembly Processes ?
21) What is make or buy decision ?
22) Write a note on ABC analysis. **(8×2=16 Marks)**

SECTION – C

III. Answer **any 6** questions. **Each** question carries **4** marks.

23) Explain the scope of Operations Management.
24) Explain the recent trends in Operations Management.
25) Explain the advantages and disadvantages of process layout.
26) What is maintenance management ? Explain its functions.
27) What is preventive maintenance ? State its merits.
28) Explain the importance of JIT system.
29) Explain the process of inventory management and control.
30) Explain the dimensions of product quality.
31) Explain the various types of control charts. **(6×4=24 Marks)**

SECTION – D

IV. Answer **any 2** questions. **Each** question carries **15** marks.

32) What is Quality Circle ? Briefly explain its merits.
33) Explain the types of Layout. Also state its advantages.
34) Explain material requirement planning. Briefly explain its advantages.
35) Explain the role of planning and control in Operations Management.

(2×15=30 Marks)