# BABA BANDA SINGH BAHADUR ENGG. COLLEGE, FATEHGARH SAHIB

#### **Question Bank**

### **SUBJECT: - TRACTOR SYSTEMS, CONTROL & OPERATION**

#### **SECTION A**

- 1. Describe briefly the function of ROPS.
- 2. What steps are followed for stopping a tractor?
- 3. Enlist the main components of braking system.
- 4. What is top end overhauling?
- 5. Describe briefly the function of final drive.
- 6. What factors can be implemented to improve fuel efficiency in tractors?
- 7. Enlist the main components of steering system.
- 8. Differentiate between dry brakes and wet brakes.
- 9. Why engines need Top End overhaul?
- 10. What factors can be implemented to improve fuel efficiency in tractors?
- 11. Write short note on preparing tractor for storage.
- 12. Differentiate between dry brakes and wet brakes.
- 13. Why tractor needs a clutch and draw the neat sketch of Single plate clutch system?
- 14. Define
  - a. Toe in & toe out
  - b. Camber angle
- 15. Write short note on
  - a. Power take off unit
  - b. Draft Control
- 16. Draw the skectch of hydraulic brake system.

## SECTION B (2 X 4)

- 2. Describe the construction and working of synchromesh gearbox of tractor.
- 3. Describe briefly the Tractor chassis mechanics.
- 4. Explain the procedure followed to prepare tractor for storage. Discuss about the safety features included in tractors.
- 5. Explain principle of operation and working of hydraulic brakes with neat sketch.
- 6. Discuss about the safety features included in tractors.
- 7. Describe briefly about the importance of ergonomics in Tractors.
- 8. Describe the daily checkpoints for starting and safety in tractors?

#### **SECTION C**

- 9. Explain in detail about the maintenance procedure of tractor after 100 hours of operation
- 10. Explain the constructional parts and working of Tractor Differential with the help of diagram.
- 11. Describe the maintenance procedure of tractor after 250 hours of operation.
- 12. Describe the maintenance procedure of tractor after 500 hours of operation.