

Online Examination, University of Mumbai

Department: All
Revision: R2016
Semester: 8
Subject: Project Management (ILO8021)
Date of Examination: 2020-10-17

Q. 1	The criteria for evaluation of project needs	M
Option 1	to be established from the beginning	CORRECT OPTION
Option 2	to be controlled	0
Option 3	to be examined	0
Option 4	to be resolved	0
Q. 2	A project organization is a structure that facilitates the coordination and	M
Option 1	implementation of project activities	CORRECT OPTION
Option 2	combination of project activities	0
Option 3	maintaining portfolio	0
Option 4	selection of different processes	0
Q. 3	A project life cycle is the series of phases that a project passes through	M
Option 1	from its initiation to its closure.	CORRECT OPTION
Option 2	from its initiation to its end.	0
Option 3	from its lower to its upper stage.	0
Option 4	from planning to its execution.	0
Q. 4	Project sponsor is the person or group that provides the	M
Option 1	financial resources for the project.	CORRECT OPTION
Option 2	patrons to the project	0
Option 3	new directions to the project	0
Option 4	support for the project	0
Q. 5	Which of the following statement is true about a Program?	M
Option 1	A program is a portfolio	0
Option 2	A Program is a part of a big project	0
Option 3	A Program is a group of related projects	CORRECT OPTION
Option 4	A Program is a group of unrelated projects	0
Q. 6	Which of the following statement is true about the Project Charter?	M
Option 1	It is used to identify scope	0
Option 2	It authorizes the existence of a project	CORRECT OPTION
Option 3	It is a bidding document	0
Option 4	It is used to rank the risks	0
Q. 7	The project charter should be issued by whom?	M
Option 1	The CFO	0
Option 2	The head of the performing organization	0
Option 3	A manager external to the project	CORRECT OPTION
Option 4	One or more functional managers	0
Q. 8	Pareto Chart helps you find:	M
Option 1	Cause of variation	0
Option 2	Cause of deviation	0
Option 3	Minor sources creating the majority of problems	CORRECT OPTION
Option 4	Majority of causes creating the minority of problems	0

Q. 9	You have created the project charter but could not get it approved by senior management. Your manager and his boss have asked you to begin the project anyway. Which of the following actions is the best thing to do?	M
Option 1	Focus on other projects that have a signed charter.	0
Option 2	Update your Project Risk Log.	0
Option 3	Show your manager the impact of proceeding without approval.	CORRECT OPTION
Option 4	Start work on critical path tasks.	0
Q. 10	Project selection is the process of ----	M
Option 1	Implement all the necessary objectives of the parent organization will be achieve	0
Option 2	Evaluating proposed projects or groups of projects, and then choosing to implement some set of them so that the objectives of the parent organization will be achieve	CORRECT OPTION
Option 3	Implement some set of the objectives.	0
Option 4	Selecting the groups of projects, and then to implement all of them so that the objectives of the parent organization will be achieve	0
Q. 11	Which contract is considered most risky for the bidders?	M
Option 1	Fixed Price	CORRECT OPTION
Option 2	CPAF	0
Option 3	Time & Material	0
Option 4	Cost Reimbursable	0
Q. 12	A project that has a negative cost variance and an SPI less than 1.0 means that the project is:	M
Option 1	Over-budget and ahead of schedule	0
Option 2	Under-budget and ahead of schedule	0
Option 3	Over-budget and behind schedule	CORRECT OPTION
Option 4	Under-budget and behind schedule	0
Q. 13	Earned Value Analysis is used to measure performance based on following parameters:	M
Option 1	Scope , Cost and Schedule	CORRECT OPTION
Option 2	Scope and Cost	0
Option 3	Scope and Schedule	0
Option 4	Cost and Schedule	0
Q. 14	What does the Schedule Performance Index (SPI) say about the project?	M
Option 1	It says whether you are overspending or under-spending	0
Option 2	It says whether you are ahead of or behind schedule	CORRECT OPTION
Option 3	It says whether your process is under control or not	0
Option 4	Specifies the control limits of the process	0
Q. 15	Which of the following statements are not true regarding the Scope Management Plan ?	M
Option 1	Provides guidance on how the Project Scope will be verified.	0
Option 2	Provides guidance regarding the enterprise environmental factors and organizational process assets that would play a part.	0
Option 3	Scope Management Plan is not a Part of the Project Management Plan.	CORRECT OPTION
Option 4	Provides guidance on how the scope will be defined , documented monitored and controlled.	0
Q. 16	If the planned value (PV) is \$275,000 and the earned value (EV) is \$300,000, the schedule variance (SV) is:	M
Option 1	Negative 25000 USD	0
Option 2	25,000 USD	CORRECT OPTION

Option 3	575,000 USD	0
Option 4	125,000 USD	0
Q. 17	Money spent during a specific time period is known as:	M
Option 1	Budgeted Cost	0
Option 2	Planned Value	0
Option 3	Actual Cost	CORRECT OPTION
Option 4	Earned Value	0
Q. 18	You are in charge of a project to build a bridge across a river. You are midway through the project. However, due to changes in environmental laws, the project can no longer proceed and would need to be terminated. Executive management has asked you to document the level of work completed for the project. This would be done in which of the processes?	M
Option 1	Project charter	0
Option 2	Contract closure	0
Option 3	Scope Verification	CORRECT OPTION
Option 4	Project Closure	0
Q. 19	A project is overbudget when	M
Option 1	CPI > 1	0
Option 2	SPI > 1	0
Option 3	CPI and SPI > 1	0
Option 4	CPI less than 1	CORRECT OPTION
Q. 20	Project terminated due to conflict in senior management is called	M
Option 1	Cross cultural termination	0
Option 2	Senescence terminations	0
Option 3	Political termination	CORRECT OPTION
Option 4	Non political termination	0
Q. 21	We demonstrate transparency in our decision-making process.	M
Option 1	Respect Mandatory standard	0
Option 2	Honesty Mandatory standard	0
Option 3	Fairness aspirational standard	CORRECT OPTION
Option 4	Responsibility Mandatory standard	0
Q. 22	Project termination due to non cooperation among different culture groups is called	M
Option 1	Non political termination	0
Option 2	Cross cultural termination	CORRECT OPTION
Option 3	Senescence terminations	0
Option 4	Political termination	0
Q. 23	We conduct ourselves in a professional manner, even when it is not reciprocated.	M
Option 1	Respect Aspirational standard	CORRECT OPTION
Option 2	Responsibility Mandatory standard	0
Option 3	Honesty Mandatory standard	0
Option 4	Respect Mandatory standard	0
Q. 24	Virtual team failure is directly related to the difficulties of building	M
Option 1	negative relationship	0
Option 2	Trust	CORRECT OPTION
Option 3	Partnership	0
Option 4	Affection	0
Q. 25	Virtual team is dispersed	M
Option 1	Geographically	CORRECT OPTION
Option 2	Physically	0
Option 3	Technically	0
Option 4	Mentally	0

Online Examination, University of Mumbai

Department: All
Revision: R2016
Semester: 8
Subject: Environmental Management (ILO8029)
Date of Examination: 2020-10-17

Q. 1	Which of the following rivers is called the world's most polluted river?	M
Option 1	Cauvery River	0
Option 2	Yamuna River	0
Option 3	Ganga River	CORRECT OPTION
Option 4	Chenab River	0
Q. 2	Which one is the correct food chain?	M
Option 1	Phytoplankton → Zooplankton → Fish	CORRECT OPTION
Option 2	Zooplankton → Phytoplankton → Fish	0
Option 3	Zooplankton → Protozoans → Fish	0
Option 4	Grass → Fish → Zooplankton	0
Q. 3	Sustainable development can be thought of in terms of three spheres i.e.	M
Option 1	environment, economy and ecology	0
Option 2	environment, economy and equity	0
Option 3	environment, ecology and society	0
Option 4	environment, economy and society	CORRECT OPTION
Q. 4	Which of the following is not a waterborne disease?	M
Option 1	Measles	CORRECT OPTION
Option 2	Typhoid	0
Option 3	Cholera	0
Option 4	Hepatitis	0
Q. 5	Measuring BOD (biological oxygen demand) is primarily used for	M
Option 1	Estimating the quantity of organic matter in sewage water	CORRECT OPTION
Option 2	Determine the level of dissolved oxygen	0
Option 3	Determine rate of fish growth in sea water	0
Option 4	Estimating the types of microbes	0
Q. 6	Which of the following is a possible producer in an ecosystem?	M
Option 1	Plants	CORRECT OPTION
Option 2	Human beings	0
Option 3	Fish	0
Option 4	Animals	0
Q. 7	Which of the following conceptual components of the environment are effective transporters of matter?	M
Option 1	Atmosphere and lithosphere	0
Option 2	Atmosphere and hydrosphere	CORRECT OPTION
Option 3	Lithosphere and biosphere	0
Option 4	Hydrosphere and lithosphere	0
Q. 8	The developed countries consume how much percent of energy?	M
Option 1	30 Percent	CORRECT OPTION
Option 2	70 Percent	0
Option 3	20 Percent	0

Option 4	60 Percent	0
Q. 9	Food chain starts with	M
Option 1	Producer	CORRECT OPTION
Option 2	Omnivores	0
Option 3	Carnivores	0
Option 4	Herbivores	0
Q. 10	A promising direction towards sustainable development is to design systems that are	M
Option 1	flexible and reversible	CORRECT OPTION
Option 2	inflexible and irreversible	0
Option 3	inflexible and reversible	0
Option 4	flexible and irreversible	0
Q. 11	Which of the following parameter of light is NOT required by plants to grow?	M
Option 1	Color of light	CORRECT OPTION
Option 2	Duration of light	0
Option 3	Intensity of light	0
Option 4	Wavelength of light	0
Q. 12	Overgrazing results in:	M
Option 1	Productive soils	0
Option 2	Fertile soil	0
Option 3	Soil erosion	CORRECT OPTION
Option 4	Retention of useful species	0
Q. 13	Why plastics are difficult to recycle	M
Option 1	as it is hard material	0
Option 2	as it has different types of polymer resins	CORRECT OPTION
Option 3	due to different sizes of plastics	0
Option 4	it is very adhesive in nature	0
Q. 14	Why the recycled paper is banned for use in food containers?	M
Option 1	Because paper can be used only one time	0
Option 2	Because it creates a lot of spaces	0
Option 3	Because it creates contamination	CORRECT OPTION
Option 4	Because paper is very thick and can't cover the food containers	0
Q. 15	What does Liming of Soil mean	M
Option 1	Application of magnesium and calcium rich substances to soil	CORRECT OPTION
Option 2	Erosion of calcium carbonate(lime) zones in soil	0
Option 3	adding lime water in acid rain prone areas	0
Option 4	Excessive growth of lemon trees in acid rain regions	0
Q. 16	Which of the following data is not required for hazard identification?	M
Option 1	Estimation of risk	CORRECT OPTION
Option 2	Affected population	0
Option 3	Contaminant levels	0
Option 4	Land use	0
Q. 17	The most important agents for Ozone depletion are	M
Option 1	Nuclear Fallout	0
Option 2	CFC's	CORRECT OPTION
Option 3	Nitrous Oxide	0
Option 4	Methane	0
Q. 18	Which of the following can be recycled many times?	M

Option 1	Plastic	0
Option 2	Aluminum	CORRECT OPTION
Option 3	Wood	0
Option 4	Organic materials	0
Q. 19	What is the main use of Nuclear Energy	M
Option 1	To use it for alternate source of Energy	CORRECT OPTION
Option 2	To waste the excessive energy	0
Option 3	To kill the enemy nation	0
Option 4	To cause mutation for people who are working	0
Q. 20	The natural place of an organism is known as	M
Option 1	Habit	0
Option 2	Habitat	CORRECT OPTION
Option 3	Niche	0
Option 4	Biome	0
Q. 21	In the food relationship where the tiger eats the deer and the deer eats plants, which of the following condition is true?	M
Option 1	Tiger is the prey	0
Option 2	Deer is the prey	CORRECT OPTION
Option 3	Deer is predator	0
Option 4	Tiger is primary consumer	0
Q. 22	In which of the following form the waste products are not discharged into the biosphere	M
Option 1	Ionosphere	0
Option 2	Biosphere	CORRECT OPTION
Option 3	Lithosphere	0
Option 4	Mesosphere	0
Q. 23	The upper part of an aquatic ecosystem contains	M
Option 1	Plankton	CORRECT OPTION
Option 2	Hankton	0
Option 3	Nekton	0
Option 4	Benthos	0
Q. 24	The set of an ecosystem is called as	M
Option 1	structure	0
Option 2	climate	0
Option 3	subsystem	0
Option 4	Biome	CORRECT OPTION
Q. 25	Animals directly or indirectly depend for their food, protection & shelter on	M
Option 1	plants	CORRECT OPTION
Option 2	other animals	0
Option 3	microorganism	0
Option 4	water	0

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Department: All
Revision: R2016
Semester: 8
Subject: Entrepreneurship Development & Management (ILO8023)
Date of Examination: 2020-10-17

Q. 1	One of the disadvantages of a franchise business for a franchisee is,	M
Option 1	Lack of brand identity.	0
Option 2	Lack of training	0
Option 3	Lack of market availability	0
Option 4	Lack of independence.	CORRECT OPTION
Q. 2	The oldest form of business organization is,	M
Option 1	cooperative society	0
Option 2	sole proprietorship.	CORRECT OPTION
Option 3	public limited company	0
Option 4	joint stock company	0
Q. 3	Drone entrepreneurs are those who,	M
Option 1	immediately copy the new inventions made by the innovative entrepreneurs.	0
Option 2	are reluctant to change since they are very conservative and do not want to make any changes	CORRECT OPTION
Option 3	invent the new ideas, new products, new production methods or processes.	0
Option 4	do not initiate any inventions but follow only successful idea.	0
Q. 4	Which one of the following actions by an entrepreneur is most likely to contribute the creativity?	M
Option 1	Risk taking	0
Option 2	Job creation and employment	0
Option 3	Raising of finance	0
Option 4	New product development	CORRECT OPTION
Q. 5	Women Entrepreneurs who are trained through specialized programmes to set up their own enterprise are known as	M
Option 1	Chance Entrepreneurs	0
Option 2	Affluent Entrepreneurs	0
Option 3	Created Entrepreneurs	CORRECT OPTION
Option 4	Rural Entrepreneurs	0
Q. 6	Government has facilitated which of the following to provide financial assistance to women entrepreneurs	M
Option 1	Financial schemes	CORRECT OPTION
Option 2	Industrial estates	0
Option 3	Training institutes	0
Option 4	Financial Advisors	0
Q. 7	The social entrepreneurship module differs from an NGO in this manner	M
Option 1	Create a social benefit	0
Option 2	Solve social issues	0
Option 3	Set up to bring some change in society	0
Option 4	Raise funds through charity	CORRECT OPTION
Q. 8	Which of the following is a pull factor for women entrepreneurs?	M
Option 1	Financial Problems	0
Option 2	Death of a breadwinner	0
Option 3	Unfortunate family circumstances	0
Option 4	Urge to establish identity and gain economic independence	CORRECT OPTION

Q. 9	What facilitates the development of entrepreneurial skills at college and institute level?	M
Option 1	ECell	CORRECT OPTION
Option 2	NIESBUD	0
Option 3	FIWE	0
Option 4	SIDBI	0
Q. 10	The objective of Entrepreneurship Development programme is not to	M
Option 1	To strengthen entrepreneurial quality/ motivation	0
Option 2	To develop entrepreneurial culture	0
Option 3	To provide loans to budding entrepreneurs	CORRECT OPTION
Option 4	To accelerate the process of industrial and economic development	0
Q. 11	What is e-NAM?	M
Option 1	Electronic registry for documents	0
Option 2	Pan-India electronic trading portal which networks the existing APMC mandis to create a unified national market for agricultural commodities.	CORRECT OPTION
Option 3	Ecommerce website for FMCG	0
Option 4	Election portal of India	0
Q. 12	ABC is an enterprise is an enterprise where investment in plant and machinery does not exceed Rs. 25 lakh. What will you classify into?	M
Option 1	micro	CORRECT OPTION
Option 2	medium	0
Option 3	small	0
Option 4	large	0
Q. 13	SIDBI stands for	M
Option 1	Small and Intermediate Development Bank of India	0
Option 2	Samarth Indian Debit bank for Industries	0
Option 3	Small International Development Bank of India	0
Option 4	Small Industries Development Bank of India	CORRECT OPTION
Q. 14	Reverse logistics is required because	M
Option 1	cash flow	0
Option 2	Goods are defective	CORRECT OPTION
Option 3	by law	0
Option 4	increase efficiency	0
Q. 15	Which of the following is not a key aspect for the facilitation of the MSME Sector as announced under the support and outreach programme, launched by the Prime Minister of India?	M
Option 1	access to credit	0
Option 2	technology upgradation	0
Option 3	access to market	0
Option 4	tax incentives	CORRECT OPTION
Q. 16	What is not a Function of National Board for Micro, Small and Medium Enterprises	M
Option 1	Providing techno-economic and managerial consultancy	0
Option 2	Developing human resources through training and skill up gradation	0
Option 3	Advising the Government in policy formulation	0

Option 4	Provide loans to the enterprise	CORRECT OPTION
Q. 17	In production sector, a small enterprise is an enterprise where the investment in plant and machinery is more than Rs. 25 lakh but does not exceed _____	M
Option 1	Rs 10 crore	0
Option 2	Rs 2 crore	0
Option 3	Rs 5 crore	CORRECT OPTION
Option 4	Rs 3 crore	0
Q. 18	A _____ encompasses all activities associated with the flow and transformation of goods from the raw material stage, through to the end user, as well as the associated information flows	M
Option 1	production line	0
Option 2	marketing channel	0
Option 3	supply chain	CORRECT OPTION
Option 4	warehouse	0
Q. 19	Activity of Indian Trade promotion organization	M
Option 1	Finance SMEs	0
Option 2	Arrange Raw material	0
Option 3	Single window for all permissions	0
Option 4	Establishing durable contacts between Indian suppliers and overseas buyers.	CORRECT OPTION
Q. 20	What do OAS stand for?	M
Option 1	outcomes, advantage, and scope	0
Option 2	objective, advantage, and success	0
Option 3	objective, adventure, and scope	0
Option 4	objective, advantage, and scope	CORRECT OPTION
Q. 21	_____ is used to plan a project by defining each necessary step in it and estimating how long each will take.	M
Option 1	critical path method	CORRECT OPTION
Option 2	critical progression method	0
Option 3	critical strategic plan	0
Option 4	key success indicators	0
Q. 22	What is the is the process of selling subsidiary assets, investments, or divisions of a company in order to maximize the value of the parent company called	M
Option 1	Divestment	CORRECT OPTION
Option 2	Harvest	0
Option 3	investment	0
Option 4	consolation	0
Q. 23	The process of transferring leadership to the next generation is known as:	M
Option 1	community property.	0
Option 2	power sharing.	0
Option 3	succession	CORRECT OPTION
Option 4	natural division of responsibility.	0
Q. 24	Who is wilfull defaulter	M
Option 1	if the company has not met repayment obligations despite having the capacity to do so	CORRECT OPTION
Option 2	if the company has no money to repay obligations	0
Option 3	if the company has borrowed money from market to repay banks	0
Option 4	if the company has declared that it has no money to repay obligations	0
Q. 25	identify the false statement	M
Option 1	A takeover occurs when one company makes a successful bid to assume control of or acquire another.	0
Option 2	Takeovers are also commonly done through the merger and acquisition process.	0
Option 3	Takeover can be done through IPO	CORRECT OPTION
Option 4	Takeovers can be done by purchasing a majority stake in the target firm.	0

Online Examination, University of Mumbai

Department: Civil
Revision: R2016
Semester: 8
Subject: Industrial Waste Treatment (CE-DLO8032)
Date of Examination: 2020-10-13

Q. 1	Which of the following is not the physical characteristics of industrial waste water	M	
Option 1	pH	CORRECT OPTION	
Option 2	Solids contents		0
Option 3	colour		0
Option 4	odour		0
Q. 2	As per BSI standards COD of sewage and industrial effluent when discharge into inland surface water should be	M	
Option 1	300mg/l		0
Option 2	100mg/l		0
Option 3	250mg/l	CORRECT OPTION	
Option 4	200mg/l		0
Q. 3	The moisture content of sludge is reduced from 90 Percent to 80 Percent in a sludge digestion tank. The percentage decrease in volume of sludge is	M	
Option 1	10 Percent		0
Option 2	50 Percent	CORRECT OPTION	
Option 3	25 Percent		0
Option 4	5 Percent		0
Q. 4	_____ represent the heavier inert matter in wastewater.	M	
Option 1	waste		0
Option 2	Screen		0
Option 3	Debris		0
Option 4	Grit	CORRECT OPTION	
Q. 5	Which of the following class is tidal salty water?	M	
Option 1	Class SB	CORRECT OPTION	
Option 2	Class GB		0
Option 3	Class GA		0
Option 4	Class AA		0
Q. 6	Which class is used for drinking water which is subjected to approved treatment equal to a minimum of coagulation, sedimentation, filtration and disinfection	M	
Option 1	Class AA		0
Option 2	Class A	CORRECT OPTION	
Option 3	Class C		0
Option 4	Class B		0
Q. 7	Which fresh water class is used for agricultural, industrial, cooling?	M	
Option 1	Class D	CORRECT OPTION	
Option 2	Class C		0
Option 3	Class A		0
Option 4	Class B		0
Q. 8	The temperature maintained during transportation of sample?	M	
Option 1	0 C to 4 C		0
Option 2	0 C to 10 C	CORRECT OPTION	
Option 3	10 C to 15 C		0
Option 4	10 C to 20 C		0

Q. 9	Physical characteristics of sample does not include	M	
Option 1	Odour		0
Option 2	Turbidity		0
Option 3	Colour		0
Option 4	Ph	CORRECT OPTION	
Q. 10	Which of the following techniques is used to determine the concentration of odour compounds in the given water sample?	M	
Option 1	Flushing		0
Option 2	Settling		0
Option 3	Stripping	CORRECT OPTION	
Option 4	Chlorination		0
Q. 11	Reverse Osmosis is which type of treatment?	M	
Option 1	Primary treatment	CORRECT OPTION	
Option 2	Preliminary treatment		0
Option 3	Tertiary treatment		0
Option 4	Secondary treatment		0
Q. 12	Why individual may not necessary combined to make composite samples?	M	
Option 1	as maximal toxicity of a variable effluent is often required in connection with control of effluent disposal .	CORRECT OPTION	
Option 2	to maintain the acidity		0
Option 3	to maintain the solids		0
Option 4	to maintain the BOD		0
Q. 13	Grab sampling consists of what?	M	
Option 1	picking the piece of ore at random to make the sample	CORRECT OPTION	
Option 2	picking the piece of ore at one place only		0
Option 3	picking the piece of ore in the grid fashion		0
Option 4	picking the piece of coal only		0
Q. 14	In Bio-Assay Test at start at what temperature sample is preserved?	M	
Option 1	5 C		0
Option 2	10 C		0
Option 3	8 C		0
Option 4	4 C	CORRECT OPTION	
Q. 15	A 3 Percent diluted sample consumes 2.128 mg/lit of DO in standard BOD test. Then BOD of sample in mg/lit is	M	
Option 1	0.0638		0
Option 2	63.84		0
Option 3	70.93	CORRECT OPTION	
Option 4	6.384		0
Q. 16	The evolution of methane, carbon dioxide, hydrogen sulphide takes place in	M	
Option 1	Zone of degradation		0
Option 2	zone of recovery		0
Option 3	zone of clear water		0
Option 4	zone of active decomposition	CORRECT OPTION	

Q. 17	If a 2 Percent solution of sewage sample is incubated for 5 days at 20 ° C and DO depletion is 10 mg/lit then BOD of Sewage would be	M	
Option 1	50 mg/lit		0
Option 2	500 mg/lit	CORRECT OPTION	
Option 3	5000 mg/lit		0
Option 4	200 mg/lit		0
Q. 18	The average velocity of flow of the stream is 0.18 m/s. What is the reaeration coefficient of river water after industrial discharge, if deoxygenation coefficient is 0.1 per day & coefficient of self purification is 3.5.	M	
Option 1	3.5		0
Option 2	0.3		0
Option 3	0.35	CORRECT OPTION	
Option 4	0.035		0
Q. 19	The most polluted zone is	M	
Option 1	Zone of degradation		0
Option 2	zone of recovery		0
Option 3	zone of clear water		0
Option 4	zone of active decomposition	CORRECT OPTION	
Q. 20	First stage BOD curve is also called as	M	
Option 1	Carbonaceous BOD	CORRECT OPTION	
Option 2	Nitrogenous BOD		0
Option 3	Logarithmic BOD		0
Option 4	Exponential BOD		0
Q. 21	If dilution ratio is 100 and loss of oxygen during test is 4 mg/lit, then BOD of sewage in mg/lit is	M	
Option 1	400	CORRECT OPTION	
Option 2	0.04		0
Option 3	25		0
Option 4	96		0
Q. 22	If waste water is having only biodegradable organics then COD/BOD ratio will be	M	
Option 1	less than one		0
Option 2	equal to 1	CORRECT OPTION	
Option 3	more than one		0
Option 4	infinity		0
Q. 23	Tolerance limit for temperature for Industrial effluents discharged in to inland surface water in degree celcius is	M	
Option 1	40	CORRECT OPTION	
Option 2	80		0
Option 3	100		0
Option 4	20		0
Q. 24	Typical values of Deoxygenation coefficient vary between	M	
Option 1	1 to 2		0
Option 2	0.1 to 0.2	CORRECT OPTION	
Option 3	0.5 to 1		0
Option 4	over 5		0
Q. 25	The wastewater from a city, containing a high concentration of biodegradable organics is being steadily discharged into a flowing river at a location S. If the rate of aeration of the river water is lower than the rate of degradation of the organics, then the dissolved oxygen of the river water	M	
Option 1	is lowest at a point upstream of the location S.		0
Option 2	is lowest at the location S.		0
Option 3	remains constant all along the length of the river.		0
Option 4	is lowest at a point downstream of the location S.	CORRECT OPTION	

Online Examination, University of Mumbai

Department: Civil
Revision: R2016
Semester: 8
Subject: Construction Management (CE-C802)
Date of Examination: 2020-10-10

Q. 1	Larger interest of the organisation is more important than the interest of any one employee in a company. If this Management principle is violated, then which of the following will get affected?	M	
Option 1	Subordination of Individual Interest to General Interest	CORRECT OPTION	
Option 2	Initiative		0
Option 3	Discipline		0
Option 4	Espirit De Corps		0
Q. 2	Who amongst the following personalities told to replace thumb rules with Science?	M	
Option 1	Elton Mayo		0
Option 2	F.W. Taylor	CORRECT OPTION	
Option 3	Gilbreth		0
Option 4	Henry Fayol		0
Q. 3	Each group of activities having same objective must have one head and one plan. This is based upon which principle of management?	M	
Option 1	Unity of Command		0
Option 2	Renumeration		0
Option 3	Unity of Direction	CORRECT OPTION	
Option 4	Scalar chain		0
Q. 4	Who amongst following has introduced Time and Motion Studies ?	M	
Option 1	Henry Fayol		0
Option 2	Lillian Gilbreth		0
Option 3	Elton mayo		0
Option 4	F.W.Taylor	CORRECT OPTION	
Q. 5	Act of guiding, overseeing and leading people comes under the management function of	M	
Option 1	organizing,		0
Option 2	controlling		0
Option 3	directing	CORRECT OPTION	
Option 4	planning,		0
Q. 6	Formulation of Objectives, Policies, Procedure, Rules, Programmes and Budgets comes under the management function of	M	
Option 1	organizing		0
Option 2	controlling		0
Option 3	leading		0
Option 4	planning	CORRECT OPTION	
Q. 7	For a small construction project which type organisation structure is applicable?	M	
Option 1	Line and Staff Organisation		0
Option 2	Line Organisation		0
Option 3	Functional Organisation	CORRECT OPTION	
Option 4	Matrix Organisation		0

Q. 8	During which stage of a project does we require the maximum coordination between various agencies concerned with the implementation of the project?	M	
Option 1	Conceptual stage		0
Option 2	Construction stage	CORRECT OPTION	
Option 3	Tender and contract stage		0
Option 4	Design stage		0
Q. 9	Order in which various stages of Construction Project is carried out is	M	
Option 1	Analysis and Design Stage – Tender and Contract Stage – Construction Stage - Conceptual stage		0
Option 2	Conceptual stage – Tender and Contract Stage -Analysis and Design Stage – Construction Stage		0
Option 3	Tender and Contract Stage – Conceptual stage – Analysis and Design Stage –Construction Stage		0
Option 4	Conceptual stage – Analysis and Design Stage – Tender and Contract Stage – Construction Stage	CORRECT OPTION	
Q. 10	For many private construction programmes and in Government construction projects which type of organisation is being used mostly?	M	
Option 1	Line and Staff Organisation		0
Option 2	Line Organisation	CORRECT OPTION	
Option 3	Matrix Organisation		0
Option 4	Functional Organisation		0
Q. 11	Which is the first phase involved in life cycle of Project?	M	
Option 1	Planning & Organizing Phase		0
Option 2	Project Clean up Phase		0
Option 3	Conception Phase	CORRECT OPTION	
Option 4	Definition Phase		0
Q. 12	What is the limit to the number of subordinates than an executive can supervise effectively at lower levels of management?	M	
Option 1	1:25 – 1:30		0
Option 2	1:10 – 1:20		0
Option 3	1:20 – 1:30		0
Option 4	1:15 – 1:20	CORRECT OPTION	
Q. 13	When the EFT and LFT are same for an activity, then that activity is called as	M	
Option 1	slack		0
Option 2	critical	CORRECT OPTION	
Option 3	float		0
Option 4	non-critical		0
Q. 14	If D is the duration, EST and EFT are the earliest start and finish, LST and LFT are latest start and latest finish time, then which of the following relation is appropriate?	M	
Option 1	EFT = EST		0
Option 2	EFT = LST		0
Option 3	EFT = EST + D	CORRECT OPTION	
Option 4	LFT = LST - D		0
Q. 15	Amongst followings, which is no a project scheduling technique?	M	
Option 1	P.E.R.T		0
Option 2	C.P.M		0
Option 3	bar charts		0
Option 4	W.B.S	CORRECT OPTION	

Q. 16	If the scheduled time for completion of a project is 10 days with a standard deviation of 2 days, then what will be the expected time of completion of the project with 99.87 Percentage probability?	M	
Option 1	6 days		0
Option 2	4 days	CORRECT OPTION	
Option 3	10 days		0
Option 4	11 days		0
Q. 17	In which year, Milestone chart is invented?	M	
Option 1	1910		0
Option 2	1930		0
Option 3	1940	CORRECT OPTION	
Option 4	1920		0
Q. 18	If for a activity optimistic time is 1 day, pessimistic time is 8 days and most likely time is 3days then what will be the expected time ?	M	
Option 1	3.6 days		0
Option 2	4days		0
Option 3	3.75days		0
Option 4	3.5 days	CORRECT OPTION	
Q. 19	Which float of an activity is the excess of 'available time' over the activity duration when all the activities starts as early as possible?	M	
Option 1	Independent Float		0
Option 2	Free Float	CORRECT OPTION	
Option 3	Interferring Float		0
Option 4	Total Float		0
Q. 20	If an activity has its optimistic,most likely and pessimistic times are 2,3 and 7 days respectively then determine its expected time and variance ?	M	
Option 1	5 and 25/36		0
Option 2	3.5 and 25/36	CORRECT OPTION	
Option 3	4 and 5/6		0
Option 4	3.5 and 5/6		0
Q. 21	The inter relationship between the functional elements of programme is achieved through	M	
Option 1	work break down structure	CORRECT OPTION	
Option 2	job layout		0
Option 3	bar charts		0
Option 4	Gantt chart		0
Q. 22	Time by which a particular activity can be delayed without affcting its preceding and succeeding activities is known as	M	
Option 1	Free Float		0
Option 2	Interferring Float		0
Option 3	Independent Float	CORRECT OPTION	
Option 4	Total Float		0
Q. 23	If the total float and duration of an activity are 5 and 10 days respectively, the particular activity can be	M	
Option 1	started 5 days later	CORRECT OPTION	
Option 2	completed in 17 days		0
Option 3	completed 5 day before		0
Option 4	activity cannot be completed		0
Q. 24	Interfering float is the difference between	M	
Option 1	Total float and free float	CORRECT OPTION	

Option 2	Total float and activity duration	0
Option 3	Total float and independent float	0
Option 4	Free float and independent float	0
Q. 25	Formula for calculating total float of an activity?	M
Option 1	late start time - early start time	CORRECT OPTION
Option 2	late start time - late finish time	0
Option 3	early start time - late start time	0
Option 4	early finish time - late finish time	0

Online Examination, University of Mumbai

Department: Civil
Revision: R2016
Semester: 8
Subject: Design & Drawing of Reinforced Concrete Structures (CE-C801)
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Q. 1	Deflection check for doubly reinforced beams is generally not required due to the following factor	M
Option 1	stress in tension steel	0
Option 2	modification factor k_c	CORRECT OPTION
Option 3	modification factor k_t	0
Option 4	stress in compression steel f_{sc}	0
Q. 2	Maximum cross-sectional area of longitudinal reinforcement in column is	M
Option 1	4 Percentage of gross cross-sectional area of column	0
Option 2	8 Percentage of gross cross-sectional area of column	0
Option 3	6 Percentage of gross cross-sectional area of column	CORRECT OPTION
Option 4	2 Percentage of gross cross-sectional area of column	0
Q. 3	In RCC beam of breadth b and overall depth D exceeding 750mm, side face reinforcement required and the allowable area of maximum tension reinforcement shall be respectively	M
Option 1	0.4 Percentage and $0.01bD$	0
Option 2	0.3 Percentage and $0.03bD$	0
Option 3	0.1 Percentage and $0.04bD$	CORRECT OPTION
Option 4	0.2 Percentage and $0.02bD$	0
Q. 4	Determine M_u lim for a beam having size 230x400mm effective depth. Use M20/Fe415	M
Option 1	198kNm	0
Option 2	101.56kNm	CORRECT OPTION
Option 3	150kNm	0
Option 4	201kNm	0
Q. 5	calculate ultimate MR of T beam for width of flange=1200mm effective depth =600mm,depth of slab =200mm and $x_u=180$ mm.Use M20	M
Option 1	685kNm	0
Option 2	815.54kNm	CORRECT OPTION
Option 3	542kNm	0
Option 4	420kNm	0
Q. 6	Lateral ties in RC columns are provided to resist	M
Option 1	Torsion	0
Option 2	Bending moment	0
Option 3	Buckling of longitudinal steel reinforcement	CORRECT OPTION
Option 4	Both bending and torsion	0
Q. 7	A reinforced concrete beam of 10m effective span and 1m effective depth is supported on 500x500mm columns. If the total uniformly distributed load on the beam is 10MN/m,the design shear force is	M
Option 1	50MN	0
Option 2	47.5MN	0
Option 3	37.5MN	CORRECT OPTION

Option 4	43MN		0
Q. 8	The effective length of circular electric pole of length 'L' and constant diameter erected on ground is,	M	
Option 1	0.80L		0
Option 2	2.0L		CORRECT OPTION
Option 3	1.25L		0
Option 4	1.75L		0
Q. 9	A foot bridge has a slab of 3m width. The central supporting beam is of 6m length,width of web =250mm.The effective width of flange is	M	
Option 1	1.25m		CORRECT OPTION
Option 2	2m		0
Option 3	0.75m		0
Option 4	1m		0
Q. 10	Development length factor K if bar is in tension for M20/Fe 415 is	M	
Option 1	47		CORRECT OPTION
Option 2	40		0
Option 3	38		0
Option 4	57		0
Q. 11	Spiral reinforcement is normally provided in	M	
Option 1	Square Column		0
Option 2	L-column		0
Option 3	Rectangular column		0
Option 4	Circular column		CORRECT OPTION
Q. 12	The minimum numbers of longitudinal bars in circular column	M	
Option 1	4		0
Option 2	10		0
Option 3	6		CORRECT OPTION
Option 4	8		0
Q. 13	The minimum numbers of longitudinal bars in rectangular column	M	
Option 1	8		0
Option 2	6		0
Option 3	10		0
Option 4	4		CORRECT OPTION
Q. 14	The approximate practical relationship between riser and tread is	M	
Option 1	2X Riser X Tread = 600 mm		0
Option 2	(2 X Riser) + Tread = 600 mm		CORRECT OPTION
Option 3	Riser X Tread = 600 mm		0
Option 4	Riser + Tread = 600 mm		0
Q. 15	For a dog-legged staircase, if landing spans parallel to the risers, the effective span is taken as	M	
Option 1	Distance equal to going plus half the landing width on either side or 1 metre, whichever is smaller		CORRECT OPTION
Option 2	Width of flight		0
Option 3	Centre to centre distance of the beams supporting top & bottom risers		0
Option 4	Width of landing		0
Q. 16	For a staircase not liable to be overcrowded, live load is usually considered as	M	
Option 1	1 kN/Sq. m.		0
Option 2	3 kN/Sq. m.		CORRECT OPTION
Option 3	0.25 kN/Sq. m.		0

Option 4	0.5 kN/Sq. m.		0
Q. 17	In a dog-legegd staircase, the width of landing should be	M	
Option 1	More than or eqal to the width of a flight	CORRECT OPTION	
Option 2	1 metre always		0
Option 3	strictly equal to the width of a flight		0
Option 4	Less than the width of a flight		0
Q. 18	Pick up the correct statement from the following	M	
Option 1	In retaining wall, shear key is provided if retaining wall is not safe against overturning		0
Option 2	In retaining wall, shear key is provided if retaining wall is not safe against sliding	CORRECT OPTION	
Option 3	In retaining wall, shear key is provided if shear stress in vertical stem is excessive		0
Option 4	In retaining wall, shear key is provided if shear force in the toe slab is more than that in the heel slab		0
Q. 19	Factor of saftey against Sliding taken in the design of cantiliver retaining wall is	M	
Option 1	3		0
Option 2	1.5	CORRECT OPTION	
Option 3	2.5		0
Option 4	2		0
Q. 20	If the spacing between the counterforts is 3 m. then the thickness of counerfort can be approximately taken as	M	
Option 1	150 mm		0
Option 2	300 mm	CORRECT OPTION	
Option 3	60 mm		0
Option 4	50 mm		0
Q. 21	The heel slab of a cantiliver retaining wall is reinforced at which face of the slab	M	
Option 1	bottom face		0
Option 2	middle face		0
Option 3	backfill		0
Option 4	top face	CORRECT OPTION	
Q. 22	If height of retaining wall is 4m then which type of retaning wall should be provided ?	M	
Option 1	counterfort wall		0
Option 2	cantiliver wall	CORRECT OPTION	
Option 3	porous wall		0
Option 4	complex wall		0
Q. 23	For counterfort retaining wall, soil unit weight is 18 kN/cubic metre and soil SBC at site is 170 kN/Sq. metre. The angle of internal friction of soil is 30 degrees. Minimum depth of foundation will be	M	
Option 1	1.6 m		0
Option 2	1.05 m	CORRECT OPTION	
Option 3	1.4 m		0
Option 4	1.5 m		0
Q. 24	In counterfort retaining wall, the heel behaves like	M	
Option 1	A continuous slab	CORRECT OPTION	
Option 2	A simply supported slab		0
Option 3	A doubly reinforced beam		0
Option 4	A cantilever		0

Q. 25	A retaining wall of height 8m retains dry sand .In the initial state ,the soil is loose and has a void ratio of 0.5 , $\gamma_d = 17.48 \text{ kN/m}^3$ and $\Phi = 30$ degree. subsequently, the backfill is compacted to a state where void ratio is 0.4, $\gamma_d = 18.8 \text{ kN/m}^3$ and $\Phi = 35$ degree .The ratio of initial passive thrust to the final passive thrust according to Rankines's earth pressure theory ,is	M
Option 1	0.38	0
Option 2	1.55	0
Option 3	0.64	0
Option 4	0.77	CORRECT OPTION