

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V • EXAMINATION – WINTER • 2014****Subject Code: 152501****Date: 26-11-2014****Subject Name: Casting Technology****Time: 10.30 am - 01.00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)**
- (1) In the Sand Moulding top flask is known as _____ **01**
a. Cope
b. Drag
c. Fillet
d. Cheek
- (2) In the Sand Moulding the bottom flask is known as _____ **01**
a. Cope
b. Drag
c. Fillet
d. Cheek
- (3) In Sand Moulding, The middle Part of Flask is called _____ **01**
e. Cope
f. Cheek
g. Drag
h. Flask- Middle
- (4) Wax pattern is used in _____ **01**
a. Shell Moulding
b. Die Casting
c. Investment casting
d. Centrifugal casting
- (5) _____ provides an added projection on a pattern and forms a seat to support and locate the core in the mould **01**
e. Mould Print
f. Core print
g. Drag
h. Cope
- (6) The taper provided on pattern for its easy and clean withdrawal from the mould is called _____ **01**
a. Shrinkage allowance
b. Draft allowance
c. Distortion allowance
d. Casting allowance
- (7) Fettling is an operation performed _____ **01**
a. Before casting
b. During casting
c. After casting
d. Never in the Casting Process
- (b)** Explain the general step to make Casting Product. **07**

- Q.2 (a)** Enlist different “Allowance” Provided in the Pattern and briefly explain any three of them with neat sketch. **07**
- (b)** Write the function of “Core”. Enlist different types of Core. Explain any three of them with neat sketch. **07**
- OR**
- (b)** Briefly explain the different Properties of types of Moulding Sand. **07**
- Q.3 (a)** Briefly explain the term Directional Solidification with neat Sketch. **07**
- (b)** Explain the function of different parts in the Gating System with neat sketch. **07**
- OR**
- Q.3 (a)** Write the function of Riser and Briefly Explain How it is helpful for Directional Solidification. **07**
- (b)** Explain the different Operations Carried out in the Fettling Process. **07**
- Q.4 (a)** Brief explain Investment Casting Process with neat sketch. **07**
- (b)** Brief explain Shell Moulding with neat sketch. **07**
- OR**
- Q.4 (a)** Brief explain Slush Casting Process with neat sketch. **07**
- (b)** Brief explain Die Casting Process with neat sketch. **07**
- Q.5 (a)** Enlist Various Non Destructive Tests carried out for Casting Products. Explain Liquid Penetrant Test with its limitations. **07**
- (b)** Enlist different types of Moulding Process. Explain any one of them with neat Sketch. **07**
- OR**
- Q.5 (a)** Brief explain Cupola Furnace with neat Sketch. **07**
- (b)** Brief explain the different Cost occur for making Casting Product. **07**
