

**Exam Name** : GDMM Paper 2 Quantitative Techniques & Operations Research

**Total Questions** : 50

**Q.1** Interger programming is a

**Marks: 2**

**Question ID:**  
5226752

No	Options Details	Select Option
1	non- linear programming problem	
2	special case of linear priogramming problem	
3	special case of transportation problem	
4	simulation technique	

**Q.2** A sequencing problem deals with

**Marks: 2**

**Question ID:**  
5226753

No	Options Details	Select Option
1	solving problem with single objective and multiple goals	
2	assigning resources to number of activities	
3	selection of an optimum order for number of jobs to be performed	
4	problem that involves waiting	

**Q.3** Brand loyalty is

**Marks: 2**

**Question ID:**

5226754

No	Options Details	Select Option
1	the process of choosing to switch from routine brand to a different brand	
2	used to estimate probabilities of brand switching	
3	a method of output analysis	
4	where a person buys products from same manufacturer repeatedly	

**Q.4** Vogel's approximation method is applicable to

**Marks: 2**

**Question ID:**

5226755

No	Options Details	Select Option
1	assignment problem	
2	transportation problem	
3	queuing problem	
4	game theory problem	

**Q.5** Hungarian method can be used to solve

**Marks: 2**

**Question ID:**  
5226756

No	Options Details	Select Option
1	assignment problem	
2	transportation problem	
3	decision making problem	
4	simulation problem	

**Q.6** PERT uses

**Marks: 2**

**Question ID:**  
5226757

No	Options Details	Select Option
1	activity oriented network	
2	deterministic network	
3	single estimate for the time	
4	event oriented network	

**Q.7** At Break-even point of sales

**Marks: 2**

**Question ID:**

5226758

No	Options Details	Select Option
1	fixed cost is equal to variable cost	
2	fixed cost is less than variable cost	
3	there is neither profit nor loss	
4	fixed cost is greater than variable cost	

**Q.8** A investment proposal is accepted if

**Marks: 2**

**Question ID:**

5226759

No	Options Details	Select Option
1	the present value of future cash inflows is lesser than the present value of initial investment	
2	the present value of future cash inflows is greater than the present value of initial investment	
3	the present value index is less than 1	
4	internal rate of return is less than the required rate of return	

**Q.9** A dummy activity in a project consumes

**Marks: 2**

**Question ID:**  
5226760

No	Options Details	Select Option
1	a fixed amount of resource	
2	no resource	
3	a variable amount of resource	
4	very high amount of resource	

**Q.10** Decision tree is useful

**Marks: 2**

**Question ID:**  
5226761

No	Options Details	Select Option
1	when outcomes are uncertain	
2	when outcomes are certain	
3	when problem is unstructured	
4	when there is no logical relationship between different parts of the decision making process	

**Q.11** In a game, if the gain of one player is equal to the loss of another player

**Marks: 2**

**Question ID:**

5226762

No	Options Details	Select Option
1	it is a two person non zero-sum game	
2	it is a mixed strategy game	
3	it is a two person zero-sum game	
4	it is a pure strategy game	

**Q.12** Customer moving from one queue to another thinking that he will get served faster by doing so is

**Marks: 2**

**Question ID:**

5226763

No	Options Details	Select Option
1	impatient customer	
2	balking customer	
3	jockeying customer	
4	patient customer	

**Q.13** EOQ is the level at which holding cost is

**Marks: 2**

**Question ID:**

5226764

No	Options Details	Select Option
1	greater than ordering cost	
2	lesser than ordering cost	
3	equal to the ordering cost	
4	zero	

**Q.14** When total capacity is equal to the total demand the transportation problem is called a

**Marks: 2**

**Question ID:**

5226765

No	Options Details	Select Option
1	unbalanced problem	
2	balanced problem	
3	degenerate problem	
4	ineffective problem	

**Q.15** Arrival rate in queuing theory follows

**Marks: 2**

**Question ID:**  
5226766

No	Options Details	Select Option
1	binomial distribution	
2	exponential distribution	
3	poisson distribution	
4	normal distribution	

**Q.16** Internal rate of return is the rate at which the net present value of investment is

**Marks: 2**

**Question ID:**  
5226767

No	Options Details	Select Option
1	positive	
2	negative	
3	one	
4	zero	



**Q.17** Graphical method to solve a LPP can be used when

**Marks: 2**

**Question ID:**

5226768

No	Options Details	Select Option
1	three variables are involved	
2	two variables are involved	
3	four variables are involved	
4	five variables are involved	

**Q.18** SIRO stands for

**Marks: 2**

**Question ID:**

5226769

No	Options Details	Select Option
1	service in rational order	
2	sales in rational order	
3	service in random order	
4	sales in random order	

**Q.19** GPP stands for

**Marks: 2**

**Question ID:**  
5226770

No	Options Details	Select Option
1	grouped programming problem	
2	graphical placement problem	
3	goal programming problem	
4	goal placement problem	

**Q.20** CVP stands for

**Marks: 2**

**Question ID:**  
5226771

No	Options Details	Select Option
1	cost volume profit	
2	cost value profit	
3	cost value programme	
4	cost volume programme	

**Q.21** NLP stands for

**Marks: 2**

**Question ID:**

5226772

No	Options Details	Select Option
1	net Logistic problem	
2	non linear programming	
3	net linear programming	
4	non logistic programming	

**Q.22** PERT stands for

**Marks: 2**

**Question ID:**

5226773

No	Options Details	Select Option
1	problem evaluation and review technique	
2	problem evaluation and research technique	
3	program evaluation and research technique	
4	program evaluation and review technique	

**Q.23** If the number of independent allocations in a feasible solution of a transportation problem is less than  $m+n-1$  then it is called a

**Marks: 2**

**Question ID:**  
5226774

No	Options Details	Select Option
1	balanced problem	
2	unbalanced problem	
3	degenerate problem	
4	ineffective problem	

**Q.24** The assignment costs of a dummy cells in an assignment problem are always assigned as

**Marks: 2**

**Question ID:**  
5226775

No	Options Details	Select Option
1	one	
2	two	
3	zero	
4	a very high value	

**Q.25** When intuition guides a problem solver to find solution it is called

**Marks: 2**

**Question ID:**  
5226776

No	Options Details	Select Option
1	function model	
2	mathematical model	
3	heuristic model	
4	probabilistic model	

**Q.26** Maximin or Minimax is known as

**Marks: 2**

**Question ID:**  
5226777

No	Options Details	Select Option
1	criteria of optimism	
2	criteria of realism	
3	savage criteria	
4	criteria of pessimism	

**Q.27** North West Corner method is used to solve

**Marks: 2**

**Question ID:**

5226778

No	Options Details	Select Option
1	assignment problem	
2	transportation problem	
3	simulation problem	
4	queuing problem	

**Q.28** The sum of preventive maintenace cost and breakdown maintenace cost is

**Marks: 2**

**Question ID:**

5226779

No	Options Details	Select Option
1	fixed cost	
2	variable cost	
3	total cost	
4	replacement cost	

**Q.29** Principle of dominance is used to

**Marks: 2**

**Question ID:**  
5226780

No	Options Details	Select Option
1	increase the size of pay-off matrix	
2	reduce the size of pay-off matrix	
3	transpose a pay-off matrix	
4	invert a pay-off matrix	

**Q.30** In a game the point at which the maximin value is equal to minimax value is called

**Marks: 2**

**Question ID:**  
5226781

No	Options Details	Select Option
1	equilibrium point	
2	cut-off point	
3	saddle point	
4	point of dominance	

**Q.31** Cost associated with changing over equipment from producing one item to producing another is called

**Marks: 2**

**Question ID:**  
5226782

No	Options Details	Select Option
1	ordering cost	
2	stock-out cost	
3	shipping cost	
4	setup cost	

**Q.32** The outcome of the following trial is dependent on the outcome of the preceding trial is stated under

**Marks: 2**

**Question ID:**  
5226783

No	Options Details	Select Option
1	Binomial assumption	
2	Markov process	
3	Monte Carlo method	
4	Delphi model	



**Q.33** Monte Carlo method is part of

**Marks: 2**

**Question ID:**  
5226784

No	Options Details	Select Option
1	deterministic simulation model	
2	probabilistic simulation model	
3	sequential model	
4	EOQ model	

**Q.34** In a LPP the amount of unused resources is represented by

**Marks: 2**

**Question ID:**  
5226785

No	Options Details	Select Option
1	surplus variables	
2	artificial variables	
3	slack variables	
4	dummy variables	

**Q.35** Goal programming is also referred as

**Marks: 2**

**Question ID:**

5226786

No	Options Details	Select Option
1	multi-criteria programming	
2	special linear programming	
3	non linear programming	
4	general linear programming	

**Q.36** The difference between the latest start time and the earliest start time of that activity is

**Marks: 2**

**Question ID:**

5226787

No	Options Details	Select Option
1	free float	
2	independent float	
3	total float	
4	critical float	

**Q.37** The shortest time taken to complete the activity is

**Marks: 2**

**Question ID:**

5226788

No	Options Details	Select Option
1	most likely time	
2	optimistic time	
3	pessimistic time	
4	expected time	

**Q.38** Project crashing is a method for

**Marks: 2**

**Question ID:**

5226789

No	Options Details	Select Option
1	shortening the project duration	
2	extending the project duration	
3	decreaing the cost of the project	
4	increasing the cost of the project	

**Q.39** The time required by a job on each machine is called

**Marks: 2**

**Question ID:**  
5226790

No	Options Details	Select Option
1	idle time	
2	expected time	
3	processing time	
4	total elapsed time	

**Q.40** Periodic inspection to detect and prevent failures

**Marks: 2**

**Question ID:**  
5226791

No	Options Details	Select Option
1	breakdown maintenance	
2	preventive maintenance	
3	overhauling	
4	emergency maintenance	

**Q.41** The policy where all items are replaced irrespective of the items failed or not failed is

**Marks: 2**

**Question ID:**

5226792

No	Options Details	Select Option
1	individual replacement policy	
2	emergency replacement policy	
3	regular replacement policy	
4	group replacement policy	

**Q.42** Decisions having impact on immediate business environment

**Marks: 2**

**Question ID:**

5226793

No	Options Details	Select Option
1	strategic decisions	
2	operating decisions	
3	tactical decisions	
4	administrative decisions	

**Q.43** Savage criteria is a decision making criteria under

**Marks: 2**

**Question ID:**  
5226794

No	Options Details	Select Option
1	certainty	
2	risk	
3	emergency	
4	uncertainty	

**Q.44** Discounted cash flow method is based on

**Marks: 2**

**Question ID:**  
5226795

No	Options Details	Select Option
1	the number of years taken for getting back the investment	
2	the profits accrued out of the investment	
3	the timing of benefits	
4	the quantum of sales	

**Q.45** A basic application of CVP analysis is

**Marks: 2**

**Question ID:**  
5226796

No	Options Details	Select Option
1	break-even analysis	
2	time series analysis	
3	regression analysis	
4	output analysis	

**Q.46** If unit sales price is ₹ 25 unit variable cost is ₹ 15 and total fixed cost is ₹ 30,000 , then break-even point in units is

**Marks: 2**

**Question ID:**  
5226797

No	Options Details	Select Option
1	1200	
2	1500	
3	3000	
4	2000	

**Q.47** Cost of the project is ₹ 1,00,000; annual earnings of the project are ₹ 20,000.  
Calculate pay back period

**Marks: 2**

**Question ID:**  
5226798

No	Options Details	Select Option
1	4 years	
2	6 years	
3	5 years	
4	10 years	

**Q.48** Crash cost ₹ 80 ; Normal cost ₹ 50; Crash time 4 days; Normal time 6 days. What is the Cost slope

**Marks: 2**

**Question ID:**  
5226799

No	Options Details	Select Option
1	20	
2	15	
3	18	
4	10	



**Q.49**

Optimistic time is 4 days; Pessimistic time is 8 days; Most likely time is 6 days. What is the expected time ?

**Marks: 2****Question ID:**

5226800

No	Options Details	Select Option
1	6 days	
2	8 days	
3	10 days	
4	12 days	

**Q.50**

Optimistic time is 4 days; Pessimistic time is 8 days; Most likely time is 6 days. What is the variance of activity time?

**Marks: 2****Question ID:**

5226801

No	Options Details	Select Option
1	0.222	
2	0.666	
3	0.444	
4	0.111	