



বিদ্যাসাগর বিশ্ববিদ্যালয়
VIDYASAGAR UNIVERSITY
Question Paper

B.Sc. Major Examinations 2021
(Under CBCS Pattern)
Semester - III
Subject : AUTOMOBILE MAINTENANCE
Paper : C 5 - T & P
(Transmission System Part-I)

Full Marks : 60 (Theory : 40 + Practical : 20)
Time : 3 Hours

*Candidates are required to give their answers in their own words as far as practicable.
The figures in the margin indicate full marks.*

(Theory)

Group-A

- A. Answer any **three** of the following questions : 12×3=36
1. (i) What is torque converter?
 - (ii) What do you mean by over drive?
 - (iii) Describe briefly with neat sketch of free wheel unit. 3+3+6
 2. (i) Explain the function of transmission in an automobile.
 - (ii) Give the classification of transmissions.

- (iii) Explain briefly lubrication of gear box. 4+3+5
3. (i) Why is an idler gear used? Which main shaft gear meshes with the idler gear.
- (ii) What is the difference between three speed and four speed gear box?
- (iii) Describe briefly working principle of sliding mesh gear box. 4+2+6
4. (i) Write down few points difference between sliding mesh and constant mesh gear box.
- (ii) What do you mean by manual transmission?
- (iii) Describe briefly working principle of sliding mesh gear box. 4+2+6
5. (i) What are the merits and demerits of constant mesh gear box.
- (ii) Explain briefly troubles of gear box.
- (iii) Write down few points about transfer case. 3+5+4
6. (i) What is epicyclic gear box?
- (ii) What are the merits and demerits of epicyclic gear box.
- (iii) Write down few points difference between automatic and manual gear box.
- (iv) What is the main function of gear shifter? 2+4+4+2

Group-B

B. Answer any *two* of the following questions : 2×2=4

1. What is gear box?
2. What is dog pin?
3. What is the main function of oil seal?
4. What do you mean by ATM of transmission system.

(Practical)
Paper - C 5-P
(Transmission System Part-I)
Marks : 20

Group-A

A. Answer any **one** of the following question :

15×1=15

1. Write down the process of making a single piece pattern having dimension of 100mm × 20mm × 20mm and also mention proper working process.
2. Write down the process of making green sand mould. Mention proper working process of it.
3. Draw a neat sketch of a synchromesh gear box and its overhauling process.

Group-B

B. Answer any **one** of the following question :

5×1=5

1. What is the pattern? Classify it.
 2. What do you mean by moulding sand and classify it?
 3. What is synchromesh gearbox? Give the neat sketch line diagram of a sliding mess gearbox.
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