



University of Engineering & Management, Kolkata

1st Term Examination, September, 2019

Course:B.Tech Semester: 3rd

Paper Name: Essential studies for professionals-III

Paper Code: HSMC302

Full Marks: 70

Time: 3 hours

Answer all the questions.

GROUP-A

(Marks:-70×0.5=35)

1. Which of the following is not the function of the RBI?
A. Banker's Bank
B. Controller of credit
C. Custodian of Foreign Exchange Reserve
D. Allotting money directly to farmers for agricultural development

2. Who issues one rupee notes in India?
A. RBI
B. Ministry of Finance
C. Ministry of Corporate Affairs
D. NABARD

3. When was RBI established?
A. 1935 B. 1949 C. 1929 D. 1914

4. Which of the following sentence is not correct?
A. RBI was nationalized on January 1, 1949.
C. RBI is the custodian of the foreign currency in India
B. RBI's head quarter is in Delhi
D. RBI has 4 Deputy Governors

5. Oudh Commercial Bank was founded in _____.
A. 1913 B. 1917 C. 1894 D. 1881

6. Punjab National Bank was established in _____.
A. 1881 B. 1894 C. 1913 D. 1917

7. Which movement encouraged the formation of commercial banks?
A. Swadeshi movement
B. Quit India Movement

20. NHB was set up in-
A. 1980 B. 1982 C. 1984 D. 1988

21. What were the main characteristics of the Indus Valley Civilization?
A. Town Planning
B. Drainage System
C. Both A and B
D. None of these

22. At which Harappan site traces of a horse have been found?
A. Dholavira
B. Surkotada
C. Harappa
D. Banwali

23. At which places in Indus Valley Civilization rice husks have been found?
A. Lothal and Dholavira
B. Surkotada and Rakhigadi
C. Chahundaro and Kalibangan
D. Lothal and Rangpur

24. Which town in Indus Valley Civilization had no Citadel?
A. Chanhudaro
B. Mohanjodaro
C. Harappa
D. Lothal

25. The statue of a dancing girl made out of _____ was found in _____.
A. Copper, Mohenjodaro
B. Silver, Harappa
C. Bronze, Mohenjodaro
D. Bronze, Harappa

26. A Seal depicting Mother Goddess with a plant growing from her womb has been found from:
A. Harappa
B. Kalibangan
C. Daimabad
D. Mohenjodaro

27. Indus people made seals with
A. Copper
B. Steatite
C. Clay
D. All of the above

28. Gayatri Mantra contained in _____ is dedicated to _____ deity.
A. Rigveda, Surya
B. Rigveda, Savitri
C. Samaveda, Surya
D. Samaveda, Savitri

29. The most significant among the given divinity of Rigveda was
A. Rudra
B. Varuna
C. Surya
D. Agni

30. In the Rigvedic period, Indra was the God of which deity?
A. Thunder
B. Energy
C. Spirit
D. Fire

31. Which scholar believed that the Mauryan has come from 'Artic Region'?
A. D.R. Sahani
B. R. D. Banerjee
C. B.G Tilak
D. V. Smith

32. Main feature in later Vedic period was,

- A. Worship of god
B. Rise of Brahmins
C. Cultivation
D. Caste System
33. 'Vid' derived from 'Veda' refer to
A. Knowledge
B. Energy
C. Truth
D. Karma
34. From where the Aryans came to India?
A. China
B. North Asia
C. Central Asia
D. Europe
35. Upanishads are _____ in number?
A. 108 B. 107
C. 106 D. 109
36. Which river is not mention in Rigveda?
A. Narmada
B. Sindhu
C. Ganga
D. Yamuna
37. Which was the earliest capital of Magadha?
A. Vaishali
B. Benaras
C. Rajgir
D. Patliputra
38. In which battle Alexander defeated king Puru?
A. Battle of Panipath
B. Battle of Kurukshetra
C. Battle of Hydaspas
D. Battle of Ghagra
39. Which king is titled as the "Second Parshurama"?
A. Mahapadma Nanda
B. Bimbisara
C. Cyrus
D. Shishunaga
40. The most powerful city among all the Mahajanpadas is –
A. Magadha
B. Patliputra
C. Kashi
D. Vaishali
41. According to the survey conducted by the Randstad Employer Brand Research (REBR) 2019, India's most attractive employer brand is:
A. Amazon India
B. Microsoft
C. TCS
D. Nestle India
42. The World Music Day is observed every year on:
A. 8th June
B. 17th July
C. 21st June.
D. 5th July
43. Who has been unanimously elected as the Speaker of 17th Lok Sabha:
A. Dr Virendra Kumar.
B. Ram Vilas Pawan
C. Om Birla
D. Milind Deora

53. The hot deserts of the world are generally found near
A. the equator B. the doldrums
C. the horse latitude D. the Tundras

54. Which one of the following is found on the western coast of continents between 30 and 40 latitudes?
A. Tropical Grassland Region B. Hot Desert Climate Region
C. Mediterranean Climate Region D. Temperate Climate Region

55. The zones of excessively dry climate with very cold temperature throughout the year correspond to
A. Alpine meadows B. Mediterranean
C. coniferous forests D. Tundra

56. Which of the following correctly refers to the term 'Taiga'
A. Deciduous forests of Canada B. Equatorial forests of Amazon
C. Coniferous forests of Siberia D. Monsoon forests of Taiwan

57. The Mediterranean lands are often called the World's
A. grazing lands B. forest lands
C. Fruit basket of the world D. paddy lands

58. Consider the following statements. Identify the right ones.
I. The equatorial, hot, wet climate is found between 5 and 10 north and south of the equator.
II. Its greatest extent is found in the lowlands of the Amazon, the Congo, Malaysia and the East Indies.

A. I only B. II only C. Both D. None

59. What are the most important characteristics of the Hot, Wet Equatorial Climate?
I. Great uniformity of temperature
II. No winter
III. Heavy precipitation

A. I only B. II only C. All of the above D. None

60. Which vegetation is called natural cattle country ?
A. Savanna B. Downs C. Selvas D. Prairies

61. Which of the following languages belong to Mizoram?
(i) English
(ii) Mizo

A. Only (i) B. Only (ii) C. Both (i) and (ii) D. None of the above

62. Official Language Act came into force in
A. 1961 B. 1962 C. 1963

63. Official Language Act 1963 states that "Hindi" means Hindi in which script?
- A. Devanagari B. Allahabadi C. Ashokan D. Din-i-illahi
64. Which of the following is/are true regarding the constitutional position of Hindi language?
- 1) Hindi written in Devanagari script with the Devanagari form of numerals is to be the official language of the Union.
- 2) It was decided that for a period of ten years from the commencement of the constitution, English language would continue to be used for all the official purposes.
- A. Only 1 B. Only 2 C. Both 1 and 2 D. None of the above
65. Which of the following are the languages of Pondicherry?
- (i) English
(ii) French
(iii) Tamil
- A. Only (i) B. Only (iii) C. Both (ii) and (iii) D. All
66. Which of the following languages are spoken in Dadra & Nagar Haveli?
- (i) English
(ii) Gujarati
(iii) Marathi
- A. Both (ii) and (iii)
B. Only (i)
C. All the above
D. None of the above
67. How many languages recognized in the constitution?
- A. 21 B. 22 C. 20 D. 24
68. The first language to be conferred the status of a Classical Language of India is:
- A. Tamil B. Telugu C. Kannad D. Malayalam
69. Which language can be used in addition to Hindi for official purposes of the Union and for use in Parliament
- A. Tamil B. Urdu C. English D. Sanskrit
70. The official language of Goa is:
- A. Kok bhorok B. Konkani C. Mandarin D. French

GROUP-B

(Marks:-70×0.5=35)

Direction (71-80) : In the following questions, some of the sentences have errors and some have none. Find out which part of a sentence has an error. The number of that part is your answer. If there is no error, the answer is D. i.e No error.

71. It is a truth that A. / those who are jealous of others B. / never get peace in life C./ No error D..
72. Walking along A./ the bank of the river B. / the road begins to rise C. / No error D..
73. The driver showed A./ great talent in keeping B./ the damaged car under control C./ No error D..
74. If it were possible to get near when A./ one of the volcanic eruptions take place B./ we should see a grand sight. C./ No error D..
75. Tea grows A./ both in Assam B./ and Ceylon C./ No error D.
76. He described about A./ the unpleasant experiences B./ he had in the jail C./ No error D.
77. Remember that a A./ stitch at a time B./ saves nine C./ No error D.
78. I was having a holiday A./ by seaside last summer B./ when I ran into captain Robinson C.. / No error D.
79. The G.M. A./ of the company B./ dispensed the Manager's services C./ No error D.
80. It is not A./ I who is B./ to blame C./ No error D.

Direction (81-90): Read the passage carefully and choose the correct answer to each question out of the four alternatives and fill in the blanks.

Every month, scientists (i) new gadgets and new ways to make technology faster and better. Our homes are full of hardware(such as DVD players and computers) (ii) and (such as computer games and MP3s) (iii) suggests, however, that it is the young people who are best able to deal with this change. Whereas teenagers have no problem (iv) a DVD player, their parents and grandparents often find using new technology (v) and different. But if you're a teenager who criticizes your parents for their (vi) of technological awareness, don't be too hard on them! Sometime (vii) the future, when you've got children of your own, your (viii)to deal with new technology will probably (ix) and your children will feel more (x) with new technology than you do.

81. (i)=?

- A. found B. invent C. estimate D. discover

82. (iv)=?

- A. operating B. discovering C. inventing D. explaining

83. (vi)=?

- A. storage B. amount C. effect D. lack
 84. (x)=?
 A. pleased B. able C. comfortable D. easy

85. (v)=?
 A. sudden B. unique C. complicated D. automatic

86. (vii)=?
 A. on B. to C. in D. at

87. (viii)=?
 A. possibility B. talent C. master D. ability

88. (ii)=?
 A. gadgets B. laptops C. software D. screens

89. (ix)=?
 A. please B. decrease C. able D. easy

90. (iii)=?
 A. industry B. experiment C. program D. research

91. On selling 17 balls at Rs. 720, there is a loss equal to the cost price of 5 balls. The cost price of a ball is:
 A. Rs. 45 B. Rs. 50 C. Rs. 55 D. Rs. 60

92. 100 oranges are bought at the rate of Rs. 350 and sold at the rate of Rs. 48 per dozen. The percentage of profit or loss is:
 A. 142/7 % loss B. 15% gain C. 142/7 % gain D. 15% loss

93. A shopkeeper sells one transistor for Rs. 840 at a gain of 20% and another for Rs. 960 at a loss of 4%. His total gain or loss percent is:
 A. 515/17 % loss B. 62/3 gain C. 515/17 % gain D. None of these

94. Alfred buys an old scooter for Rs. 4700 and spends Rs. 800 on its repairs. If he sells the scooter for Rs. 5800, his gain percent is:
 A. 44/7 % B. 11% C. 55/11 % D. None of these

95. A vendor bought toffees at 6 for a rupee. How many for a rupee must he sell to gain 20%?

- A. 3 B. 4 C. 5 D. 6

96. What percent is 2 minutes 24 seconds of an hour?

- A. 6% B. 2% C. 4% D. 8%

97. Due to fall in manpower, the production in a factory decreases by 40%. By what percentage should the working hours be increased to restore the original level of production?

- A. $66 \frac{2}{3}\%$ B. $46 \frac{1}{3}\%$ C. 25% D. 40%

98. The salary of all officers is increased twice successively by 20%. What is the net percentage increase in their salaries?

- A. 20% B. 40% C. 21% D. 44%

99. In an examination it is necessary for a candidate to get 45 % of the maximum marks to pass. A candidate who gets 180 marks, fails by 45 marks. Find the maximum marks.

- A. 450 B. 600 C. 500 D. 550

100. 10 litres of water is added to 50 litres of a solution containing 20% of alcohol in water. What is the strength of alcohol in the solution now?

- A. 20% B. $16 \frac{2}{3}\%$ C. $12 \frac{1}{2}\%$ D. $33 \frac{1}{3}\%$

101. In an exam 80% of the boys and 40% of the girls passed. The number of girls who passed is 120, which is $\frac{2}{3}$ rd of the number of boys who failed. What is the total number of students who appeared for the exam?

- A. 1200 B. 380 C. 3800 D. 2180

102. If 15% of A is the same as 20% of B, then A : B is :

- A. 3 : 4 B. 4 : 3 C. 17 : 16 D. 16 : 17

103. The ratio of number of boys and girls in a class is 3 : 2. In the 1st semester exam 20% of boys and 25% of girls get more than or equal to 90% marks. What percentage of students get less than 90% marks?

- A. 56 B. 70 C. 78 D. 80

104. A mixture of 85 kg contains milk and water in the ratio 27 : 7. How much more water is to be added to get a new mixture containing milk and water in the ratio 3:1?

- A. 5 kg B. 6.5 kg C. 7.5 kg D. 8 kg

105. The ages of Raju and Biju are in the ratio 3:1. Fifteen years hence, the ratio will be 2:1. Their present ages are:

- A. 30yrs, 10yrs B. 45 yrs, 15yrs C. 21 yrs, 7 yrs D. 60yrs, 20yrs

106. The seats in an Engineering college for Computer science, electronics and civil are in the ratio of 5 : 7 : 8. There is a proportion to increase these seats by 40%, 50% and 75% respectively. What will be the ratio of increased seats ?

- A. 2 : 3 : 4 B. 6 : 7 : 8 C. 6 : 8 : 9 D. none of these

107. In a company 83.33% of male staff are same in number as 45.45% of the female staff. What is the ratio of male staff to female staff

- A. 4 : 9 B. 7 : 2 C. 2 : 1 D. 6 : 11

108. If $m:n = 3:4$ and $n:o = 8:9$, then $m:o$ is :

- A. 1 : 3 B. 3 : 2 C. 2 : 3 D. 1 : 2

109. The mean proportional between 234 and 104 is :

- A. 12 B. 39 C. 54 D. None of these

110. The simple Interest on a certain sum of money at the rate of 4% p.a. for 5 years is Rs. 1680. At what rate of interest the same amount of interest can be received on the same sum after 4 years ?

- A. 5% B. 6% C. 7% D. 8%

111. The interest on a certain deposit at 4.5% p.a. is Rs. 405 in one year. How much will the additional interest in one year be on the same deposit at 5% p.a. ?

- A. Rs.50 B. Rs. 45 C. Rs.40.5 D. Rs. 48.5

112. Mr.Govind invested an amount of Rs.13900 divided in two different schemes S1 and S2 at the simple interest rate of 14% p.a. and 11% p.a. respectively. If the total amount of simple interest earned in two years was Rs.3508, what was the amount invested in Scheme S2?

- A. Rs.6400 B.Rs.6500 C. Rs.7200 D. Rs.7500

113. A sum of money was invested in a bank at 8% simple interest p.a. for 3 years. Instead had it been invested in mutual fund at 8.5% p.a. simple interest for 4 years, the earning would have been Rs.500 more. What is the sum invested?

- A. Rs.4500 B. Rs.5000 C. Rs.3500 D. Rs. 5500

114. A person borrowed Rs.600 @ 3% per annum S.I and Rs.800 @ $4\frac{1}{2}$ % per annum on the agreement that the whole sum will be returned only when the total interest becomes Rs.246. The number of years, after which the borrowed sum is to be returned, is

- A. 2 years B. 3 years C. 4 years D. 5 years

115. A sum of money becomes triple itself in 16 years. In how many years will it become 5 times at the same rate?

- A. 32 B. 15 C. 27 D. 30

116. The compound interest on Rs.30,000 at 7% per annum is Rs. 4347. The period (in years) is:

- A. 2 B. $2\frac{1}{2}$ C. 3 D. 4

117. The difference between simple interest and compound interest on Rs.1200 for one year at 10% per annum reckoned half-yearly is :

- A. Rs.2.50 B. Rs.3 C.Rs.3.75 D. Rs.4

I. $x^2 - x - 42 = 0,$

II. $y^2 - 17y + 72 = 0$ to solve both the equations to find the values of x and y?

- A. If $x < y$
B. If $x > y$
C. If $x \geq y$ or $x \leq y$
D. If $x = y$ or the relationship between x and y cannot be established.

I. $x^2 + 9x + 20 = 0,$

II. $y^2 + 5y + 6 = 0$ to solve both the equations to find the values of x and y?

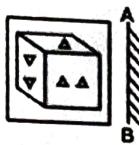
- A. If $x < y$
B. If $x > y$
C. If $x \geq y$ or $x \leq y$
D. If $x = y$ or the relationship between x and y cannot be established

I. $x^2 + 3x - 18 = 0,$

II. $y^2 + y - 30 = 0$ to solve both the equations to find the values of x and y?

- A. If $x < y$
B. If $x > y$
C. If $x \geq y$ or $x \leq y$
D. If $x = y$ or the relationship between x and y cannot be established

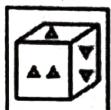
121. If a mirror is placed on the line AB, then which of the answer figures is the right image of the given figure?



(a)



(b)



(c)



(d)



122. In the following question below are given some statements followed by some conclusions. Taking the given statements to be true even if they seem to be at variance from commonly known facts, read all the conclusions and then decide which of the given conclusion logically follows the given statements.

Statements: I. Some pens are pencils.

II. Some pens are erasers.

Conclusions: I. Some pencils are erasers.

II. All erasers are pens.

A. Only conclusion (I) follows

B. Only conclusion (II) follows.

C. Both conclusion follow.

D. Neither conclusion (I) nor conclusion (II) follows.

123. Three of the following four are alike in a certain way and so form a group. Which is the one that does not belong to that group?

A. 169 B. 441 C. 361 D. 529

124. Three of the following four are alike in a certain way and so form a group. Which is the one that does not belong to that group?

A. Rose B. Jasmine C. Marigold D. Lotus

125. Three of the following four are alike in a certain way and so form a group. Which is the one that does not belong to that group?

A. 65 B. 25 C. 95 D. 35

126. Three of the following four are alike in a certain way and so form a group. Which is the one that does not belong to that group?

A. PM B. EB C. TQ D. VY

127. Three of the following four are alike in a certain way and so form a group. Which is the one that does not belong to that group?

A. Volume B. Size C. Large D. Shape

128. Three of the following four are alike in a certain way based on the English alphabetical series and so form a group. Which is the one that does not belong to that group?

A. MLJ B. WVT C. OMK D. JIG

129. Three of the following four are alike in a certain way and so form a group. Which is the one that does not belong to that group?

A. Clutch B. Wheel C. Brake D. Car

130. Three of the following four are alike in a certain way and so form a group. Which is the one that does not belong to that group?

A. 50 B. 65 C. 170 D. 255

131. Select the one which is different from other three alternatives.

A. Typhoid B. Cholera C. Jaundice D. AIDS

132. Three of the following four are alike in a certain way and hence form a group. Which is the one that does not belong to the group?

A. Break B. Divide C. Split D. Change

133. Three of the following four pairs are alike in a certain way and hence form a group. Which one does not belong to that group?

A. DONE : NOED

B. WANT : NATW

C. WITH : TIHW

D. HAVE : AVEH

134. Three of the following four are alike in a certain way and so form a group. Which is the one that does not belong to that group?

A. Mustard B. Jowar C. Wheat D. Paddy

135. Three of the following four are alike in a certain way and so form a group. Which is the one that does not belong to that group?

- A. 6348
- B. 7824
- C. 6264
- D. 5298

136. Three of the following four are alike in a certain way and so form a group. Which is the one that does not belong to that group?

- A. 21
- B. 35
- C. 49
- D. 42

137. Three of the following four are alike in a certain way and so form a group. Which is the one that does not belong to that group?

- A. Manager
- B. Teacher
- C. Doctor
- D. Engineer

138. A series is given with one term missing. Choose the correct alternative from the given ones that will complete the series.

- 22, 24, 28, ?, 52, 84
- A. 38
- B. 42
- C. 46
- D. 36

139. A series is given with one term missing. Choose the correct alternative from the given ones that will complete the series.

- 6, 11, 21, 36, 56, ?
- A. 42
- B. 81
- C. 51
- D. 91

140. If CALENDAR = AYJCLBYP, then STABLE = _____.

- A. RQYZCJ
- B. QRYZJC
- C. QRYCZJ
- D. RQCYZJ
