Code No. : 6210

FACULTY OF ENGINEERING
B.E. 2/4 (CSE) II Semester (Main) Examination, June 2010
OBJECT ORIENTED PROGRAMMING USING JAVA

Time: 3 Hours] [Max. Marks : 75

***Note** : Answer **all** questions from Part – A. Answer any **five** questions from Part – **B**.*

PART – A **25 Marks**

1. List control statements with simple example. **3**
2. What is a class ? **2**
3. Write a simple program for reading a file. **3**
4. Explain printwriter class with an simple example. **2**
5. Explain about string tokenizer. **2**
6. Explain about Bitset and Timer. **3**
7. List the methods in Inpustream . **3**
8. List the methods in Outputstream. **2**
9. What is an frame ? **2**
10. Explain the life cycle of an applet. **3**

PART – B **50 Marks**

11. Explain the concept of inheritance and give examples on each type of inheritance.
12. Write a program that shows three methods that exit in various ways, none without executing their finally clauses.

13. Write a program to domonstrate the implementation of cloneable and defines the method Clone Test (), which calls clone() in object ?

14. Explain the concept of Hashtable with an example.

15. Explain the concept of serialization with an example.

16. Explain the concept of adapter class with an example.

17. Write a program that uses a sequence Input stream to ouput the contents of two files.

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is of course the reason to intensify such problems but such instances have become very common to many townships/ settlements located along the rivers. Here, inadequate capacity of pumps and encroachment of the drainage channels, rather than the construction of flood wall, are the reason for drainage congestion.

EFFECT ON PHYSICAL CHARACTERISTICS OF RIVER

In alluvial rivers, some changes in the river morphology are continuously taking place for which the silt laden flow is primarily responsible. Sometimes, these changes are influenced by the river training works which affect not only the river reach in the immediate vicinity but also quite some distance upstream or downstream besides the opposite bank depending on the type and magnitude of the training works executed.

On River Bed Level

Construction of embankments results in increasing the silt charge in the flow due to prevention of spill of silt laden water. This may result in aggrading of the bed of the river in the post embankment period. At the same time, flow of water during floods gets restricted between the embankments, as a result of which there is increase in the velocity of flow. This would increase the silt carrying capacity of the river. Its effect on the river would generally depends on whether the river is aggrading, degrading or poised. Aggrading river takes the braided form, braiding being the result of the river's incapability to transport the heavy sediment which it brings from its upper reaches. The effect of embankment in such a case would be to continue the deposition of coarse silt within the embankment thus, accentuating aggradation. Of course, with higher flood levels and increased protection as initially designed, the progressive raising of the embankment becomes inevitable. If so, a stage may come when it may no longer be possible to contain the river by the embankment. Under such circumstances, if breach occurs, there is the possibility of emergence of the river into a new channel. A further possibility is that when the dry weather water level in the river becomes higher than the countryside level, the continuous seepage round the year through the embankment may cause extensive water logging of the countryside. Hence flood embankments are generally suggested to be ideal in case of relatively stable reaches of a river without any major tributary joining in that reach. In case of rivers with aggrading characteristics, the flood embankments would be inadvisable as a long term solution. Proper care must be taken for operation and maintenance of embankments in case their construction is unavoidable for aggrading rivers.

Lateral Stability of Rivers

Flood embankments also affect the lateral stability of rivers. Natural rivers flowing through alluvium are found to adjust their channel geometry to accommodate a dominant discharge, at this discharge equilibrium is most closely approached and tendency to change is the least[10]. Observations on many rivers throughout the world show the average top width (W) of an alluvial channel is related to the dominant or bankfull discharge, Q, by:

$$W \propto Q^{\frac{1}{2}}$$

where dominant discharge Q is represented by a relatively frequent recurring flood say with a return period of 18 months to two years[11].