INTERMEDIATE EXAMINATION
June 2017

P–9(OMSM)
Syllabus 2016

Operations Management and Strategic Management

Time Allowed: 3 Hours

Full Marks: 100

This paper contains two Sections.
Both Sections are compulsory, subject to instructions provided against each.
The figures in the margin on the right side indicate full marks.
All workings must form a part of your answer.
Assumptions, if any, must be clearly indicated.

SECTION – A
(Operations Management)

1. (a) Choose the correct answer:

    1×10=10

    (i) Out of the following trends in production/operations management, which one is sometimes called as agile manufacturing?
    - (A) Re-engineering
    - (B) Supply-Chain Management
    - (C) Lean Production
    - (D) Flexibility

    (ii) Out of the following factors that are affecting Capacity Planning, which one is Less Controllable one?
    - (A) Machine break-downs
    - (B) Amount of labour employed
    - (C) Facilities installed
    - (D) Shifts of work per day

    (iii) Which of the following stages of Product Life Cycle does attribute beginning of substantial increase in Sales and Profits?
    - (A) Introduction
    - (B) Growth
    - (C) Maturity
    - (D) Decline

    (iv) This aims at finding the best and most efficient way of using the available resources— men, materials, money and machinery:
    - (A) Time Study
    - (B) Work Study
    - (C) Method Study
    - (D) Job Evaluation

Please Turn Over

(v) Which one is NOT an index of Productivity?

(A) Man-hour output

(B) Productivity ratio

(C) TQM

(D) Use of Financial Ratios

(vi) The time by which an activity can be rescheduled without affecting the other activities— preceding or succeeding is called as

(A) Slack

(B) Independent Float

(C) Free Float

(D) Total Float

(vii) Reliability and per unit cost of which of the following spares are less?

(A) Regular spares

(B) Insurance spares

(C) Capital spares

(D) Rotable spares

(viii) For a marketing manager, the sales forecast is

(A) estimate of the amount of unit sales for a specified future period.

(B) arranging the salesmen to different segments of the market.

(C) to distribute the goods through transport to satisfy the market demand.

(D) to plan the sales methods.

(ix) The activity of specifying when to start the job and when to end the job is known as

(A) Planning

(B) Scheduling

(C) Timing

(D) Follow-up

(x) The lead time is

(A) Time for placeholders for materials

(B) Time of receiving materials

(C) Time between receipt of material and using materials

(D) Time between placing the order and receiving the materials

(b) Match Column-I with Column-II: 1×6=6

I			II
(A)	Aviation Fuel	(i)	Value Analysis
(B)	Brainstorming	(ii)	Machine Shop
(C)	Forgings	(iii)	Turbo-Alternator
(D)	Tools	(iv)	Refinery
(E)	Hydro-electricity	(v)	Job Evaluation
(F)	Ranking Method	(vi)	Smithy

(c) State whether the following statements are 'True' or 'False': 1×6=6

    (i) Merit Rating is used to determine the cost of a product.

    (ii) Project costs increase as the duration of the project increases.

    (iii) In carrying out Job Evaluation studies, point system is the best method.

    (iv) Production planning and control is essentially concerned with the control of Finished goods.

    (v) A Productivity Index is a device of expressing the ratio between outputs and the inputs of the resources numerically.

    (vi) If the total float value is zero, it means the resources are just sufficient to complete the activity without delay.

Answer *any three* questions from the following: 16×3=48

2. (a) 'An important objective of Operations Management is Resource Utilization.' Enumerate. Also list the scope of Operations Management. 3+3=6

  (b) Briefly explain various methods of sales forecasting. 10

3. (a) Discuss the term 'Process Strategy'. What does it involve? 3+3=6

  (b) Calculate the standard time per article produced from the following data obtained by a work sampling study: 10

    Total no. of observations = 2,600

    No. of working observations = 2,000

    No. of units produced in 100 hours duration = 5,000 numbers

    Proportion of manual labour = ¾

    Proportion of machine time = ¼

    Observed rating factor = 120%

    Total allowances = 15% of normal time

4. (a) A Bakery shop sells bakery items. Past data of demand per week in hundred kilograms with frequency is given below:

Demand/Week	0	6	12	18	24	30
Frequency	1	12	19	8	6	4

Using the following sequence of random numbers, generate the demand for the next 10 weeks. Also find out the average demand per week. 10

Random numbers	12	27	18	58	43	75	31
	62	47	35	53	42	68	71

(b) An incentive scheme allows proportionate production bonus beyond 100% performance level.

Calculate the amount of

(i) Incentive bonus and

(ii) Total payment received by an operator on a particular day during which the following particulars apply:

Operation   : Assembling a table clock set

Work Content : 40 Standard minutes per assembled set

Attended Time : 8 Hours

Time spent on unmeasured work : 3 Hours

Number of sets assembled during the day : 10

Wage rate   : ₹ 5 per hour

(iii) What is the net labour productivity achieved by the operator during the day?   2×3=6

5.   (a) A project consists of eleven activities A, B, C, D, E, F, G, H, I, J and K.

The relationship among various activities is as follows:

Activity	Preceding Activity
A	–
B	A
C	A
D	B
E	C
F	D, E
G	F
H	F
I	G
J	I, H
K	J

Draw the network diagram.   6

(b) Product A has a Mean Time Between Failures (MTBF) of 35 hours and a Mean Time to Repairs (MTTR) of 6 hours. Product B has a MTBF of 45 hours, and has a MTTR of 3 hours.

(i) Which product has higher reliability?

(ii) Which product has greater maintainability?

(iii) Which product has greater availability?   3+3+4=10

SECTION – B
(Strategic Management)

6. Choose the correct answer: 1×6=6

(i) Benchmarking is

    (A) the analytical tool to identify high cost activities based on the 'Pareto Analysis'.

    (B) the search for industries best practices that lead to superior performance.

    (C) the simulation of cost reduction schemes that helps to build commitment and improvement of actions.

    (D) the process of marketing and redesigning the way a typical company works.

    (E) the framework that earmarks a linkage with suppliers and customers.

(ii) Successful differentiation strategy allows the company to

    (A) gain buyer loyalty to its brands.

    (B) charge too high a price premium.

    (C) depend only on intrinsic product attributes.

    (D) have product quality that exceeds buyers' needs.

    (E) segment a market into distinct group of buyers.

(iii) The essential ingredients of Business Process Re-engineering (BPR) are

    (A) continuous improvements of products, processes and technologies.

    (B) planning for the technologies, processes and strategic partnerships etc.

    (C) fundamental re-thinking and radical redesign of business process to achieve dramatic results.

    (D) generation, comparison and evolution of many ideas to find one worthy of development.

    (E) identification and selection of lay-outs most suited for products and processes.

(iv) Marketing Research Studies are undertaken

    (A) to measure brand loyalty of a class of consumers.

    (B) to predict market potential of a product on a future date.

    (C) to understand product-price relationship.

    (D) to make out a case for revision of an existing strategy.

    (E) All of the above

(v) Organisation culture is

    (A) appreciation for the arts in the organisation.

    (B) ability of the organization to act in a responsible manner to its employees.

    (C) combination of (A) and (B) above

    (D) deeper level of basic assumptions and beliefs that are shared by the members of the firm.

    (E) None of the above

Please Turn Over

(vi) Innovation strategy is
 (A) defensive strategy
 (B) offensive strategy
 (C) responding to anticipating customers and market demands
 (D) guerrilla strategy
 (E) harvesting strategy

Answer *any two* questions from the following: 12×2=24

7. (a) Enlist the advantages of Strategic Management.   6

 (b) State various limitations of the BCG model.   6

8. (a) Briefly discuss important features which Human Resource Strategy may bring to bear on the organization.   6

 (b) List down some guidelines for formulation of the "Mission Statement".   6

9. Write short notes on *any three* of the following: 4×3=12

 (a) Functional organisational structure

 (b) Role of marketing

 (c) Contingency plan

 (d) Managerial Communication