STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI- 86
(For candidates admitted during the academic year 2016 – 2017& thereafter)

SUBJECT CODE : 16VS/VM/SC66

B. Voc. DEGREE EXAMINATION, APRIL 2022
SUSTAINABLE ENERGY MANAGEMENT
SIXTH SEMESTER

COURSE : MAJOR CORE
PAPER : ENERGY FOR SMART CITIES
TIME : 3 HOURS **MAX. MARKS : 100**

Section – A

Answer any ALL questions **(20×1=20)**

I. CHOOSE THE CORRECT ANSWER

1. Committee will approve release of funds for smart city mission _____.
   a) Apex b) High power steering c) city advisory forum d) AMRUT
2. Smart building will save up to _____ % of water
   a) 50 b) 30 c) 25 d) 75
3. _____ is located on Coromandel Coast of Bay of Bengal.
   a) Bangalore b) Chennai c) Hyderabad d) Kolkata
4. _____ is the generation of energy by rise and fall of ocean tides and currents.
   a) Geothermal b) Biomass c) Tidal d) Hydroelectric
5. Urban transformation under the smart city mission will be handled by _____.
   a) NGO b) IoT c) SPV d) AC
6. _____ will not be included in the smart city advisory forum.
   a) Mayor b) District collector c) Chief Minister d) MLA

II. EXPAND THE FOLLOWING

7. ICT –
8. IoT –
9. SPV –
10. SMART –
11. IEA –
12. FeV –

III. FILL IN THE BLANKS

13. _____ indicates the development stage of the country.
14. The Jawaharlal Nehru National Urban Renewal Mission was launched in _____.
15. India's first fully planned hill city is _____.
16. _____ monitors vehicles and diverts traffic conditions.
17. The rapid informal growth in peri-urban areas is a negative consequence of _____.

IV. ANSWER IN A SENTENCE

18. Define Smart city.
19. What is energy demand?
20. Give any two alternative resources to meet energy demand.

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Section – B

Answer any FOUR questions. **(4X10=40)**

21. Write in brief the various basic components of a smart city.
22. Discuss Maslow's hierarchy of needs.
23. Explain smart cities mission strategies in India.
24. State core infrastructure elements in smart city mission of India.
25. Explain any three solar applications in mobility.
26. Explain flaws in smart city infrastructure.

Section – C

Answer any TWO questions. **(2X20=40)**

27. Explain the "Patrick Geddes" contribution to town planning.
28. Explain smart transportation technology in smart cities.
29. Explain drive green in smart city with examples of FEV and HEV.
30. Discuss the following
    a) Elucidate the difference between the smart city and the normal city
    b) Explain challenges for smart city in mobility

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