

**VPM's**  
**DR VN BRIMS, Thane**  
**Programme: PGDM (2014-16)**  
**Fourth Trimester (Operations) Examination September 2015**

<b>Subject</b>	<b>New Product Development and Concurrent Engineering</b>		
<b>Roll No.</b>		<b>Marks</b>	<b>60 Marks</b>
<b>Total No. of Questions</b>	<b>7</b>	<b>Duration</b>	<b>3 Hours</b>
<b>Total No. of printed pages</b>	<b>1</b>	<b>Date</b>	<b>01.10.2015</b>

**Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions.**

**Q1) 20 Marks (Compulsory)**

- a) Explain any 6 characteristics of a good product design?
- b) Define value analysis and value. How can one increase the value associated with a product?

**Attempt Any FOUR from the Remaining SIX Questions**

**Q2) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

- a) What is the importance of diffusion in innovation?
- b) Write a short note on incremental, radical and disruptive innovation giving suitable examples for the same?
- c) Write a short note on innovation and invention?

**Q3) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

- a) What are the components of a product development process?
- b) What are the components of a concept development process?
- c) What are the different types of organization structures seen in product based companies?

**Q4) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

- a) What are the different steps in product planning?
- b) What are the characteristics of concurrent engineering?
- c) What are the benefits of concurrent engineering?

**Q5) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

- a) What are the different types of prototypes?
- b) What are the various principles of prototyping?
- c) What are the different designs for manufacturing principles?

**Q6) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

- a) What are the different types of functions in value analysis? Write a short note on functional analysis.
- b) What are the benefits and risks associated with adopting new technology?
- c) What are the wastes eliminated in JIT?

**Q7) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks**

- a) What are the two pillars of JIT?
- b) Write a short note on competitiveness pyramid.
- c) What are the various operations priorities on which a firm's operations strategy can be based on?