Code No: RR410303 **RR** **Set No. 2**

IV B.Tech I Semester Examinations,November 2010
AUTOMOBILE ENGINEERING
Common to Mechanical Engineering, Production Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) Explain the working of Evaporating Cooling System.
   (b) Name the components of water cooling system and explain in detail. [8+8]
2. (a) Explain the working of a Hoatch kiss diagram.
   (b) Explain the working of differential in an automobile. [8+8]
3. (a) Give the basic components of fuel system in a petrol engine and describe the functions of each.
   (b) Explain the working of a A. C. mechanical fuel pump. [8+8]
4. (a) List out the functions to be performed by the transmission system of an automobile.
   (b) Explain the arrangements by which engine power is transmitted to the wheels. [6+10]
5. Describe the Ackermann and Davis Steering Mechanisms. What are their relative merits? [6+6+4]
6. (a) What is cam? How does it operate an engine valve?
   (b) Sketch an engine valve and name its different parts.
   (c) What is tappet clearance? Why is it necessary? [4+6+6]
7. (a) Explain the constructional features of any one type of auto transformer.
   (b) Sketch & name the parts of a spark plug. [8+8]
8. (a) Name the various electrical components used in an automobile & give their functions.
   (b) Explain the working of a starter switch. [10+6]

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Code No: RR410303 **RR** **Set No. 4**

IV B.Tech I Semester Examinations,November 2010
AUTOMOBILE ENGINEERING
Common to Mechanical Engineering, Production Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) Give the basic components of fuel system in a petrol engine and describe the functions of each.
   (b) Explain the working of a A. C. mechanical fuel pump. [8+8]
2. (a) What is cam? How does it operate an engine valve?
   (b) Sketch an engine valve and name its different parts.
   (c) What is tappet clearance? Why is it necessary? [4+6+6]
3. Describe the Ackermann and Davis Steering Mechanisms. What are their relative merits? [6+6+4]
4. (a) Explain the working of Evaporating Cooling System.
   (b) Name the components of water cooling system and explain in detail. [8+8]
5. (a) List out the functions to be performed by the transmission system of an automobile.
   (b) Explain the arrangements by which engine power is transmitted to the wheels. [6+10]
6. (a) Name the various electrical components used in an automobile & give their functions.
   (b) Explain the working of a starter switch. [10+6]
7. (a) Explain the working of a Hoatch kiss diagram.
   (b) Explain the working of differential in an automobile. [8+8]
8. (a) Explain the constructional features of any one type of auto transformer.
   (b) Sketch & name the parts of a spark plug. [8+8]

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Code No: RR410303 **RR** **Set No. 1**

IV B.Tech I Semester Examinations,November 2010
AUTOMOBILE ENGINEERING
Common to Mechanical Engineering, Production Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) Name the various electrical components used in an automobile & give their functions.
   (b) Explain the working of a starter switch. [10+6]
2. (a) Explain the working of a Hoatch kiss diagram.
   (b) Explain the working of differential in an automobile. [8+8]
3. (a) Give the basic components of fuel system in a petrol engine and describe the functions of each.
   (b) Explain the working of a A. C. mechanical fuel pump. [8+8]
4. (a) Explain the constructional features of any one type of auto transformer.
   (b) Sketch & name the parts of a spark plug. [8+8]
5. (a) Explain the working of Evaporating Cooling System.
   (b) Name the components of water cooling system and explain in detail. [8+8]
6. (a) List out the functions to be performed by the transmission system of an automobile.
   (b) Explain the arrangements by which engine power is transmitted to the wheels. [6+10]
7. (a) What is cam? How does it operate an engine valve?
   (b) Sketch an engine valve and name its different parts.
   (c) What is tappet clearance? Why is it necessary? [4+6+6]
8. Describe the Ackermann and Davis Steering Mechanisms. What are their relative merits? [6+6+4]

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Code No: RR410303 **RR** **Set No. 3**

IV B.Tech I Semester Examinations,November 2010
AUTOMOBILE ENGINEERING
Common to Mechanical Engineering, Production Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) Explain the working of Evaporating Cooling System.
   (b) Name the components of water cooling system and explain in detail. [8+8]
2. (a) Name the various electrical components used in an automobile & give their functions.
   (b) Explain the working of a starter switch. [10+6]
3. (a) Give the basic components of fuel system in a petrol engine and describe the functions of each.
   (b) Explain the working of a A. C. mechanical fuel pump. [8+8]
4. Describe the Ackermann and Davis Steering Mechanisms. What are their relative merits? [6+6+4]
5. (a) Explain the working of a Hoatch kiss diagram.
   (b) Explain the working of differential in an automobile. [8+8]
6. (a) What is cam? How does it operate an engine valve?
   (b) Sketch an engine valve and name its different parts.
   (c) What is tappet clearance? Why is it necessary? [4+6+6]
7. (a) List out the functions to be performed by the transmission system of an automobile.
   (b) Explain the arrangements by which engine power is transmitted to the wheels. [6+10]
8. (a) Explain the constructional features of any one type of auto transformer.
   (b) Sketch & name the parts of a spark plug. [8+8]

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