JAIPURIA INSTITUTE OF MANAGEMENT
LUCKNOW NOIDA JAIPUR INDORE

JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA

PGDM / PGDM (M) / PGDM (SM)

SIXTH TRIMESTER (Batch 2017-19)

END TERM EXAMINATIONS, MARCH 2019

Set-II

Course Name	**PROJECT MANAGEMENT**	Course Code	**OM 601**
Max. Time	**2 hours**	Max. Marks	**40 MM**

INSTRUCTIONS:

1) **Attempt all questions.**
2) **All questions carry equal marks.**

Q1)

1.1) You are appointed as a project manager of a Nanotechnology project. The following table depict the major activities, activity durations and predecessor relationships for completion of the project. The table also depict the approved cost estimate for each activity.

Activity	**Duration (in Weeks)**	**Predecessor**	**Approved Cost Estimate (in Rs 00)**
A	2		20
B	2	A	24
C	6	A	30
D	5	A	25
E	4	B	16
F	4	D	20
G	2	C	10

The table below depicts the status report of the project at the end of week 6

Activity	**% Complete**	**Actual Expenditure (in Rs 00)**
A	FINISHED	15
B	FINISHED	20
C	80%	21
D	80%	18
E	50%	6
F	0%	
G	0%	

a) Develop a cost baseline for the project. Distribute cost over periods on pro rata basis.
b) Compute PV, EV, AC, CV, SV for each activity at the end of period 6.
c) Compute PV, EV, AC, CV, SV, CPI, SPI for the project at the end of period 6.
d) Comment on the health of the project at the end of period 6.

1.2) Name various process groups as per PMBOK® by PMI.

(Marks 8+2=10)

Q2)

2.1) Charlie Cook has been designated as Project Manager for developing a new chemical contaminant tracking machine. He identifies major project activities and is able to determine the activity durations & precedence relationships for the project. Details are in table below:

Project Details: Chemical Contaminant Tracking Machine:

Activity	Immediate Predecessor	Time Duration (Days)
A	-	9
B	A	7
C	A	3
D	B	6
E	B	9
F	C	4
G	E,F	6
H	D	5
I	G,H	3

a) Determine the critical path(s) and project completion time.
b) Determine Total Float for each activity.

2.2) You are the designated "Project Manager" for new product development for an automobile manufacturer. Your project scope includes all work including from concept development to final testing of prototype. Draw a WBS for the same. Make suitable assumptions regarding the project scope.

(Marks 6+4=10)

Q3)

3.1) Green India, an environment recycling company, needs to clean up a large trash dump under a state environment clean up contract. The job includes separating steel and copper from other debris. To complete the project, Project Manager has laid out the eight major activities involved in the project. These activities have been labeled A through H in the following table, which also shows completion times (in weeks) and immediate predecessors.

Activity	Predecessor	Pessimistic Time Estimate	Most Likely Time Estimate	Optimistic Time Estimate
A	-	7	5	2
B	A	5	3	2
C	B	14	8	6
D	B	20	10	6
E	B	8	3	3
F	C,D	10	5	3
G	D	12	6	4
H	E,G	16	6	5

a) Determine expected completion time of the project
b) Determine probability to complete the project 2 weeks before its expected completion time.
c) Determine time to complete the project with a probability of 95%.

3.2) Explain NPV and IRR techniques of project selection.

(Marks 7+3=10)

Q4): Answer the following questions:

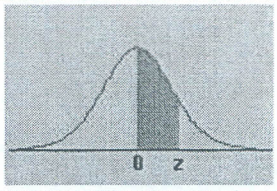
4.1) Differentiate between top down and bottom up project cost estimation. Discuss briefly different activity cost estimation techniques.

4.2) Discuss strategies for managing positive risks in a project.

4.3) Discuss briefly the key skills of an effective project manager.

(Marks 4+4+2=10)

Standard Normal (Z) Table
Area between 0 and z



	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	0.0000	0.0040	0.0080	0.0120	0.0160	0.0199	0.0239	0.0279	0.0319	0.0359
0.1	0.0398	0.0438	0.0478	0.0517	0.0557	0.0596	0.0636	0.0675	0.0714	0.0753
0.2	0.0793	0.0832	0.0871	0.0910	0.0948	0.0987	0.1026	0.1064	0.1103	0.1141
0.3	0.1179	0.1217	0.1255	0.1293	0.1331	0.1368	0.1406	0.1443	0.1480	0.1517
0.4	0.1554	0.1591	0.1628	0.1664	0.1700	0.1736	0.1772	0.1808	0.1844	0.1879
0.5	0.1915	0.1950	0.1985	0.2019	0.2054	0.2088	0.2123	0.2157	0.2190	0.2224
0.6	0.2257	0.2291	0.2324	0.2357	0.2389	0.2422	0.2454	0.2486	0.2517	0.2549
0.7	0.2580	0.2611	0.2642	0.2673	0.2704	0.2734	0.2764	0.2794	0.2823	0.2852
0.8	0.2881	0.2910	0.2939	0.2967	0.2995	0.3023	0.3051	0.3078	0.3106	0.3133
0.9	0.3159	0.3186	0.3212	0.3238	0.3264	0.3289	0.3315	0.3340	0.3365	0.3389
1.0	0.3413	0.3438	0.3461	0.3485	0.3508	0.3531	0.3554	0.3577	0.3599	0.3621
1.1	0.3643	0.3665	0.3686	0.3708	0.3729	0.3749	0.3770	0.3790	0.3810	0.3830
1.2	0.3849	0.3869	0.3888	0.3907	0.3925	0.3944	0.3962	0.3980	0.3997	0.4015
1.3	0.4032	0.4049	0.4066	0.4082	0.4099	0.4115	0.4131	0.4147	0.4162	0.4177
1.4	0.4192	0.4207	0.4222	0.4236	0.4251	0.4265	0.4279	0.4292	0.4306	0.4319
1.5	0.4332	0.4345	0.4357	0.4370	0.4382	0.4394	0.4406	0.4418	0.4429	0.4441
1.6	0.4452	0.4463	0.4474	0.4484	0.4495	0.4505	0.4515	0.4525	0.4535	0.4545
1.7	0.4554	0.4564	0.4573	0.4582	0.4591	0.4599	0.4608	0.4616	0.4625	0.4633
1.8	0.4641	0.4649	0.4656	0.4664	0.4671	0.4678	0.4686	0.4693	0.4699	0.4706
1.9	0.4713	0.4719	0.4726	0.4732	0.4738	0.4744	0.4750	0.4756	0.4761	0.4767
2.0	0.4772	0.4778	0.4783	0.4788	0.4793	0.4798	0.4803	0.4808	0.4812	0.4817
2.1	0.4821	0.4826	0.4830	0.4834	0.4838	0.4842	0.4846	0.4850	0.4854	0.4857
2.2	0.4861	0.4864	0.4868	0.4871	0.4875	0.4878	0.4881	0.4884	0.4887	0.4890
2.3	0.4893	0.4896	0.4898	0.4901	0.4904	0.4906	0.4909	0.4911	0.4913	0.4916
2.4	0.4918	0.4920	0.4922	0.4925	0.4927	0.4929	0.4931	0.4932	0.4934	0.4936
2.5	0.4938	0.4940	0.4941	0.4943	0.4945	0.4946	0.4948	0.4949	0.4951	0.4952
2.6	0.4953	0.4955	0.4956	0.4957	0.4959	0.4960	0.4961	0.4962	0.4963	0.4964
2.7	0.4965	0.4966	0.4967	0.4968	0.4969	0.4970	0.4971	0.4972	0.4973	0.4974
2.8	0.4974	0.4975	0.4976	0.4977	0.4977	0.4978	0.4979	0.4979	0.4980	0.4981
2.9	0.4981	0.4982	0.4982	0.4983	0.4984	0.4984	0.4985	0.4985	0.4986	0.4986
3.0	0.4987	0.4987	0.4987	0.4988	0.4988	0.4989	0.4989	0.4989	0.4990	0.4990