

(ISO/IEC - 27001 - 2005 Certified)

SUMMER - 13 EXAMINATION

Subject Code: 12219 <u>Model Answer</u>

Important Instructions to examiners:

- 1) The answers should be examined by key words and not as word-to-word as given in the model answer scheme.
- 2) The model answer and the answer written by candidate may vary but the examiner may try to assess the understanding level of the candidate.
- 3) The language errors such as grammatical, spelling errors should not be given more Importance (Not applicable for subject English and Communication Skills).
- 4) While assessing figures, examiner may give credit for principal components indicated in the figure. The figures drawn by candidate and model answer may vary. The examiner may give credit for any equivalent figure drawn.
- 5) Credits may be given step wise for numerical problems. In some cases, the assumed constant
- values may vary and there may be some difference in the candidate's answers and model answer.
- 6) In case of some questions credit may be given by judgement on part of examiner of relevant answer based on candidate's understanding.
- 7) For programming language papers, credit may be given to any other program based on equivalent concept.

Q. 1 a) i) What are the function of management?

Ans. Function of Management

- 1. Forecasting
- 2. Planning
- 3. Organizing
- 4. Staffing
- 5. Directing Leadership, Communication, Motivation, Supervision.
- 6. Co-ordinating
- 7. Controlling
- 8. Decision Making

[4 marks]



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ii) Why is it necessary to have controlling function of management?

Ans. - Controlling is the process that measures current performance and guides it towards some predetermined goal

- Controlling involves
 - i) The monitoring of programme activity to make sure that end objective are being met.
 - ii) The initiation of corrective action is required to over-come problems, if any, hindering the accomplishment of objective
- Checks and examinations are required on a periodic basis to ensure that the things are proceeding as per plans established.
- Controlling is necessary to ensure that orders are not misunderstood, rules are not violated and objectives have been unknowingly shifted.
- Control means control of persons and other things.
- Controlling is continuous process which measures the progress of operations, (compares) verifies their conformity with the predetermined plan and takes corrective action, if required.
- As explain above, controlling, process
- i) set standards,
- ii) Measures job performances and
- iii) Takes corrective action if required

[explanation 1 Mark each point]

iii) State any eight principle of management suggested by Henry Fayol.

Ans. Management Principles developed by Henri Fayol:

- 1. Division of work
- 2. Authority
- 3. Discipline
- 4. Unity of command
- 5. Unity of direction
- 6. Subordination of Individual interests to the general interests.
- 7. Remuneration.



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- 8. Centralization.
- 9. Scalar Chain.
- 10. Order
- 11. Equity
- 12. Stability of tenure of personnel
- 13. Initiative
- 14. Esprit de Corps

[4 marks]

iv) Explain the concept of Intellectual Property Right.

- Ans: Intellectual property (IP) is a legal concept which refers to creations of the mind for which exclusive rights are recognized.
 - -Under intellectual property law, owners are granted certain exclusive rights to a variety of intangible assets, such as musical, literary, and artistic works; discoveries and inventions; and words, phrases, symbols, and designs.
 - Common types of intellectual property rights include copyright, trademarks, patents, industrial design rights, trade dress, and in some jurisdictions trade secrets.

[Meaning -2 Marks , Explanation -2 Marks]

Q1 b) Attempt any **ONE** of the following:

i) "Planning of work is the most important function of the supervisor" Explain.

- Ans: -Planning can be defined as deciding in advance what to do, how to do, when to do and who will do it
 - -Supervisor, being the manager in a direct contact with the operatives, has got multifarious function to perform.
 - -Supervisor's basic role is to plan the daily work schedule of the workers by guiding them the nature of their work and also dividing the work amongst the workers according to their interests, aptitudes, skills etc.

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-The base of success of any project or goal of an organization is its planning. The best is the plan the best results are produced. The bad planning throws an organization out of the market

[Planning – 1 Mark, Role of Supervisor -1 Mark, Relation 4 Marks]

ii) State four type of organization and describe the working of line and Staff organization with line diagram.

Ans: Four Type of organization

- 1. Line, Military or scalar Organization
- 2. Functional Organisation
- 3. Line and Staff Organisation.
- 4. Project Organisation

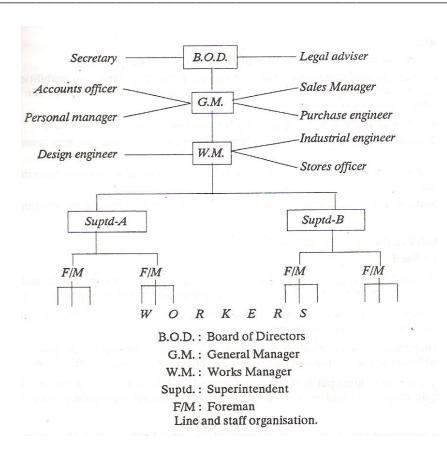
[2 marks]

Line and Staff Organisation.

- It is combination of line and Functional organization
- it is horizontal and vertical, both, in structure
- The Line officers make the decisions and issue instructions to subordinates, the staff officers have no authority to issue instructions. But in their decision-making function, the Line officers receive advice and guidance from the Staff Officers.
- Organization will be successful only when there is joint work of 'Managers' and 'Executers.'

[Working of Line and Staff organization – 2 Marks]

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[Line diagram – 2 marks]

Q. 2 a) Differentiate between Administration and Management

Sr.No	Administration	Management
1	It is concerned with formulation of broad objectives, plans & policies.	Management is an art of getting things done through others by directing their efforts towards achievement of pre-determined goals.
2	Administration is a decision-making function.	Management is an executing function.
3	Administration decides what is to be done & when it is to be done.	Management decides who should do it & how should be do it.

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4	Administration is a thinking function because plans & policies are determined under it.	Management is a doing function because managers get work done under their supervision.
5	Conceptual and Human skills	Technical and Human skills
6	Top level function	Middle & lower level function

[any four 1 Mark for each point]

b) State the advantages and disadvantages of Joint Stock company

Advantages of Joint Stock Company

- 1. A huge sum of money can be raised.
- 2. It associates limited liability with it.
- 3. Shares are transferable.
- 4. Company's life is not affected by the life (death) of shareholders.
- 5. Services of specialists can obtained.
- 6. Risk of loss is divided among many shareholders.
- 7. The company associates with it stability, efficiency and flexibility of management.

Disadvantages of joint Stock Company.

- 1. A good deal of legal formalities is required for the formation of a joint stock company.
- 2. Company is managed by big shareholder only.
- 3. High paid officials manage the whole show: they cannot have as high interests in the company as the proprietors can have.
- 4. People can commit frauds with the company.
- 5. Board of directors and managers who remain familiar with the financial position of the company may sell or purchase shares for their personal profits.
- 6. It is maintain secrecy as in partnership.
- 7. The team spirit, with which partnership works, is lacking in a joint stock company.
- 8. Divided responsibility.

[Any Two Advantages – 2 Marks, Any Two Disadvantages – 2 Marks]

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c) Explain the meaning of "Decentralized" department.

- -Decentralization eliminate the unnecessary levels of management
- -Responsibility is given to lower authorities.
- No Excessive load of work on top authorities.
- Specialized work culture is possible.
- Quick decision can be made.
- More work delegation
- May increase the confusions in work and reporting structure.

[Meaning – any four point – each 1 mark]

d) Distinguish between "Public Limited Company" and "Private Limited Company".

The following are the main points of distinction between a private limited company and a public limited company:

Parameter Public Limited Company		Private Limited Company	
Minimum number of members	Seven	Two.	
Maximum number of members	No maximum limit	Fifty	
Issue of Prospectus	Invite public	A private company cannot invite public to subscribe to its shares or	



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		debentures Membership of a private company is restricted to friends		
Transfer of shares	The shares of a public company are freely transferable to subscribe to its shares.	The transfers if shares are generally restricted by the articles of association of a private company.		
Commencement of business	It can start only after receiving the certificate to commence business.	A private company can allot shares and commence business after getting the certificate of incorporation from the Registrar of Companies.		
Number of directors	A public limited company is required to have at least three directors.	A private limited company must have at least two directors		
Quorum for meetings	Five members constitute a quorum in case of a public company.	The quorum for a meeting of a private company is two		
Use of the word 'Limited'	The word 'Limited' is used at the end of the name of public company.	In case of a private company, the word 'Private Limited' must be used at the end of the name of a company.		
Legal formalities	More legal formalities	A private limited company is required to observe a less number		



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		of legal formalities as compared to a public company.	
Restriction regarding managerial remuneration	Public limited companies cannot pay managerial remuneration in any financial year more than 11 % of the net profits of the company for that financial year	No such restrictions applies in case of a private limited company	

[1 Marks each any 4 Point]

e) Difference between Intrinsic and Extrinsic Motivation

Sr.No	Intrinsic Motivation	Extrinsic Motivation
1	This Motivation is internal desires to perform a particular task.	This Motivation comes because of external things Examples include money, good grades, and other rewards.
2	people do Certain activities because it gives them pleasure, develops a particular skill, or It's morally the right thing to do	Person may not enjoy the task or work
3	The result produce are best	The result produced may not be up to the mark.
4	Person keeps doing these activates without wishing money or rewards	Person keeps doing activates only if he/she is going to get money or rewards



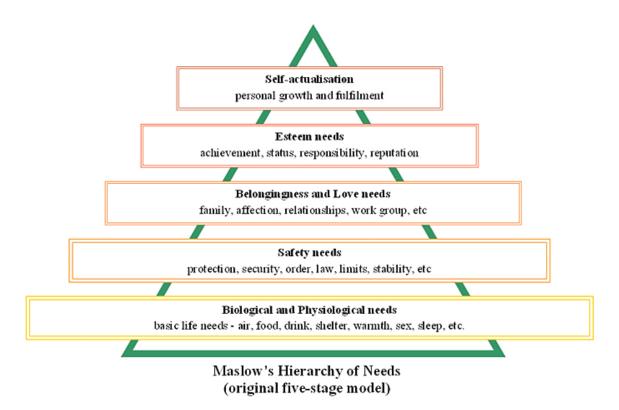
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5	This motivation is natural and Automatic to do the task	The person has to push and promote to do the work
6	e.g. Writing poems for self-interest.	e.g. Writing poems to sell it get some money out of it.

[Any Four point -1 mark each]

Q 3 Attempt any **FOUR** of the following

a) State Maslow's theory of motivation and its application in industry.



[Diagram – 1 mark]

Maslow's hierarchy of needs

1. Biological and Physiological needs - air, food, drink, shelter, warmth, sex, sleep, etc.

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2. Safety needs - protection from elements, security, order, law, limits, stability, etc.

3. **Belongingness and Love needs** - work group, family, affection, relationships, etc.

4. Esteem needs - self-esteem, achievement, mastery, independence, status, dominance,

prestige, managerial responsibility, etc.

5. **Self-Actualization needs** - realising personal potential, self-fulfillment, seeking personal

growth and peak experiences.

[Explanation – 2 Marks]

Application in Industry

To Employee Motivation.

[Application – 1 Mark]

b) What are the benefits under Employee's State Insurance (ESI) act to the insured

people.

BENEFITS UNDER THE ESI SCHEME:

1. Sickness benefit

- It is the form of periodical payment to any insured person

- Sickness is certified by a duly appointed medical practitioner or another person

having qualification as prescribed in regulations.

2. Maternity benefit

-An insured woman employee is entitled payment in case of confinement or miscarriage

or sickness arising out of pregnancy birth of child or miscarriage.

3. Disablement benefit

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-An insured person suffering from disablement as a result of injury in course of employment (i.e employment injury) is entitled for disablement benefit.

4. Dependents benefits

-Where insured person dies of employment injury, dependents' benefit shall be payable

5. Medical benefit

-An insured person whose condition demands medical treatment is entitled to receive medical treatment and medical benefit.

[Any Four Benefit – 1 mark each]

c) Explain the function of personnel management.

- 1. Procurement and Maintenance of adequate work- force as regards to both- number and quality of personnel.
- 2. Education and training of present employees.
- 3. Maintaining Satisfactory Personnel Contact and Employee Relationships
- 4. Maintaining satisfactory group relationship
- 5. Maintaining employees health
- 6. Maintaining employees safety
- 7. Maintaining employees service activities (employee welfare)

[Any four Function -1 mark each]

d) Explain the causes of accident in the industry.

Ans: Causes of Accidents

1. Technical Causes ----- Unsafe conditions - Medical factors

- Environmental factors

-Technical causes or unsafe conditions reflect deficiencies in plant, equipment, tools, materials handling system, general work environment, etc.

[2 marks]

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2. Human Causes ------ Unsafe acts - Personal factors

- Human causes or unsafe acts by the person concerned are due to his ignorance or forgetfulness, carelessness, day- dreaming, etc.

[2 marks]

e) State provisions of "Factory Act".

Ans: Main provisions of the Act

- Heath

- 1. Cleanliness
- 2. Disposal of Wastes and Effluents
- 3. Ventilation and Temperature
- 4. Dust and fumes
- 5. Artificial Humidification
- 6. Overcrowding
- 7. Lighting
- 8. Drinking water
- 9. Latrines and Urinals
- **10.** Spittoons

- Safety

- 1. Encasing and fencing of machinery
- 2. Work on or near machinery in motion
- 3. Employment of young persons on dangerous machines
- 4. Hoists and lifts
- 5. Lifting machine, chains ,ropes and lifting tackles
- 6. Pressure plants
- 7. Floors, stairs and means of access to different places
- 8. Pit, sumps, openings in floors, etc.,
- 9. Excessive weights
- 10. Protection of eyes



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- 11. Protection against dangerous fumes
- 12. Explosive or inflammable dust, gas.etc.
- 13. Protection in case of fire.

- Welfare

- 1. Washing facilities
- 2. Facilities for sitting
- 3. First aid appliances
- 4. Canteens
- 5. Shelters, rest-room and lunch –rooms
- 6. Crèches
- 7. Welfare officers

Working Hours

- 1. Weekly hours
- 2. Weekly holidays
- 3. Daily hours
- 4. Intervals for rest
- 5. Extra wages for over –time
- 6. Restriction on double employment
- 7. Restriction on employment of women

- Employment of young children

- 1. Prohibition of employment of young children
- 2. Non –adult workers
- 3. Certificate of fitness
- 4. Working hours for work
- 5. Register of child workers.

[Any Four provisions – each 1 mark]

Q.4 a) Attempt any 3 of the following

- i) State the various types of taxes. Explain the "Custom duty'.
- 1. Direct Tax Income tax, profits of companies (corporation tax), capital gains tax etc. (2 marks)

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2. Indirect tax – sales tax, excise duties etc. Custom duty encourage smuggling of goods. Indirect tax is one the burden of which passed on by the person on whom it is imposed to other persons e.g. Import duties levied on foreign vehicles are collected from merchants importing them but ultimately this amount is realized from the customers. (2 marks)

ii) Define fixed capital and working capital. Give example of each. State its use in industry.

To start an industry large amount of money is to be invested for more or less permanently fixed assets and this cannot be got back at will. E.g. invested in the plant, equipment, land and buildings.

Concerns engaged in commerce, trade, merchandise banking etc need very little fixed investments. But manufacturers of heavy and capital goods need major parts of their funds in fixed assets. (2 marks)

Working capital – It is that part of capital which is required to meet day to day needs in running the business. It is required for the purchase of raw material stationary etc. (2 marks)

- iii) Explain why budgets are necessary. (any four reasons one mark each)
- Budgets should be based on estimated future requirement for a definite period of time. It provided predetermined standard of performance for the guidance of efforts and activities in the business.
- To make a periodical evaluation of management policies of the industry.
- To provide check over expenditures in various departments.
- To make a programme for systematic developments.
- To decide basis for the expenditure of funds.
- To provide basis for checking working of the concern by seeing their efficiency and economy.

iv) Define: 1. SAP 2. JIT

- 1. <u>SAP</u>- SAP is the acronym for Systems, Applications and Products in data processing. It is an extremely complicated ERP system and runs on a fourth generation. SAP is the solution of an enterprise resource planning (ERP). It is used for the planning the entire resources of an organizations. (2 marks)
- <u>JIT</u> Supplies are delivered **Just In Time**, to be used parts are produced just in time, to be made into subassemblies and assemblies and products are finished just in time to be delivered to the



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customer. Inventory carrying cost are low, part defects right away productivity is increased and high quality products are made at low cost. (2 marks)

Q.4 b) Attempt any one of the following

i) Explain production Budget (including variance report). (3+3 marks)

-A production budget is prepared after receiving the sales budget. It shows the quantity of products to be manufactured.
It is based on following information

Sales budget

Factory capacity (Production and storage)

Budgeted stock requirement

Economic lot size

Availability of raw material and labour etc.

It may be compiled on departmental basis.

Anand Company								
	Production Budget for the year index 2003 - 2004							
No.	Parts Units of output							
		Jan Feb March April						
1	Crankshaft	4000	4000	4000	4000			
2	Flywheel	3000	3200	3000	3000			
	Total	7000	7200	7000	7000			

Variance Report for the month of Jan 2003

	Product/section	Standard	Actual	
1	Crankshaft	4000	3850	
2	Flywheel	3000	3024	
	Total	7000	6874	

iii) Define Purchase Function. Describe stepwise procedure of purchasing.

(2+4 marks)

The purchase function is a liaison agency which operates between the factory organization and the outside vendors on all matters of procurement.



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Purchase procedure varies with the nature and size of industry. In small factories this function is performed by works manager but in large manufacturing concerns where large quantities of materials are consumed.

- After receiving the purchase requisition form exact quantity of material to be purchased and its specification is decided.
- Prepare a list of suppliers who deal with the business of the articles to be purchased and are reliable.
- If the material to be purchased is of small amount and required urgently it may be purchased locally.
- Prepare and issue Notice Inviting tenders.
- Open the tenders at prescribed time on the prescribed date.
- Prepare a comparative statement of the rates, terms and conditions mentioned in the tenders.
- If required samples may be received from the firm.
- Place the purchase order to the fir selected.
- Copy of the purchase order must be sent to the stores.
- A detailed inspection is carried out after the material is received.
- If the material is found to be satisfactory the bill of the supplier is passed and the payment is made to the firm.

Q.5 Attempt any 2 of the following

a) State the meaning and objectives of inventory management.

-In involves determining and controlling the amount of raw material an organization should keep in stock to operate effectively and efficiently.

Efficient management of inventory requires balancing several conflicting goals.

To keep inventories as small as possible to minimize the amount of workhouse space.

Need to fill all customer requirements

To optimize the number of order placed.

To take advantage of the economics of long production runs and quantity discounts.

To solve inventory problems the manager can use the economic order quantity (EOQ) model.

It involves the use of short term funds is business and is regularly converted to cash.



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Materials are changed into finished products, products are sold out to realize cash and the cash is utilized in purchasing the materials. (1+3 marks)

b) Define economic order quantity (EOQ). State its significance. How industry use it in controlling the inventory? (1+1+2 marks)

It is the quantity whose procurement cost is equal to inventory carrying cost.

- EOQ involves calculation of Procurement cost or buying cost, Set up cost in case of manufacturing and Inventory carrying cost.

An industry making bolts mill definitely like to know the length of steel bars to be purchased at any one time. This length of steel bars is case of EOQ. For manufacturing it will include unit material unit direct labour all the unit burden excepting items affected by lot size. This cost varies between 10 to 20% of the product cost.

- c) Why training and development is required in an organization? (any four one mark each)
- Training in the art of increasing the knowledge and skill for doing a particular job the development means growth of the individuals in all respects.

Development is a long term educational process utilizing a systematic and organized procedure by which managerial personnel get conceptual and theoretical knowledge. Benefits

To organization

Improvement in performance

Improvement in working methods

Reduction in working methods

Reduction in learning time

Reduction in supervisory burden

Improvement in morel and reduction in grievances

Reduction in accident rates.

Reduction in machine breakdown and maintenance cost.

Improvement in quality of work

To employees.

Improvement in knowledge and skills.

Increased productivity which results in enhanced earnings.

Lesser chances of accidents.

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More opportunity for growth/ promotions

High morale

Increase in self confidence.

- Q.6 Attempt any two of the following
- a) What is a Balance sheet? Draw its typical format showing major components. (2+6 marks)
- It is a statement showing the financial status of the company at any given time. It is a statement of assets, liabilities and capital at a specified date. It prepared at least annually

A.B.C. Co. balance sheet march 31, 1991			
Liabilities	Assets		
Rs.	Rs.		
Current liabilities	Current assets		
Creditors for expenses	Cash in hand		
Trade creditors	Cash in bank		
Billing payable	Bills receivable		
Bank overdraft	Debtors		
Long term liabilities	Inventory		
Long term loan	Fixed assets		
Mortgage on property	Furniture and fittings		
Owner equity	Plant and machinery		
Capital	Building		
Retained profits	Goodwill		

b) What do you mean by Total Quality Management (TQM)? What are the principles of TQM.

- Quality of output of every department and by every employee, cleanliness, orderliness, punctuality, customer service, standardization of works and continuous efforts for their improvement.

Principles – Conformance to customer requirements.

Prevention of producing bad quality

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Ideal of zero detect as the performance standard.

Measurement of cost of quality.

Create consistency of purpose for improvements.

All employees should be trained retrained & refresher courses be arranges.

Objective should be quality first and not the short term profits.

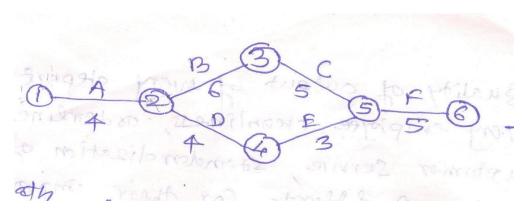
Encourage productivity

En courage coordination between departments

Respect towards work and humanity.

(2+6 marks)

c)



Path A-B-C-F=4+6+5+5=20 days -> critical path , and A-D-E-F=4+4+3+5=16 days

Activity	Period in	EST	EFT	LST	LFT	Float
	days					
A	4	0	4	0	4	0
В	6	4	10	4	10	0
С	5	10	15	10	15	0
D	4	4	8	8	12	4
Е	3	8	11	12	15	4
F	5	15	20	15	20	0
Col.1	Col.2	Col.3 from	Col.4 LFT	Col.5 EST	Col.6 from	Col.7 LST-
		N.W.	–D	+ D	N.W	EST or
		diagram			diagram	LFT-EFT

(2+1+5 marks) 1 mark each for column 3,4,5,6,7 = 05