

KATHMANDU UNIVERSITY
End Semester Examination [C]
June 2018

JUN 15 2018

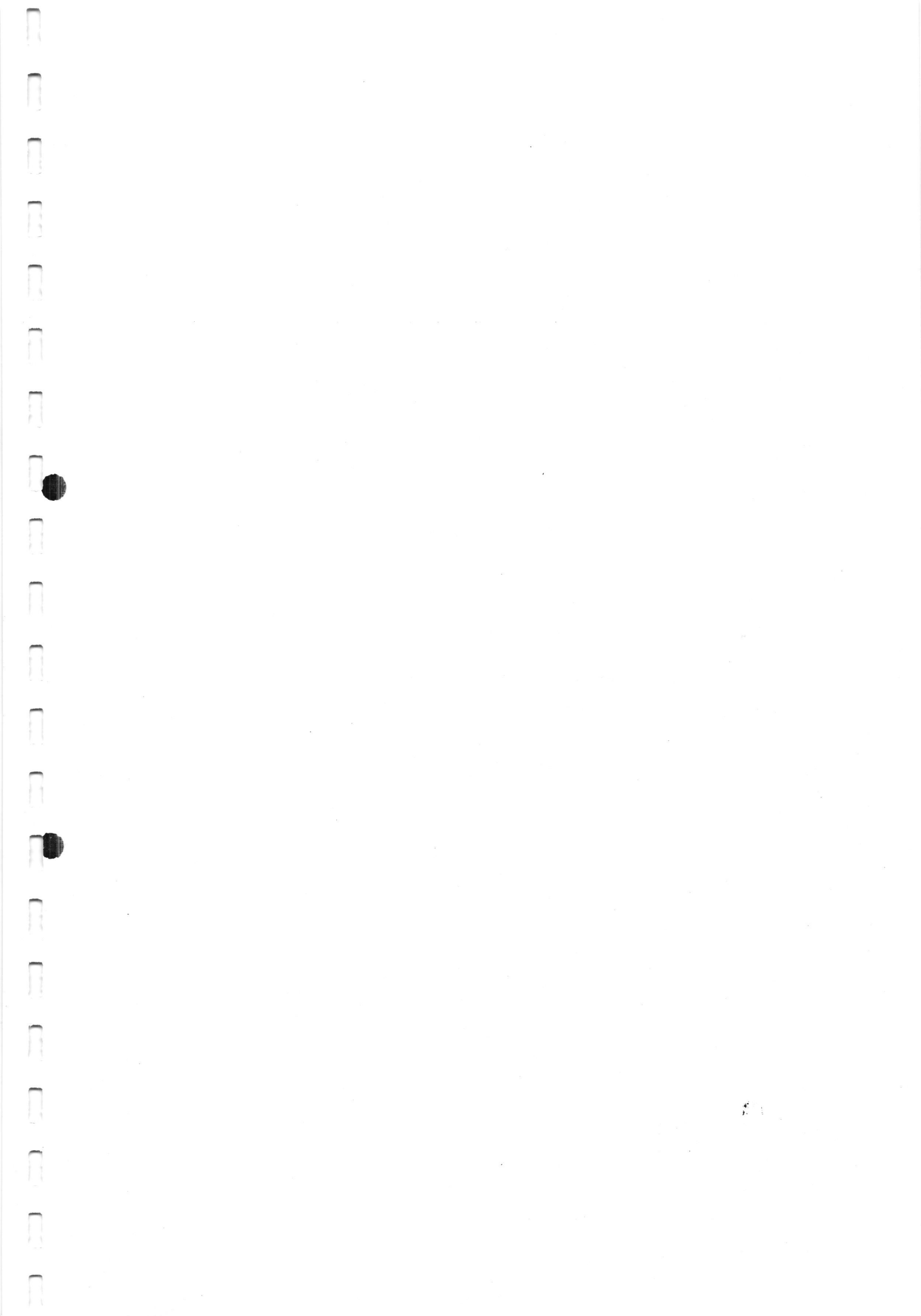
Level : B.E.
Year : IV
Time : 2 hrs. 30 mins.

Course : MEPP 412
Semester: I
F.M. : 55

SECTION "B"

Attempt *ALL* the questions.

1. Give a neat sketch of the theoretical and actual P-V diagram for a two –stroke petrol and diesel engine. Describe briefly the factors which account for deviation between these two plots. [5]
2. What is turbocharger? Explain with neat sketch the components of turbocharger in a modern automobile. [5]
3. Discuss the basis performance parameters of IC engine. [5]
4. Explain the formation of hydrocarbon (HC) carbon monoxide (CO) and nitrogen oxides (NO_x) in the engine exhaust. [5]
5. Explain, with the neat sketch, the construction and working of single –plate clutch. How the working of a single plate clutch is effected by coefficient of friction, the axial force and friction area. [5]
6. Make a comparison amongst gear boxes of the following type with sketch sliding mesh, constant mesh and synchromesh gearbox. [5]
7. Sketch a simple epicyclic gear train and explain how this type of gear train operates to transmit the drive and operate at different speeds. [5]
8. Stake the basis different between the electronic ignition system and convention ignition system with sketches. [5]
9. Draw the layout of a hydraulic braking system and explain each components of hydraulic braking system in modern automobile. [7]
10. Name different types of fuel injection system for diesel engine. Explain with neat diagrams the working of such systems. [8]



13. What is a unique selling point (USP)?
- A short phrase that expresses what the business can do uniquely for its customers
 - A postal service organization that delivers packages
 - A public statement that reveals that the company is for sale
 - A price point that is agreed upon by customers and sellers
14. What is the marketing mix?
- The right mix of advertising and pricing to attract your target market
 - The major elements of a marketing strategy - product, place, price, and promotion
 - The mixture of advertising and public relations efforts that best suits your target market
 - The set of decisions that must be made before deciding upon which target market to address
15. What information does a balance sheet provide to an entrepreneur?
- It provides owners with an estimate of the company's worth on a given date.
 - It provides owners with information on how profitable the company is.
 - It shows owners what the company needs in terms of cash for the remainder of the period.
 - It tells owners which products are selling more than others.
16. What is the point of profitability ratios?
- The point at which the firm begins to operate profitably and has recovered its startup costs
 - The point at which the firm has to go to a bank to secure financing for a second stage of growth
 - The success of the firm in using its available resources to generate a profit
 - The point at which the firm has earned enough to pay off its initial debt incurred upon startup
17. What information does the break-even point provide?
- The amount of sales volume that must be sold to recoup start-up expenses
 - The minimum sales volume required to stay in business for the long term
 - The minimum sales volume that is required to cover payroll for the period
 - The minimum sales volume that allows the firm to surpass its competitors in revenue
18. Who is the founder of social enterprise Maya Universe Academy?
- Manjil Rana
 - Birendra Basnet
 - Ajgar Ali
 - Ambika Shrestha
19. According to Nepal CEO Summit, who is the CEO of the year 2018?
- Kulman Ghising
 - Sanduk Ruit
 - Ambika Shrestha
 - Birendra Basnet
20. Entrepreneurial couples who work together as co-owners of their businesses.
- Copreneurs
 - Serial entrepreneurs
 - Corporate castoffs
 - corporate dropouts

