



**KHYBER PAKHTOON KHWA, PUBLIC SERVICE COMMISSION, PESHAWAR.**

**SUBJECT:- COPETTIVE EXAMINATION FOR THE POSTS OF PROVINCIAL  
MANAGEMENT SERVICE(BPS-17).**

2010

**FORESTRY**

Time Allowed: 03 hours.

Max: Marks: 100

Attempt any Five Questions

1. Define silviculture and explain the different methods of thinning. What benefits foresters obtain from thinning operations? (20)
2. Differentiate between MAI (Mean Annual Increment) and CAI (Current Annual Increment). Calculate the volume of a Poplar stand on 20 hectares having ten year age and  $20 \text{ m}^3/\text{ha}/\text{annum}$  MAI. Identify and discuss the different management factors, which may influence the MAI. (20)
3. Explain, which test (T-TEST or F-TEST) you would like to use for analyzing the tree girth data collected from two Eucalyptus stands established in KP Province for identifying the difference or no difference within the tree girths of stands raised at different locations. (20)
4. What do you know about Biological Control of insects and pathogens to protect the forests? Explain what benefits you may obtain by opting Biological Control of insects and pathogens compared to the Chemical Control of insects and pathogens. (20)
5. Recent Flood in Pakistan has caused big damage to the life and property in Pakistan. Being a Watershed Management Expert, what strategy you would suggest to reduce the flood losses in future. (20)
6. Describe the economic importance of Rangelands and discuss the major constraints to manage such lands in Pakistan. Which province of Pakistan has the highest rangeland area? (20)
7. Wood industry in Pakistan is facing the problem of shortage of wood. Suggest different factors, which may increase the supply of industrial wood from Farmlands. What impact of increased wood supply do you expect on wood prices in the industrial wood market? Show the impact graphically. (20)
8. Define logging and discuss different methods of logging in detail. What safety measures you would suggest for logging operation? (20)