

EXAMINATION

(ANSWERS)

Marks

- (3) 1. What should be the deciding factor in hiring a tractor?
condition of the machine
- (3) 2. List three methods of evaluating tractors for fire fighting operations.
(i) * *personal knowledge of tractors owned and operated in local area*
(ii) * *during annual pre-fire season check with logging companies and equipment owners to update pre-organization plan*
(iii) * *inspection at time of hiring*
- (5) 3. List the main components of a tractor, which should be checked for suitability before hiring.
(i) * *engine*
(ii) * *track assembly*
(iii) * *radiator*
(iv) * *blade*
(v) * *winch*
- (6) 4. Where are the following parts located on a tractor?
(i) Grouser: *track shoe*
(ii) Sprocket: *track assembly*
(iii) Corner Bits: *lower corners of blade*
(iv) Top Roller: *track assembly*
(v) R.O.P.S.: *over operator's seat*
(vi) Links: *chain or track*
- (3) 5. What may result from improper track tension?
track jumps off its rollers when working on steep ground or hillsides
- (3) 6. Describe briefly a simple check of the hydraulic system to determine if there is any "drift".
operator raises blade off ground halfway, sets control to "hold" position – any downward drift indicates possible hydraulic fluid leakage or other deficiency in system
- (3) 7. What is the minimum size bulldozer that should be dispatched for Initial Attack on fires?
D-6, TD15, HD9 or equivalent

Marks

- (3) **8.** (i) How are tractor rental rates established?
 Annually by an inter-ministerial committee of the Provincial Government
- (ii) Who issues the rental rate schedule for fires?
 Ministry of Forests Protection Branch
- (iii) Under what authority?
 Regulation under the Forest Act
- (3) **9.** Which Ministry of the Provincial Government regulates transportation of
 overweight/overwidth equipment?
 Ministry of Transportation and Highways
- (5) **10.** List the five positions that would be required for a two-bulldozer unit.
- (i) ** Tractor Boss*
- (ii) ** Line Locator*
- (iii) ** Operator*
- (iv) ** Operator*
- (v) ** Swampers*
- (3) **11.** Name the key position to be filled at the start of fireline construction with
 tractors.
 Line Locator
- (3) **12.** What is the primary responsibility of the Tractor Boss?
 building completed section of fireline assigned by Sector or Fire Boss
- (3) **13.** What is the purpose of the clean-up crew persons?
 *to clean up behind the last tractor by reducing amount of fuel along edge of
 fireline*
- (3) **14.** List the three basic methods of attacking fires with tractors.
- (i) ** direct*
- (ii) ** parallel*
- (iii) ** indirect*
- (3) **15.** In Direct Attack, what maximum width of tractor line is the general rule?
 Not more than two blade widths

Marks

- (5) **16.** List the factors the Line Locator must consider in locating line for Parallel Attack.
- (i) ** amount and type of fuel remaining between fire and proposed line*
 - (ii) ** wind (speed and direction)*
 - (iii) ** topography (slope and aspect)*
 - (iv) ** time of day*
 - (v) ** fire weather build-up and fire danger indices*
- (5) **17.** When building a parallel fireline with tractors, should the trees and debris be pushed inside or outside the line? Why?
- outside the line*
- * to avoid adding fuel to the fire*
** to avoid hampering clean, straightforward burn-out*
- (3) **18.** Under what circumstances would you consider using Indirect Attack?
- (i) ** fire too hot to work close to fire edge*
 - (ii) ** fire moving too fast*
 - (iii) ** behavior of fire unpredictable or erratic*
- (3) **19.** What is the main purpose of putting a chain saw operator ahead of a lead tractor in fireline construction?
- buck windfalls and slash to facilitate pushing of debris by lead bulldozer*
- (3) **20.** What function does the skidder perform most effectively on a fire?
- mopping up*
- (4) **21.** List two mop-up jobs that can be done effectively by a smaller tractor.
- (i) ** pushing over snags; uprooting burning stumps; rolling larger logs over; breaking down smoldering piles*
 - (ii) ** burying burning chunks in mineral soil*
- (3) **22.** Who is responsible for safety on the fireline?
- (i) ** "Safety is everybody's business"*
 - (ii) ** Fire Boss*
 - (iii) ** all levels of bosses*
 - (iv) ** tractor operator*
- (3) **23.** What safety feature must be on every tractor used in the woods under the W.C.B. Regulations?
- R.O.P.S. (rollover protective structure) and protective canopy and screens*

Marks

- (4) **24.** List two safety requirements an operator must follow when he gets off his tractor with the engine still running.
- (i) * ***drop the blade to the ground***
 - (ii) * ***set the brakes***
- (3) **25.** What safety precaution should the operator take when parking his tractor overnight?
- park in an open area on bare ground safe from creeping fire***
- (3) **26.** What are some of the disadvantages of larger tractors (D9 and equivalent) in fire fighting?
- (i) * ***difficult to transport to and from fire area***
 - (ii) * ***awkward to maneuver in close quarters***
 - (iii) * ***creates excessive amount of debris***
 - (iv) * ***may become mired in wet or swampy ground***
 - (v) * ***difficulty working on steep slopes or hillsides***
- (3) **27.** Why is burning-off along the fireline necessary?
- to widen and strengthen fireline by removing unburned fuel between fireline and fire's edge***
- (3) **28.** What is the objective of Direct Attack with a bulldozer on a small, hot-burning fire?
- contain fire before it can spread***
- (3) **29.** List three factors that affect the width of fireline in Direct Attack.
- (i) * ***amount and type of unburned fuel along inside of line***
 - (ii) * ***height and density of tree canopy***
 - (iii) * ***steepness of slope***

Total marks **100**