

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA, SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION, DEPARTMENT OF INDUSTRIAL & TECHNOLOGY EDUCATION

SECOND SEMESTER 2021/2022 SESSION EXAMINATION

COURSE CODE: -ITE 582

COURSE TITLE: - Metal Stamping

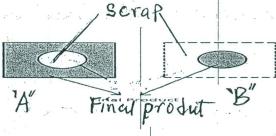
TIME ALLOWED: - 2 Hours

INSTRUCTION: - Attempt four (4) Questions only

- (1a) What do you understand by the term four-slide stamping?

 Differentiate between progressive die and transfer die stamping operations CATION.

 Outline the three (3) distinct movements in fine blanking operations CATION.
- (2a). What is cold operation in sheet metal forming?
- b). Outline five (5) advantages of cold operation as compared to warm forming
- State five (5) disadvantages of warm operation
- (3a). What is piercing operation?
- b). Outline and briefly explain four (4) distinct method of piercing
- c). State the sequential process of punching and blanking of sheet metals
- (4a). Why the need for use of stamping lubricant during stamping operation?
- b). Outline four (4) relevant lubricants available for metal stamping operation
- c). What is the reason behind sheet metal forming simulations?
- (5a). What is metal stamping?
 - b). Differentiate between stamping and forging operations
- c). Give valid reasons why you think operations "A" and "B" in the Figure below are not the same



(6a). What is sheet metal bending as an operation in metal stamping?

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- b). What does K-Factor and bending allowance stand for in sheet metal bending?
- c). Briefly describe three types of stamping presses

Good Luck

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