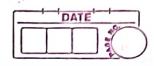
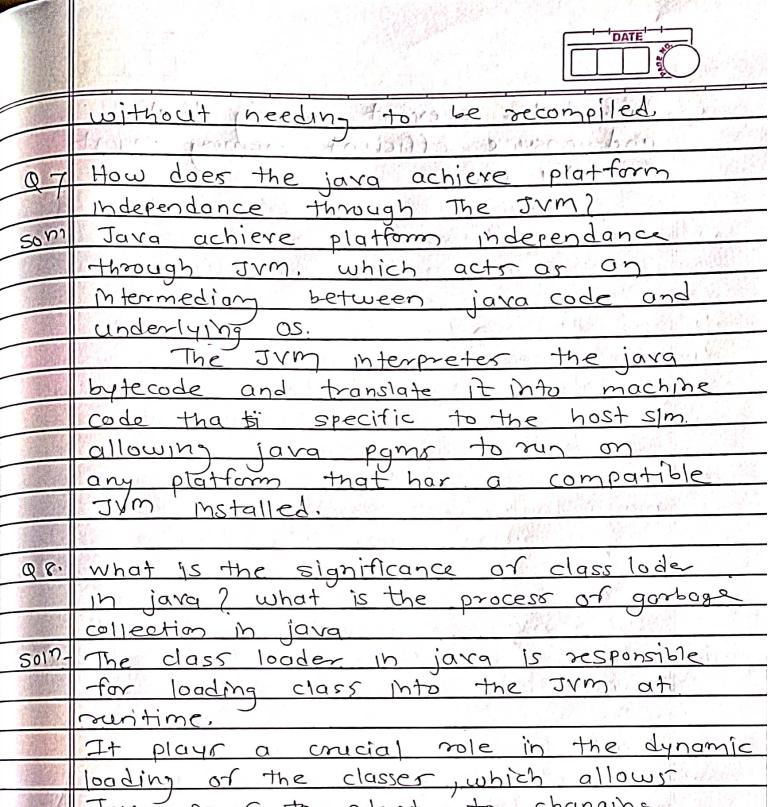
	OOPJ Assignent No. 02
	OOK J M-SKU 19
数 在 X	Explain the components of JOKIV
	Tava developement (1+ consist or
	3 components
	Java comeila (Java) comeila
A STATE OF THE STA	- Translate java source code into
Tr.	byte code
	Jovan Virtual Machine (Jum)
有是特别的	- executes the bytecode
\$2 5	Java Runtime Environment (JRE)
	-includes library and othe files
	necessary for running java applications
A HOUSE MERCHANIST IN IC.	
The same of the sa	Difference beta JDK, JVM, and JRB
2012	JOKA
WE THE	It is a slw Developement kit
MASKET ST	that includes took for developing java
2.00	applications.
10 A Y 10	
	JVM
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	is a virtual machine that
	executer jang byterade
The state of the s	JRE!
	JRE is a montime environment
1 4 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	that indudes libraries and other
	filer necessary for running jova
MAN W	applications.
14.00	
ANN.	In simple terms the JOK is
	for developen the Jum is for
5	sunning jova pams and JRE
	J. D. Ond J. C.



is used for end users who swont to oun jova applications on their machines. 3. what is role of Jum in Jaral som the JVM or Java virtual machine plays as crucial role in execution of java pama The Street of th It acts as an interpreter that translate javo bytecode into machine code that can be understood and executed by underlying H/w. Essentially the JVM serves as a bridge beto the platform independant jova code and platform specific os Profession tori grive sale on 18 16 Dallan States States States How doer Jum executer jand code? some The JVM code (execited by 11-17-57 loading the bytecode generated by the java. It then Merpritr this bytecode line by line, translating it into machine code that can be executed by the processor. Student of the second of the Additionally Irm employs various optimization techniques, such as Just - m - time compilation to improve performance de javar pans dumna runtime.

Q 4	Explain the memon marmit system or
	700
SOV	Juses a combination of automotic
	memory mant techniquesto such as
为人的	garbage collection, to identify
3001	efficiently allocate and deallocate
TOWN OF A SHALL SE	memory for java pams.
613	TOUR THE WAS A - 13 SHOT NO WAS LOVED TO THE OWNER OF THE OWNER OWNER OF THE OWNER
W 15/	This helps too prevent memory leaks
IN STATE OF	and optimize the performance of an
THE REST	application.
Thurst .	
<u>Q</u> ,5,	what one the JIT compiler and its
	role mil 7 km / mil
<u>5017</u>	Dancomponent
	of the JVM that compiles java
	bytecode into notive machine code
281.	at/runtime 15/1000 mill
	This allows for improved porformance
A State	by optimizing code execution based
	on the specific H/w and os
0 6	what is bytem de and
	Mhat is bytecode and why is it
50 m	Bytecode is the intermediate representation
	CO CO COMPANIENT CO
V Syrva	can be executed on any sim that
	has Jym installed. This makes jaxon and the
\$1650	This makes javg pans partable and allows them to run on diff. devices
WY Car	allows them to run on diff. devicer
14	



It plays a crucial role in the dynamic loading of the classer, which allows Tava pams to adopt to changing req. and load classes as needet.

Gorbage Collection in java is the process

of automatically sectorning memory that is no longer in use by the pgm. The JVM garbage cotte, identifier and semove objects that one no longer seference by the pgm freeing up memory for new objects to be allocated

