

Printed Pages : 2



EAG-014

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 994014

Roll No.

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B. Tech.

(SEM. VII) (ODD SEM.)

THEORY EXAMINATION, 2014-15

WASTE AND BY-PRODUCT UTILIZATION

Time : 3 Hours]

[Total Marks : 100

Note : Attempt all sections. Each question carries equal marks.**SECTION-A****1** Attempt all part of the following: **(10x2=20)**

- (a) What is waste?
- (b) Define byproduct order.
- (c) What is recycling process of waste product?
- (d) What is formation of byproducts?
- (e) Which type of product is recycle by recycling process, give the brief description any of them?
- (f) What is the agricultural waste , give your personal view's?
- (g) What is BOD?
- (h) How will you classified the waste product?
- (i) What is sedimentation process?
- (j) What is charcoal briquette

SECTION-B

- 2 Attempt any four parts of the following: **(4×5=20)**
- (a) Describe solid waste management process with its flow charts.
 - (b) Give the scope of solid waste management.
 - (c) Discuss the Waste utilization in various industries and How?
 - (d) Give the production of charcoal briquette.
 - (e) What is disadvantage of waste and control of the waste production?

SECTION-C

- 3 Attempt any **two** of the followings : **(2x10=20)**
- (a) Give the magnitude of waste generation in different food processing industries.
 - (b) How you will generate the electricity using surplus biomass, give the best process for that?
 - (c) Give the waste treatment processes and Disposal processes respectively.
- 4 Attempt any **two** of the followings : **(2x10=20)**
- (a) What is secondary treatment process in full explanation ,and also describe the Biological and chemical oxygen demand for different food plant?
 - (b) Explain the activated sludge process with its figures.
 - (c) Give the Advanced waste water treatment process of sand.
- 5 Attempt any **two** of the followings : **(2x10=20)**
- (a) Give the operation and management of institutional community and family size biogas plant.
 - (b) Give the concept of vermi-composting.
 - (c) Give the short notes on:
 - (i) Trickling filters
 - (ii) Tertiary treatment
 - (iii) Lagoons
 - (iv) Flocculation
 - (v) Flootation