نموذج اجابه لماده الاضافات البترولیه ٤١٣ ك

نصف ورقه امتحانیه

الممتحن : د احمد حمدی طنطاوی عبدالمنعم

الیوم: الأربعاء مساءا ١١-١-٢٠١٧

الزمن: ساعتان

Model Answer

Part (B)

Choose the correct answer: *(40 marks)*

41. Dewaxing process can be used to remove…….. compounds.
a) Olefinic b) Paraffinic c) Aromatic d) Cycloalkanes

42. Aromatic base oil has ……. fluidity at low temperature.
a) Poor b) High c) Low d) Moderate

43. The lowest temperature at which it can vaporize to form an ignitable mixture in air is ……
a) Pour point. b) Self ignite point. c) Aniline point. d) Flash point.

44. The …….is the temperature at which wax crystals begin to appear in oil liquid.
a) Flash point. b) Ignite point. c) Aniline point. d) Pour point.

45. In crude oil, a high pour point is generally associated with high…….content.
a) Paraffinic. b) Aromatic. c) Naphthenic. d) Alcoholic .

46. The lowest temperature at which a mineral oil is completely miscible with an equal volume of aniline is…….
a) Kraft point. b) Ignite point. c) Aniline point. d) Flash point.

47. One of the following compounds isn't a product of the lubricating oil oxidation.
a) Resins. b) Acidic compounds. c) Lacquers. d) Alkali compounds.

48. Detergents and dispersant can ……
a) Reduce friction. b) Decrease engine life. c) Reduce pour point. d) a, c.

49. The dispersants ……. deposit precursors in oil.
a) Suspend. b) Coagulate. c) Aggregate. d) Precipitate.

50. …..compounds are used to improve the colour of lubricating oil
a) Polymeric b)Phenolic c) Iminic d) Dyes

51. ….. viscosity index means the high change rate in viscosity with the temperature
a) High b) low c) Moderate d) None of them

52. …….is used to improve the pour point and viscosity index
a) Polypropylene b) Polybutylene c) Polyethylene d) Polymethacrylate

53. The quality of lubricating oil increased by …….pour point
a) Decreasing b) Increasing c) Elevating d) b, c

54. Basic sulphonate compounds are used as ……... additives
a) Anticorrosion b) Detergent c) Dispersant d) All of them

55. From the advantages of solvent used in solvent extraction process are ……
a) Chemically changed b) Low selectivity c) Hard to handle d) None of them

56. The solvent used in deasphalting process is….
a) Butane b) Propene c) Toluene d) Propane

57. ……are the most widely used as antifoaming additives.
a) Carboxylics b) Amines c) Phenols d) Organic silicon polymers

58. From the advantages of Lubricating oils additives is ……..
a) Must not interfere with each other b) chemically unchanged
c) More chemically reactive the base oil d) all of them

59. Polymethacrylates can be used as……
a) Antifoaming additives b) Pour point depressants c) Colour additives d) All of them

60. The metal components of an engine can be protected from corrosion process by…..
a) Inhibition of oil oxidation b) Acid neutralization c) Protective film formation d) All of them

61. ……is used to reduce mild wear by forming a protective film on metal surfaces
a) Neutral material b) Polar materials c) Nonpolar material d) None of them

62. Zinc dithiophosphates are good …… destroyer
a) Acid b) Ester c) Peroxide d) Amine

63. Lubricating oils can be classified according to their physical properties as…….. additives
a) Dispersants b) Viscosity improvers c) Anticorrosion d) Antifoam

64. Solvent exctraction is very important to remove……. compounds.
a) Aliphatic b) Paraffinic c) Aromatic d) Olefinic

65. Deasphalting processes used to dissolve …….. compounds in the top and asphaltenic compounds are withdrawn from the bottom.
a) Olefinic b) Paraffinic c) Aromatic d) Cycloalkanes

66. Finishing treatment can be used to remove ……. compounds.
a) Nonpolar b) Polar c) Neutral d) Cycloalkanes

67. Viscosity index improvers are …….. molecular weight polymers.
a) Long chain, high b) Short chain, high c) Long chain, low d) Short chain, low

68. …… compounds are the most widely used detergents additives.
a) Sulfonates b) Aromatic c) Nitrogenates d) Paraffines

69. Friction modifiers may be…….
a) Carboxylic acids b) Phosphoric acids c) Amines or amides d) All of them

70. The chemical nature of the film formed in the Corrosion inhibitation process is……...
a)Carboxylated compounds b) Sulphonates compounds
c) Zinc dialkyl dithisophosphates d) All of them

71. Antifoaming additives are used to …….. of foam.
a) Decrease amount b) Weak the droplet c) Reduce the stability d) All of them

72. …….. additives are used to prevent harmful carbon and sludge deposits.
a) Antiwear b) Antifriction c) Detergent or dispersants d) Anticorrosion

73. Pour point depressant ……the growth of wax crystals and their capacity to adsorb the liquid oil to form gel.
a) Decrease b) Raises c) Increases d) None of them

74. The rate of change in viscosity with temperature can be expressed in terms of…….
a) Thermal viscosity b) Kinematic viscosity c) Viscosity index d) Viscosity.

75. Paraffinic base oil has …… volatility and high flash point
a) High b) Low c) Moderate d) None of them

76. The pour point depressant can be occurred by ……
a)Removing the long chain alkane
b)Addition of polyester compounds
c)Increasing of aromatic compounds
d)All of them

77. Color and fluorescence additives can be used to……
a) Reduce friction b) Depress oil pour point c) Prevent rust formation d) None of them

78. Lubricating oil has no …… point
a) Flash b) Pour c) Boiling d) Freezing

79. The pour point is typically …… the cloud point.
a) Higher than b) Lower than c) Equal d) b, c

80. The pH of lubricating oil must be …….5.5
a) Lower than b) Higher than c) Equal d) All of them