Normalization – Note: If the relation is in BCNF then it is also in 3NF

a. USER_ADDRESSES[User, Atype, Address]
   i. {User, Atype}→{Address}
   ii. BCNF—{User,Atype} is a superkey
b. USER_EMAILS[User, Etype, Email]
   i. {User, Etype}→{Email}
   ii. BCNF—{User,Etype} is a superkey
c. USER_PHONES[User,Ptype, PhoneNum]
   i. {User, Ptype}→{PhoneNum}
   ii. BCNF—{User,Ptype} is a superkey
d. USER[PhoneNum, AcctBal, Fname, Lname, Gender, DoB]
   i. {PhoneNum}→{AcctBal, Fname, Lname, Gender, DoB}
   ii. BCNF—{PhoneNum} is a superkey
e. REQUEST[DateTime, User, Approval, Price, ICP, Mname, Mcreator]
   i. {DateTime, User}→{Approval, Price, ICP, Mname, Mcreator}
   ii. BCNF—{ DateTime, User} is a superkey
f. ICP_ADDRESSES[ICP, Atype, Address]
   i. {ICP, Atype}→{Address}
   ii. BCNF—{ ICP, Atype} is a superkey
g. ICP _EMAILS[ICP, Etype, Email]
   i. { ICP, Etype}→{Email}
   ii. BCNF—{ ICP, Etype} is a superkey
h. ICP _PHONES[ICP,Ptype, PhoneNum]
   i. { ICP, Ptype}→{PhoneNum}
   ii. BCNF—{ ICP, Ptype} is a superkey
i. ICP[ABN, Name, Domain, AcctBal]
   i. {ABN}→{Name, Domain, AcctBal}
   ii. {Name}→{ABN, Domain, AcctBal}
   iii. BCNF—{ Name} and { ABN} are superkeys
j. PSUBSCRIPTION[User, PackageICP, PackageN]
   i. Trivial FD
   ii. BCNF—{User, PackageICP, PackageN} is a superkey
k. SSUBSCRIPTION[User, ServiceN, ServiceICP]
   i. Trivial FD
   ii. BCNF—{User, ServiceN, ServiceICP} is a superkey
l. SERVICE[Name, ICP, Desc]
   i. {Name, ICP}→{Desc}
   ii. BCNF—{ Name, ICP} is a superkey
m. PACKAGE[ICP, Name, Desc]
   i. {ICP, Name}→{Desc}
   ii. BCNF—{ ICP, Name} is a superkey
n. SERV_PACK[Sname, ICP, Pname]
   i. Trivial FD
   ii. BCNF—{Sname, ICP, Pname} is a superkey

o. CONTRACT[<u>ICP, Cnum</u>, Rank, Creator, Effective, CreationDate, EffectiveDate, TerminationDate]
   i. {ICP,Cnum}→{Rank, Creator, Effective, CreationDate, EffectiveDate, TerminationDate}
   ii. BCNF—{ ICP,Cnum} is a superkey

p. SERV_MAT[<u>Sname, SICP, Mcreator, Mname</u>]
   i. Trivial FD
   ii. BCNF—{Sname, SICP, Mcreator, Mname} is a superkey

q. WHOLESALE[<u>Mcreator, Mname, CICP, Cnum</u>, Price]
   i. {Mcreator,Mname,CICP,Cnum}→{Price}
   ii. BCNF—{ Mcreator,Mname,CICP,Cnum} is a superkey

r. CATEGORY[<u>ICP, Name</u>, ParentICP, ParentName, Desc]
   i. {ICP,Name}→{ParentICP, ParentName, Desc}
   ii. BCNF—{ ICP,Name} is a superkey

s. CATEGORIZATION[<u>CICP, Cname, Mname, Mcreator</u>]
   i. Trival FD
   ii. BCNF—{CICP, Cname, Mname, Mcreator} is a superkey

t. MATERIAL[<u>Cname, Name</u>, Desc, Type, Expiry, CreationDate]
   i. {Cname, Name}→{Desc, Type, Expiry, CreationDate}
   ii. BCNF—{ Cname, Name} is a superkey

u. CREATOR[<u>ABN</u>, Name, OfferDesc, AcctBal]
   i. {ABN}→{Name, OfferDesc, AcctBal}
   ii. {Name}→{ABN, OfferDesc, AcctBal}
   iii. BCNF—{ Name} and { ABN} are superkeys

v. CC_ADDRESSES[<u>Creator, Atype</u>, Address]
   i. {Creator, Atype}→{Address}
   ii. BCNF—{ Creator, Atype} is a superkey

w. CC_EMAILS[<u>Creator, Etype</u>, Email]
   i. {Creator, Etype}→{Email}
   ii. BCNF—{ Creator, Etype} is a superkey

x. CC_PHONES[<u>Creator,Ptype</u>, PhoneNum]
   i. {Creator, Ptype}→{PhoneNum}
   ii. BCNF—{ Creator, Ptype} is a superkey